

Tod Moody, President
Omar Arias-Montez, Vice President
John Carapiet, Secretary

Catharine Benediktsson, Director
Richard Snyder, Director

NOTICE AND AGENDA
Regular Board Meeting
at Sanitary District No. 5 of Marin County
Thursday, August 17th, 2023

5:00 P.M. REGULAR BOARD MEETING

Teleconference Location:
Director Richard Snyder
10 Pomander Walk
Belvedere 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

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 July 20th, 2023 Regular Board Meeting Minutes
2. Review and receive all electronic fund transfers (EFTs) and approve warrants from July 14th, 2023, through August 10, 2023, (JP Morgan Chase Bank, check no. 9906 through check no. 9956, all transactions totaling \$416,936.74) and receive July 2023, payroll, in the sum of \$159,414.49 (Dohrmann)
3. Receipt of Financial Reports for July 2023 (Dohrmann)

MANAGEMENT REPORTS:

4. District Manager Summary Report (Rubio)

NEW BUSINESS:

5. Review the Districts Current Sewer Lateral Inspection Program Notification of Compliant and Non-Compliant Sewer Laterals and discussion regarding possible additional notifications to the County of Marin Public Health Official of Non-Compliant sewer laterals that are not brought into compliance within the allowed permit time. (Rubio) – Action
6. Review and Discuss HF&H Contract Amendment for completion of the Sewer Rate Study and for the Proposed work for the upcoming connection fee update (Rubio)- Action

UNFINISHED BUSINESS:

COMMITTEE REPORTS:

7. Capital Improvement Program Committee (Carapiet/Arias-Montez)
8. Finance & Fiscal Oversight Committee (Arias-Montez/Snyder)
9. Governance Committee (Snyder/Benediktsson)
10. Personnel Committee (Snyder/Carapiet)
11. Ad Hoc Committee – Paradise Drive (Carapiet/Benediktsson)

OTHER BUSINESS:

ENVIRONMENTAL:

12. SD5 Main Plant Permit Renewal - The San Francisco Bay Regional Water Quality Control Board has prepared a draft NPDES permit (tentative order) for the Sanitary District No. 5 of Marin County Main Wastewater Treatment Plant at 2001 Paradise Drive, Tiburon, Marin County for discharge of about 0.56 million gallons per day of treated wastewater to Raccoon Strait in Central San Francisco Bay through a deepwater outfall.

The Regional Water Board will hear comments on the tentative order during a meeting starting at 9:00 a.m. on October 11, 2023. The last date for written comments is 5:00 p.m. on September 13, 2023. The Regional Water Board will hear oral testimony but will not accept written comments after this date.

The tentative order can be obtained from the waterboard website at:

http://www.waterboards.ca.gov/sanfranciscobay/board_decisions/tentative_orders.html

CORRESPONDENCE:

INFORMATIONAL ITEMS:

13. New SWRCB (State Water Resources Control Board) WDR (Waste Discharge Requirements) 2022-0103-DWQ
14. New District SSERP (Sewer Spill Emergency Response Plan)

ADJOURNMENT:

The Board will be asked to adjourn the meeting to a Regular Board Meeting on September 21, 2023, at 5:00 P.M.

**Regular Board Meeting Minutes
at Sanitary District No. 5 of Marin County
Thursday, July 20th, 2023**

5:00 P.M. REGULAR BOARD MEETING

Teleconference Location:
Director Richard Snyder
10 Pomander Walk
Belvedere 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

ROLL CALL:

Directors Present: 1700 hrs.

Tod Moody, President

Omar Arias-Montez, Vice President

Richard Snyder, Director – Teleconference

Staff Present: Tony Rubio, Robin Dohrmann

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.

- No public comments

DIRECTORS' COMMENTS AND/OR AGENDA REQUESTS:

- Director Snyder did not receive paper copy packet in a timely manner to review the HDR Occupancy Optimization draft report.

CONSENT CALENDAR:

1. Approval of June 29th, 2023 Special Board Meeting Minutes
2. Review and receive all electronic fund transfers (EFTs) and approve warrants from June 22th, 2023, through July 13th, 2023 (JP Morgan Chase Bank), check no. 9841 through check no. 9903, all transactions totaling \$243,171.13) and receive June 2023, payroll, in the sum of \$144,598.02 (Dohrmann)
3. Receipt of Financial Reports for June 2023 (Dohrmann)

Discussion by the Board. Motion (Snyder/Arias-Montez) to approve the Consent Calendar.
Passed (3-0-1-1).

MANAGEMENT REPORTS:

4. District Manager Summary Report (Rubio)

District Manager Rubio answered questions from the Board.

NEW BUSINESS:

5. Review and Discuss Draft Response to Marin County Civil Grand Jury Report Titled “Build More ADUs – An Rx for Increasing Marin’s Housing Supply” and possible approval to provide direction to the District Manager to submit the Districts final response to the Grand Jury prior to September 15, 2023 (Rubio) – Action

Discussion by the Board. Motion (Snyder/Arias-Montez) to approve the Consent Calendar. Passed (3-0-1-1).

6. Review and accept MP CIP review and Occupancy Optimization report and provide direction to District Manager to create a plan that will produce additional workspaces for staff that are equitable and efficient based on some of the recommendations provided in the report. (Rubio)- Action

Discussion by the Board. Tabled to August 17th, 2023 Regular Board Meeting.

UNFINISHED BUSINESS: None

COMMITTEE REPORTS: None

7. Capital Improvement Program Committee (Carapiet/Arias-Montez) None

8. Finance & Fiscal Oversight Committee (Arias-Montez/Snyder) None

9. Governance Committee (Snyder/Benediktsson) None

10. Personnel Committee (Snyder/Carapiet) None

11. Ad Hoc Committee – Paradise Drive (Carapiet/Benediktsson) None

OTHER BUSINESS: None

ENVIRONMENTAL:

CORRESPONDENCE: None

INFORMATIONAL ITEMS: None

ADJOURNMENT: 1743 hrs.

The Board will be asked to adjourn the meeting to a Regular Board Meeting on August 17, 2023, at 5:00 P.M.

Approved:

Attest:

Tod Moody
President, Board of Directors

Omar Arias-Montez
Vice President, Board of Directors

Warrant List Summary

July 14 through August 10, 2023

Item #2A

Num	Date	Name	Memo	Amount
JP Morgan Chase - Primary 7399				
9906	08/10/23	Access Answering Service	Acct #4080C, Answering Service - August 2023	-75.90
9907	08/10/23	Alameda Electrical Distributors, Inc.	Acct #56156: Electrical parts & supplies - July 2023	-1,323.89
9908	08/10/23	Alhambra	Acct #547945611762129, Water - July 2023	-313.30
9909	08/10/23	AT&T	Acct #960732-76375559 - July 2023	-676.87
9957	08/10/23	Balf, Abigail	EE Incentive Program - July 2023	-1,144.20
9910	08/10/23	Banshee Networks, Inc.	Acct #400M14, M.P. Parts & Service - July 2023	-2,421.55
9911	08/10/23	Bay City Boiler	Acct #274428, M.P. Flue - July 2023	-1,170.00
9912	08/10/23	Brelje and Race Laboratories, Inc.	M.P./P.C. Plant Samples - June 2023 (AJE FY23-24)	-1,296.00
9913	08/10/23	Burke, Williams & Sorensen, LLP	Legal Advice - July 2023	-2,043.00
9914	08/10/23	California Association of Sanitation ...	CASA Membership Dues - July 2023	-675.00
EFT	08/10/23	CalPERS	EFT Health Premium, Cust #4163206459 - August 2023	-21,796.07
EFT	08/10/23	CalPERS	#4163206459, GASB 68 Actuarial Valuation Report Fees (AJE FY22-...	-700.00
9915	08/10/23	Caltest Analytical Laboratory	Acct: Tiburon5: M.P./P.C. Lab Sampling - June (AJE FY22-23) - Aug...	-3,652.75
9916	08/10/23	Caltronics Business Systems, Inc.	Acct #SD15, Multi-purpose Copier Contract - July 2023	-280.90
9917	08/10/23	Cintas Corporation #626	Acct #626-00821, PPE/Safetywear - July 2023	-140.00
9958	08/10/23	Collodi, Peter	Standby Mileage Reimb., April - July, 2023 (AJE FY22-23)	-192.57
9918	08/10/23	Comcast	Acct# 963 425 517, VOIP Service - August 2023	-374.81
9919	08/10/23	Comcast Business	Acct# 8155 30 011 0149465, Bus. Voice, Internet & Cable - August 2...	-453.88
9920	08/10/23	County of Marin - Central Collections	FY23-24 LAFCO Charges - July 2023	-3,356.05
9921	08/10/23	CSRMA California Sanitation Risk M...	Phys. Property + W.C., FY2023-2024	-112,014.62
9922	08/10/23	D&K Auto Service	SD5 Vehicle Maint. - July 2023	-174.42
EFT	08/10/23	Deluxe	New SD5 Checks - July 2023	-915.78
9923	08/10/23	Department of Motor Vehicles	Acct #037060, DL Pull Notices / Replenishment - August 2023	-150.00
9924	08/10/23	DKF Solutions Group, LLC	My Safety Officer Subscription + CalOSHA Training - July 2023	-7,796.08
9964	08/10/23	Fastenal Company	CAPET0959, M.P. Supplies - June (AJE FY22-23) + July 2023	-11,186.41
9926	08/10/23	Goodman Building Supply Co.	Acct #20070, M.P. Supplies - August 2023	-185.38
9927	08/10/23	Grainger	Acct #810128785, M.P. Supplies - July 2023	-200.15
9959	08/10/23	Hage, Ross M.	FY23-24 Incentives/Hlth & Wellness - August 2023	-600.00
9928	08/10/23	HDR Engineering, Inc.	Consulting, SD5 MP Digester - May & June 2023 (FY AJE22-23)	-6,640.26
9960	08/10/23	Hill, Arlee S	Misc. Reimb. A Hill, Certification Reimb. - June 2023 (AJE FY22-23)	-925.00
9929	08/10/23	Home Depot Credit Services	#6035322005164334: M.P. Supplies - June (AJE FY22-23) - July 2023	-139.97
9930	08/10/23	Ireland Robinson Hadley	31 Alcatraz Permit Fees Refund - July 2023	-11,602.00
9931	08/10/23	Jackson's Hardware, Inc.	Acct #7601, Supplies - July 2023	-338.87
9932	08/10/23	JM Integration, LLC	M.P. Parts & Service - May 2023 (AJE FY22-23) - July 2023	-19,427.97
9933	08/10/23	Ken Grady Company, Inc.	SD5 Plant Parts - July 2023	-1,371.75
9934	08/10/23	Koffler Electrical Mechanical Repair	Cust #00-SAN060, M.P. Parts & Srv. - June 2023 (AJE FY22-23)	-3,654.76
9935	08/10/23	Larry Walker Associates, Inc.	Tech Support for M.P. NPDES Reg. Assistance - February - June 2...	-9,973.50
9936	08/10/23	Lystek Int'l, LTD	Biosolids Transport - June 2023 (AJE FY22-23)	-768.13
9937	08/10/23	Marin County Tax Collector	Acct #170796, Cust #21603, LAFCO Service Charges for FY23-24 - ...	-3,356.05
9938	08/10/23	Mill Valley Refuse Service, Inc.	Acct #032945, Garbage Service + 1 yd rental - July 2023	-270.53
9939	08/10/23	Mill Valley Refuse Service, Inc.	Acct #063092, SLUDGE TRANSPORT - July 2023	-3,844.00
9940	08/10/23	Owen Equipment Sales	Acct #C10655, SD5 Vactor Truck Service - July 2023	-282.69
9941	08/10/23	Pacific Gas & Electric	Acct #2908031411-4, Utilities - July 2023	-26,464.14
9942	08/10/23	pdblowers, Inc.	P.C. Parts & Srv. Blowers - June 2023 (AJE FY22-23)	-8,199.41
EFT	08/10/23	PERS	EFT PERS Pension - July 2023	-25,756.27
EFT	07/17/23	PERS	EFT PERS Spec. Comp./Holiday - 7.4.2023	-124.81
9943	08/10/23	Robert L Talavera, LLC	SSGIS ArcView Support - July 2023	-1,050.00
9961	08/10/23	Rosser, John	Standby Mileage Reimb., J Rosser, June 2023 (AJE FY22-23) - July ...	-5,916.22
9944	08/10/23	Roy's Sewer Service, Inc.	P&L - July 2023	-780.00
9965	08/10/23	Royal Wholesale	Acct#: 50-93968: M.P. Supplies - May 2022 (AJE FY22-23)	-6,496.76
9963	08/10/23	Salazar, Ignacio	Raingear/Boots Reimb - August 2023	-375.71
9905	08/03/23	Serramonte Ford	SD5 Trucks - August 2023	-29,485.75
9904	08/03/23	Serramonte Ford	SD5 Trucks - August 2023	-29,485.75
9946	08/10/23	Special District Risk Management A...	Member #7665, Life, Vision, DDS & LTD Ins - September 2023	-2,038.33
9947	08/10/23	Staples, Inc.	Acct #60111000714, Office Supplies - June 2023 (FY22-23 AJE)	-366.04
EFT	08/10/23	State Water Resources Control Board	I Salazar - SWRCB Application Fee, WWTP Operator G1 - August 2...	-125.00
EFT	08/10/23	State Water Resources Control Board	J Rosser - SWRCB G1 Renewal Fee, WWTP Operator G1 - August 2...	-150.00
9948	08/10/23	Town of Tiburon	Fuel - May + June - 2023 (AJE FY22-23)	-3,610.72
9949	08/10/23	Underground Service Alert	Acct #165410, Annual Fee - July 2023	-875.03
9950	08/10/23	Underground Service Alert of NorCa...	Acct #165410, Annual Fee, FY23-24 Tickets & CA Fees - July 2023	-315.20
9951	08/10/23	Univar	Cust ID #STDT001, Chemicals - June (AJE FY22-23) - July 2023	-16,382.26
9952	08/10/23	US Bank	Acct#:4246 0445 5565 3611, June - July 2023 (AJE FY22-23)	-8,434.82
9953	08/10/23	USABlueBook	Cust #933682, M.P. Parts & Lab Supplies - July 2023	-3,837.87
9954	08/10/23	USP Technologies	Cust #: UCO500893, Chemicals - July 2023	-8,139.26
9955	08/10/23	Verizon Wireless	Acct #0342125502-00001: iPhones & BPS Comm - June - July 2023 ...	-549.79
9956	08/10/23	Water Components & Building Supply	Acct #454, M.P. Supplies - July 2023	-72.54
Total JP Morgan Chase - Primary 7399				-416,936.74
TOTAL				-416,936.74

08/10/23

**Sanitary Distr. No.5 of Marin Co.
Warrant List Detail - REVISED**

July 18 through August 10, 2023

Item #2B

Num	Date	Name	Memo	Account	Class	Paid Am...
9906	08/10/23	Access Answering Ser...	Acct #4080C, Answering Service - August 2023	JP Morgan Chase - Primar...		
			Inv #29846, Answering Service re SSO & Alarm Notifications - August ...	8510 · Data/Alarms/IT Supp ...	SD5	-75.90
TOTAL						-75.90
9907	08/10/23	Alameda Electrical Dis...	Acct #56156: Electrical parts & supplies - July 2023	JP Morgan Chase - Primar...		
			Inv #S5609121.004, #S5609121.005 (PO#753069), Electrical parts & su...	7027 · Electrical & Instrument	SD5	-1,323.89
TOTAL						-1,323.89
9908	08/10/23	Alhambra	Acct #547945611762129, Water - July 2023	JP Morgan Chase - Primar...		
			Inv #12012314 052623, Water - July 2023	7023 · Janitorial Supplies & ...	SD5	-305.47
			Inv #12012314 052623, Water - July 2023	7042 · Paradise Supplies & ...	Tiburon:P...	-7.83
TOTAL						-313.30
9909	08/10/23	AT&T	Acct #960732-76375559 - July 2023	JP Morgan Chase - Primar...		
			PC Plant Telephones - July 2023	8532 · Paradise Cove Telep...	Tiburon:P...	-379.96
			PC Pumps & Lines Telephones - July 2023	8533 · Pumps & Lines Telep...	Tiburon:P...	-7.02
			Tib Pumps & Lines Telephones - July 2023	8533 · Pumps & Lines Telep...	Tiburon	-289.89
TOTAL						-676.87
9957	08/10/23	Balf, Abigail	EE Incentive Program - July 2023	JP Morgan Chase - Primar...		
			Safety Boot Allowance: FY23-24 Boot Allowance - July 2023	8515.01 · Boot Allowance	SD5	-144.20
			EE Incentive: FY23-24 EE Incentive Program: CSU - Sac: Cert #620834 ...	8005 · Employee Incentives	SD5	-1,000.00
TOTAL						-1,144.20
9910	08/10/23	Banshee Networks, Inc.	Acct #400M14, M.P. Parts & Service - July 2023	JP Morgan Chase - Primar...		
			Inv #15945: SD5 IT Support/Software upgrades/software subscriptions r...	8510 · Data/Alarms/IT Supp ...	SD5	-2,421.55
TOTAL						-2,421.55

08/10/23

Sanitary Distr. No.5 of Marin Co.
Warrant List Detail - REVISED

July 18 through August 10, 2023

Num	Date	Name	Memo	Account	Class	Paid Am...
9911	08/10/23	Bay City Boiler	Acct #274428, M.P. Flue - July 2023	JP Morgan Chase - Primar...		
			Inv #26918 (PO#RC754215), M.P. ER Boiler, rewired + lower switchover...	7022 · Plant Maint. Parts & S...	SD5	-1,170.00
TOTAL						-1,170.00
9912	08/10/23	Brelje and Race Labor...	M.P./P.C. Plant Samples - June 2023 (AJE FY23-24)	JP Morgan Chase - Primar...		
			Inv #150135: M.P. Samples - June 2023 (AJE FY23-24)	7051 · Main Plant Lab Monit...	Belvedere	-515.02
			Inv #150135: P.C. Samples - June 2023 (AJE FY23-24)	7052 · Paradise Cove Monito...	Tiburon:P...	-55.00
			Inv #150135: M.P. Samples - June 2023 (AJE FY23-24)	7051 · Main Plant Lab Monit...	Tiburon	-725.98
TOTAL						-1,296.00
9913	08/10/23	Burke, Williams & Sor...	Legal Advice - July 2023	JP Morgan Chase - Primar...		
			Inv #304889, Legal Advice - July 2023	6039 · Legal	SD5	-2,043.00
TOTAL						-2,043.00
9914	08/10/23	California Association ...	CASA Membership Dues - July 2023	JP Morgan Chase - Primar...		
			Inv #7333, SD5 CASA 2022 Membership Dues, 7.1.2023 - 6.30.2024	6025 · Dues & Subscriptions	SD5	-675.00
TOTAL						-675.00
EFT	08/10/23	CalPERS	EFT Health Premium, Cust #4163206459 - August 2023	JP Morgan Chase - Primar...		
			Active Employee Health - August 2023	8020.05 · Employee Health	SD5	-20,716.58
			Retiree Health - August 2023	8022.05 · Retiree Health	SD5	-1,079.49
TOTAL						-21,796.07
EFT	08/10/23	CalPERS	#4163206459, GASB 68 Actuarial Valuation Report Fees (AJE FY22-...	JP Morgan Chase - Primar...		
			Inv #100000016511697, GASBY 68 Actuarial Valuation Report Fees for ...	8019.05 · PERS Retirement	Belvedere	-141.93
			Inv #100000016511697, GASBY 68 Actuarial Valuation Report Fees for ...	8019.05 · PERS Retirement	Tiburon:P...	-8.75
			Inv #100000016511697, GASBY 68 Actuarial Valuation Report Fees for ...	8019.05 · PERS Retirement	Tiburon	-199.32
			Inv #100000016511697, GASBY 68 Actuarial Valuation Report Fees for ...	8019.05 · PERS Retirement	Belvedere	-141.93

08/10/23

**Sanitary Distr. No.5 of Marin Co.
Warrant List Detail - REVISED**

July 18 through August 10, 2023

Num	Date	Name	Memo	Account	Class	Paid Am...
			Inv #100000016511697, GASBY 68 Actuarial Valuation Report Fees for ...	8019.05 · PERS Retirement	Tiburon:P...	-8.75
			Inv #100000016511697, GASBY 68 Actuarial Valuation Report Fees for ...	8019.05 · PERS Retirement	Tiburon	-199.32
TOTAL						-700.00
9915	08/10/23	Caltest Analytical Lab...	Acct: Tiburon5: M.P./P.C. Lab Sampling - June (AJE FY22-23) - Aug...	JP Morgan Chase - Primar...		
			Inv #710069, #710166, #710382, #710490, #710544, #710635 - July - A...	7051 · Main Plant Lab Monit...	SD5	-1,692.90
			Inv #700068, #710167, #710304, #710543, 710545 - July 2023	7042 · Paradise Supplies & ...	SD5	-1,553.25
			Inv #709144, #710010 - June 2023 (AJE FY22-23)	7051 · Main Plant Lab Monit...	Belvedere	-168.74
			Inv #709144, #710010 - June 2023 (AJE FY22-23)	7051 · Main Plant Lab Monit...	Tiburon	-237.86
TOTAL						-3,652.75
9916	08/10/23	Caltronics Business S...	Acct #SD15, Multi-purpose Copier Contract - July 2023	JP Morgan Chase - Primar...		
			Inv #3840477, Inv #3841022, Konica Multi-purpose copier (C308) contra...	6047 · Office Supplies	SD5	-280.90
TOTAL						-280.90
9917	08/10/23	Cintas Corporation #626	Acct #626-00821, PPE/Safetywear - July 2023	JP Morgan Chase - Primar...		
			Inv #4160861566, #4161575991, #4162271212, #4162977167 - July 2023	8520 · Personal Protection/S...	SD5	-140.00
TOTAL						-140.00
9958	08/10/23	Collodi, Peter	Standby Mileage Reimb., April - July, 2023 (AJE FY22-23)	JP Morgan Chase - Primar...		
			Standby Mileage Reimbursement, 4.1.2023 - 6.6.2023 (AJE FY22-23)	6018.2 · Standby Mileage Ex...	Belvedere	-110.04
			Standby Mileage Reimbursement, 4.1.2023 - 6.6.2023 (AJE FY22-23)	6018.2 · Standby Mileage Ex...	Tiburon:P...	-27.51
			Standby Mileage Reimbursement, June - July 2023	6018.2 · Standby Mileage Ex...	SD5	-55.02
TOTAL						-192.57
9918	08/10/23	Comcast	Acct# 963 425 517, VOIP Service - August 2023	JP Morgan Chase - Primar...		
			Inv #170234004, VOIP Phone Service (14) Land Line Phones - August 2...	8531 · Main Plant Telephones	SD5	-374.81
TOTAL						-374.81

08/10/23

**Sanitary Distr. No.5 of Marin Co.
Warrant List Detail - REVISED**

July 18 through August 10, 2023

<u>Num</u>	<u>Date</u>	<u>Name</u>	<u>Memo</u>	<u>Account</u>	<u>Class</u>	<u>Paid Am...</u>
9919	08/10/23	Comcast Business	Acct# 8155 30 011 0149465, Bus. Voice, Internet & Cable - August 2...	JP Morgan Chase - Primar...		
			Bundle: Cable, Internet & Land Line Phones -- August 2023	8510 · Data/Alarms/IT Supp ...	SD5	-324.79
			Bundle: Land Line Phones -- August 2023	8531 · Main Plant Telephones	SD5	-125.86
			Bundle: Land Line Phones -- August 2023	8532 · Paradise Cove Telep...	Tiburon:P...	-3.23
TOTAL						-453.88
9920	08/10/23	County of Marin - Cent...	FY23-24 LAFCO Charges - July 2023	JP Morgan Chase - Primar...	SD5	
			Central Collections - LAFCO FY23-24	7062 · Permits/Fees - General	SD5	-3,272.15
			Central Collections - LAFCO FY23-24	7063 · Paradise Cove Permit...	Tiburon:P...	-83.90
TOTAL						-3,356.05
9921	08/10/23	CSRMA California San...	Phys. Property + W.C., FY2023-2024	JP Morgan Chase - Primar...		
			Inv #7207, Property Ins. Premium, 7.1.2023-6.30.2024	6033.1 · Insurance - SD5 Pr...	SD5	-63,641.62
			Inv #7152, Workers' Compensation Deposit, 7.1.2023 - 6.30.2024	8023 · Workers Comp Insura...	SD5	-48,373.00
TOTAL						-112014.62
9922	08/10/23	D&K Auto Service	SD5 Vehicle Maint. - July 2023	JP Morgan Chase - Primar...		
			Inv #75335, PO#754KC, F250 SuperDuty XLT, oil change + lights - July ...	7072 · Maintenance	SD5	-174.42
TOTAL						-174.42
EFT	08/10/23	Deluxe	New SD5 Checks - July 2023	JP Morgan Chase - Primar...		
			EFT: Item #SSLT104-2, Ordered new checks/warrants, Dbl signature + ...	6008 · Audit & Accounting	SD5	-915.78
TOTAL						-915.78
9923	08/10/23	Department of Motor V...	Acct #037060, DL Pull Notices / Replenishment - August 2023	JP Morgan Chase - Primar...		
			Fund replenishment for pull notices - August 2023	6025 · Dues & Subscriptions	SD5	-150.00
TOTAL						-150.00

08/10/23

**Sanitary Distr. No.5 of Marin Co.
Warrant List Detail - REVISED**

July 18 through August 10, 2023

Num	Date	Name	Memo	Account	Class	Paid Am...
9924	08/10/23	DKF Solutions Group, ...	My Safety Officer Subscription + CalOSHA Training - July 2023	JP Morgan Chase - Primar...		
			Inv #21477, #21514, #21398, #21443, 21531 (PO #160861), DKF CalO...	8515 · Safety	SD5	-7,796.08
TOTAL						-7,796.08
9964	08/10/23	Fastenal Company	CAPET0959, M.P. Supplies - June (AJE FY22-23) + July 2023	JP Morgan Chase - Primar...		
			Inv #66270 (PO#654038), Shop Cabinets - July 2023	7022 · Plant Maint. Parts & S...	SD5	-8,329.23
			Inv #66469 (PO#954039), 66317 (PO#654038) - Bolt Clamp SHOP RES...	7021 · Plant Maintenance Su...	SD5	-1,087.94
			Inv #65823 (PO#654038), Safety supplies, latex gloves restock - June 2...	8515 · Safety	Belvedere	-286.87
			Inv #65823 (PO#654038), Safety supplies, latex gloves restock - June 2...	8515 · Safety	Tiburon:P...	-17.69
			Inv #65823 (PO#654038), Safety supplies, latex gloves restock - June 2...	8515 · Safety	Tiburon	-402.88
			Inv #65823 (PO#654038), SHOP RESTOCK - June 2023 (FY22-23)	7021 · Plant Maintenance Su...	Belvedere	-73.53
			Inv #65823 (PO#654038), SHOP RESTOCK - June 2023 (FY22-23)	7021 · Plant Maintenance Su...	Tiburon	-103.65
			Inv #65823 (PO#654012), Latex Gloves - June 2023 (AJE FY22-23)	8515 · Safety	Belvedere	-367.12
			Inv #65823 (PO#654012), Latex Gloves - June 2023 (AJE FY22-23)	8515 · Safety	Tiburon	-517.50
TOTAL						-11,186.41
9926	08/10/23	Goodman Building Su...	Acct #20070, M.P. Supplies - August 2023	JP Morgan Chase - Primar...		
			Inv #875002 (PO#AB875002), M.P supplies - August 2023	7021 · Plant Maintenance Su...	SD5	-185.38
TOTAL						-185.38
9927	08/10/23	Grainger	Acct #810128785, M.P. Supplies - July 2023	JP Morgan Chase - Primar...		
			Inv #9775906580, #9745934555 (PO#655736), tools + motor 1/3 HP, 45...	7021 · Plant Maintenance Su...	SD5	-200.15
TOTAL						-200.15
9959	08/10/23	Hage, Ross M.	FY23-24 Incentives/Hlth & Wellness - August 2023	JP Morgan Chase - Primar...		
			FY23-24 Health & Wellness - August 2023	8021.05 · EE Health & Welln...	SD5	-600.00
TOTAL						-600.00

08/10/23

**Sanitary Distr. No.5 of Marin Co.
Warrant List Detail - REVISED**

July 18 through August 10, 2023

Num	Date	Name	Memo	Account	Class	Paid Am...
9928	08/10/23	HDR Engineering, Inc.	Consulting, SD5 MP Digester - May & June 2023 (FY AJE22-23)	JP Morgan Chase - Primar...		
			Inv #1200537413, HDR Consulting, SD5 M.P. Digester Rehab & Cleanin...	9213 · M.P. Digester	Belvedere	-301.69
			Inv #1200537413, HDR Consulting, SD5 M.P. Digester Rehab & Cleanin...	9213 · M.P. Digester	Tiburon	-425.27
			Inv #1200522380, HDR Consulting, SD5 P.C. Preparation of technical re...	6017 · Consulting Fees	Tiburon:P...	-5,913.30
TOTAL						-6,640.26
9960	08/10/23	Hill, Arlee S	Misc. Reimb A Hill, Certification Reimb. - June 2023 (AJE FY22-23)	JP Morgan Chase - Primar...		
			A Hill - NASSCO recertification reimbursement - June 2023 (AJE FY22-23)	6025 · Dues & Subscriptions	Belvedere	-375.09
			A Hill - NASSCO recertification reimbursement - June 2023 (AJE FY22-23)	6025 · Dues & Subscriptions	Tiburon:P...	-23.13
			A Hill - NASSCO recertification reimbursement - June 2023 (AJE FY22-23)	6025 · Dues & Subscriptions	Belvedere	-526.78
TOTAL						-925.00
9929	08/10/23	Home Depot Credit Se...	#6035322005164334: M.P. Supplies - June (AJE FY22-23) - July 2023	JP Morgan Chase - Primar...		
			Inv #068233 / 0526160 (PO#952171), M.P. Supplies - July 2023	7021 · Plant Maintenance Su...	SD5	-480.48
			Inv #068233 / 0526160 (PO#952171), M.P. Supplies - RETURNED 7.11....	7021 · Plant Maintenance Su...	SD5	480.48
			Inv #030614 / 1033039 (PO#652187), M.P. Supplies - June 2023 (AJE F...	7021 · Plant Maintenance Su...	Belvedere	-72.93
			Inv #030614 / 1033039 (PO#652187), M.P. Supplies - June 2023 (AJE F...	7021 · Plant Maintenance Su...	Tiburon	-102.80
			HD Credit - June 2023	7021 · Plant Maintenance Su...	Belvedere	14.84
			HD Credit - June 2023	7021 · Plant Maintenance Su...	Tiburon	20.92
TOTAL						-139.97
9930	08/10/23	Ireland Robinson Hadl...	31 Alcatraz Permit Fees Refund - July 2023	JP Morgan Chase - Primar...		
			31 Alcatraz Ave (Permit #NB23-021), Remodel (5 add'l fixture)s - Cnnxn ...	5900.30 · Connection Permit...	Belvedere	-100.00
			31 Alcatraz Ave (Permit #NB23-021), Remodel (5 add'l fixtures) - Clxn F...	5900.31 · Collection	Belvedere	-6,687.00
			31 Alcatraz Ave (Permit #NB23-021), Remodel (5 add'l fixtures) - Trx Fe...	5900.34 · Treatment	Belvedere	-4,815.00
TOTAL						-11,602.00
9931	08/10/23	Jackson's Hardware, I...	Acct #7601, Supplies - July 2023	JP Morgan Chase - Primar...		
			Inv #133994 (PO#PC952173), Inv #134132 (PO#AB754159) Supplies - ...	7021 · Plant Maintenance Su...	SD5	-338.87
TOTAL						-338.87

08/10/23

**Sanitary Distr. No.5 of Marin Co.
Warrant List Detail - REVISED**

July 18 through August 10, 2023

Num	Date	Name	Memo	Account	Class	Paid Am...
9932	08/10/23	JM Integration, LLC	M.P. Parts & Service - May 2023 (AJE FY22-23) - July 2023	JP Morgan Chase - Primar...		
			Inv #23278 (Agmnt #Q230413): Troubleshooting at multiple mechanical si...	7022 · Plant Maint. Parts & S...	SD5	-11,311.35
			Inv #23280 (Agmnt #Q230413): Set-up and test router configurarions; pro...	7022 · Plant Maint. Parts & S...	SD5	-8,116.62
TOTAL						-19,427.97
9933	08/10/23	Ken Grady Company, I...	SD5 Plant Parts - July 2023	JP Morgan Chase - Primar...		
			Inv #5610 (P.O. #RC754206),Swivel Kit + Mounting adapter - July 2023	7022 · Plant Maint. Parts & S...	SD5	-702.75
			Inv #5681 (PO#RC754206). ATI Sensor - July 2023	7022 · Plant Maint. Parts & S...	SD5	-669.00
TOTAL						-1,371.75
9934	08/10/23	Koffler Electrical Mech...	Cust #00-SAN060, M.P. Parts & Srv. - June 2023 (AJE FY22-23)	JP Morgan Chase - Primar...		
			Inv #0103418-IN (PO#DL954038), (1) 30.0 HP Motor - June 2023 (AJE ...	7022 · Plant Maint. Parts & S...	Belvedere	-1,516.73
			Inv #0103418-IN (PO#DL954038), (1) 30.0 HP Motor - June 2023 (AJE ...	7022 · Plant Maint. Parts & S...	Tiburon	-2,138.03
TOTAL						-3,654.76
9935	08/10/23	Larry Walker Associat...	Tech Support for M.P. NPDES Reg. Assistance - February - June 20...	JP Morgan Chase - Primar...		
			Inv #00113.11-2, Inv #00113.11-3 Regulatory Assistance, 1.31.2023 (AJ...	7062 · Permits/Fees - General	Belvedere	-3,460.37
			Inv #00113.11-2, Inv#00113.11-3 Regulatory Assistance, 1.31.2023 (AJ...	7055 · MP Dilution Study	Tiburon:P...	-224.00
			Inv #00113.11-2, Inv #00113.11-3 Regulatory Assistance, 1.31.2023 (AJ...	7062 · Permits/Fees - General	Belvedere	-4,877.88
			Inv #00113.11-4 Regulatory Assisance, through 6.30.2023 (AJE FY22-23)	7062 · Permits/Fees - General	Belvedere	-585.67
			Inv #00113.11-4 Regulatory Assisance, through 6.30.2023 (AJE FY22-23)	7062 · Permits/Fees - General	Tiburon	-825.58
TOTAL						-9,973.50
9936	08/10/23	Lystek Int'l, LTD	Biosolids Transport - June 2023 (AJE FY22-23)	JP Morgan Chase - Primar...		
			Inv #153-703, Biosolids Transport to Lystek Facility (8.21WT) - June 202...	7029 · Main Plant Sludge Dis...	Belvedere	-318.77
			Inv #153-703, Biosolids Transport to Lystek Facility (8.21WT) - June 202...	7029 · Main Plant Sludge Dis...	Tiburon	-449.36
TOTAL						-768.13

08/10/23

**Sanitary Distr. No.5 of Marin Co.
Warrant List Detail - REVISED**

July 18 through August 10, 2023

Num	Date	Name	Memo	Account	Class	Paid Am...
9937	08/10/23	Marin County Tax Coll...	Acct #170796, Cust #21603, LAFCO Service Charges for FY23-24 - ...	JP Morgan Chase - Primar...		
			Cust #21603, LAFCO Service Charges for FY23-24	6021 · County Fees	SD5	-3,212.75
			Cust #21603, LAFCO Service Charges for FY23-24	6021 · County Fees	Tiburon:P...	-143.30
TOTAL						-3,356.05
9938	08/10/23	Mill Valley Refuse Serv...	Acct #032945, Garbage Service + 1 yd rental - July 2023	JP Morgan Chase - Primar...		
			Garbage Service, Including 1 yd trash + 1 yd cardboard rental - July 2023	7023 · Janitorial Supplies & ...	SD5	-270.53
TOTAL						-270.53
9939	08/10/23	Mill Valley Refuse Serv...	Acct #063092, SLUDGE TRANSPORT - July 2023	JP Morgan Chase - Primar...		
			Sludge Transport/Exchange only: 10 loads - July 2023	7029 · Main Plant Sludge Dis...	SD5	-3,844.00
TOTAL						-3,844.00
9940	08/10/23	Owen Equipment Sales	Acct #C10655, SD5 Vactor Truck Service - July 2023	JP Morgan Chase - Primar...		
			Inv #00060643 (PO#xxx), Vactor Truck Ignition Switch - July 2023	7072 · Maintenance	SD5	-282.69
TOTAL						-282.69
9941	08/10/23	Pacific Gas & Electric	Acct #2908031411-4, Utilities - July 2023	JP Morgan Chase - Primar...		
			Acct #2908031411-4, SD5 Utilities - July 2023	8542 · Main Plant Utilities	SD5	-20,193.41
			Acct #2908031411-4, P.C. Plant Utilities - July 2023	8543 · Paradise Cove Utilities	Tiburon:P...	-2,101.28
			Acct #2908031411-4, SD5 Pump St Utilities - July 2023	8544 · Pump Station Utilities	SD5	-3,859.90
			Acct #2908031411-4, P.C. Pump St Utilities - July 2023	8544 · Pump Station Utilities	Tiburon:P...	-309.55
TOTAL						-26,464.14
9942	08/10/23	pdblwers, Inc.	P.C. Parts & Srv, Blowers - June 2023 (AJE FY22-23)	JP Morgan Chase - Primar...		
			Inv #81974 + #81786 (PO#954021) P.C. Parts & Service: (2) 33-URAI-J ...	7041 · Paradise Parts & Serv...	Tiburon:P...	-8,199.41
TOTAL						-8,199.41

08/10/23

**Sanitary Distr. No.5 of Marin Co.
Warrant List Detail - REVISED**

July 18 through August 10, 2023

Num	Date	Name	Memo	Account	Class	Paid Am...
EFT	08/10/23	PERS	EFT PERS Pension - July 2023	JP Morgan Chase - Primar...		
			Retirement July 2023 (Classic 1600 Rate): ER @ 15.95%; EE @ 8.0% (...)	8019.05 · PERS Retirement	SD5	-14,264.76
			Retirement June 2023 (PEPRA Rate): ER @ 7.68%; EE @ 7.75% (AJE ...)	8019.05 · PERS Retirement	SD5	-11,491.51
TOTAL						-25,756.27
9943	08/10/23	Robert L Talavera, LLC	SSGIS ArcView Support - July 2023	JP Morgan Chase - Primar...		
			Inv #RLT0723F1, SSGIS ArcView Support: Upload pipe history data, inst...	8510 · Data/Alarms/IT Supp ...	SD5	-1,050.00
TOTAL						-1,050.00
9961	08/10/23	Rosser, John	Standby Mileage Reimb., J Rosser, June 2023 (AJE FY22-23) - July ...	JP Morgan Chase - Primar...		
			Standby Mileage Reimbursement, 6.20.2023 (AJE FY22-23)	6018.2 · Standby Mileage Ex...	Belvedere	-57.36
			Standby Mileage Reimbursement, 7.14.2023	6018.2 · Standby Mileage Ex...	SD5	-57.36
			FY23-24 EE Incentive Program: CSU- Sac: Cert #625411 - July 2023	8005 · Employee Incentives	SD5	-1,000.00
			FY23-24 EE Incentive Program: CSU- Sac: Cert #625413 - July 2023	8005 · Employee Incentives	SD5	-1,000.00
			FY23-24 EE Incentive Program: CSU- Sac: Cert #625410 - July 2023	8005 · Employee Incentives	SD5	-1,000.00
			FY23-24 EE Incentive Program: CSU- Sac: Cert #625414 - July 2023	8005 · Employee Incentives	SD5	-1,000.00
			FY23-24 EE Incentive Program: CSU- Sac: Cert #625412 - July 2023	8005 · Employee Incentives	SD5	-1,000.00
			Reimbursement for CSU-Sac Water Program Materials (Books + Scantr...	6020 · Continuing Education	SD5	-551.50
			FY23-24 Health & Wellness Program	8021.05 · EE Health & Welln...	SD5	-250.00
TOTAL						-5,916.22
9944	08/10/23	Roy's Sewer Service, I...	P&L - July 2023	JP Morgan Chase - Primar...		
			Inv #222403, Cleared sewer line from 202-210 Beach Rd., Belvedere	7011 · Pumps & Lines Maint...	SD5	-780.00
TOTAL						-780.00
9965	08/10/23	Royal Wholesale	Acct#: 50-93968: M.P. Supplies - May 2022 (AJE FY22-23)	JP Morgan Chase - Primar...		
			Inv #7914-1052143 (PO#652177), M.P. Parts - May 2023 (AJE FY22-23)	7022 · Plant Maint. Parts & S...	Belvedere	-1,219.03
			Inv #7914-1052143 (PO#652177), M.P. Parts - May 2023 (AJE FY22-23)	7022 · Plant Maint. Parts & S...	Tiburon	-1,718.40
			Inv #7914-1054891 (PO#652177), M.P. Supplies - April 2023 (AJE FY2...	7021 · Plant Maintenance Su...	Belvedere	-1,394.74
			Inv #7914-1054891 (PO#652177), M.P. Supplies - April 2023 (AJE FY2...	7021 · Plant Maintenance Su...	Tiburon	-1,966.08
			Inv #7914-1055214 (PO#652177), P.C. Supplies - July 2023	7042 · Paradise Supplies & ...	SD5	-416.62

08/10/23

**Sanitary Distr. No.5 of Marin Co.
Warrant List Detail - REVISED**

July 18 through August 10, 2023

<u>Num</u>	<u>Date</u>	<u>Name</u>	<u>Memo</u>	<u>Account</u>	<u>Class</u>	<u>Paid Am...</u>
			Credit memo #79149009022986 - June 2023 (AJE FY22-23)	7021 · Plant Maintenance Su...	Belvedere	90.52
			Credit memo #79149009022986 - June 2023 (AJE FY22-23)	7021 · Plant Maintenance Su...	Tiburon	127.59
TOTAL						-6,496.76
9963	08/10/23	Salazar, Ignacio	Raingear/Boots Reimb - August 2023	JP Morgan Chase - Primar...		
			FY23-24: Boot Allowance Reimbursement - August 2023	8515.01 · Boot Allowance	SD5	-200.00
			PPE/Uniforms - August 2023	8520 · Personal Protection/S...	SD5	-175.71
TOTAL						-375.71
9905	08/03/23	Serramonte Ford	SD5 Trucks - August 2023	JP Morgan Chase - Primar...		
			2023 Truck, VIN #3FTT W8E9 8PRA 65514 - August 2023	9229.8 · Vehicle Replacement	SD5	-29,485.75
TOTAL						-29,485.75
9904	08/03/23	Serramonte Ford	SD5 Trucks - August 2023	JP Morgan Chase - Primar...		
			2023 Truck, VIN #3FTT W8E9, 9PRA 63710 - August 2023	9229.8 · Vehicle Replacement	SD5	-29,485.75
TOTAL						-29,485.75
9946	08/10/23	Special District Risk M...	Member #7665, Life, Vision, DDS & LTD Ins - September 2023	JP Morgan Chase - Primar...		
			Life, Vision, DDS & LTD Ins - Inv #H42711 - September 2023	8020.05 · Employee Health	SD5	-2,038.33
TOTAL						-2,038.33
9947	08/10/23	Staples, Inc.	Acct #60111000714, Office Supplies - June 2023 (FY22-23 AJE)	JP Morgan Chase - Primar...		
			Inv #3290296831, Office Supplies - June 2023 (FY22-23 AJE)	6047 · Office Supplies	Belvedere	-148.43
			Inv #3290296831, Office Supplies - June 2023 (FY22-23 AJE)	6047 · Office Supplies	Tiburon:P...	-9.15
			Inv #3290296831, Office Supplies - June 2023 (FY22-23 AJE)	6047 · Office Supplies	Tiburon	-208.46
TOTAL						-366.04

08/10/23

**Sanitary Distr. No.5 of Marin Co.
Warrant List Detail - REVISED**

July 18 through August 10, 2023

Num	Date	Name	Memo	Account	Class	Paid Am...
EFT	08/10/23	State Water Resource...	I Salazar - SWRCB Application Fee, WWTP Operator G1 - August 20...	JP Morgan Chase - Primar...		
			I Salazar - SWRCB Application Fee: WWTP Operator (G1) - August 2023	6025 · Dues & Subscriptions	SD5	-125.00
TOTAL						-125.00
EFT	08/10/23	State Water Resource...	J Rosser - SWRCB G1 Renewal Fee, WWTP Operator G1 - August 2...	JP Morgan Chase - Primar...		
			I Salazar - SWRCB Application Fee: WWTP Operator (G1) - August 2023	6025 · Dues & Subscriptions	SD5	-150.00
TOTAL						-150.00
9948	08/10/23	Town of Tiburon	Fuel - May + June - 2023 (AJE FY22-23)	JP Morgan Chase - Primar...		
			Fuel - May 2023 (AJE FY22-23)	7071 · Fuel	Belvedere	-643.91
			Fuel - May 2023 (AJE FY22-23)	7071 · Fuel	Tiburon:P...	-39.70
			Fuel - May 2023 (AJE FY22-23)	7071 · Fuel	Tiburon	-904.34
			Fuel - June 2023 (AJE FY22-23)	7071 · Fuel	Belvedere	-820.23
			Fuel - June 2023 (AJE FY22-23)	7071 · Fuel	Tiburon:P...	-50.57
			Fuel - June 2023 (AJE FY22-23)	7071 · Fuel	Tiburon	-1,151.97
TOTAL						-3,610.72
9949	08/10/23	Underground Service ...	Acct #165410, Annual Fee - July 2023	JP Morgan Chase - Primar...		
			Inv #2023165410, Annual Dues, based on # of tickets SD5 req'd in 2023...	7011 · Pumps & Lines Maint...	SD5	-875.03
TOTAL						-875.03
9950	08/10/23	Underground Service ...	Acct #165410, Annual Fee, FY23-24 Tickets & CA Fees - July 2023	JP Morgan Chase - Primar...		
			Inv #23USB165410, Annual Dues, based on # of tickets (SD5: 510), July...	7011 · Pumps & Lines Maint...	SD5	-315.20
TOTAL						-315.20

**Sanitary Distr. No.5 of Marin Co.
Warrant List Detail - REVISED**

July 18 through August 10, 2023

Num	Date	Name	Memo	Account	Class	Paid Am...
9951	08/10/23	Univar	Cust ID #STDT001, Chemicals - June (AJE FY22-23) - July 2023	JP Morgan Chase - Primar...		
			Inv #51348560 (PO #AB754168) Sodium Bisulfite 25% (\$1.4750/Gal) - J...	7024 · Main Plant Chemicals	SD5	-9,712.32
			Inv #51314714 (PO #AB754155) Sodium Bicarbite Crystals (\$0.7900/Ga...	7042 · Paradise Supplies & ...	Tiburon:P...	-1,924.14
			Inv #51257684 (PO#AB653695) Sodium Hypochlorite 12.5% (\$1.4640/G...	7024 · Main Plant Chemicals	Belvedere	-1,969.51
			Inv #51257684 (PO#AB653695) Sodium Hypochlorite 12.5% (\$1.4640/G...	7024 · Main Plant Chemicals	Tiburon	-2,776.29
TOTAL						-16,382.26
9952	08/10/23	US Bank	Acct#:4246 0445 5565 3611, June - July 2023 (AJE FY22-23)	JP Morgan Chase - Primar...		
			QB Subscription Renewal + Acct Support + clean-up - July 2023	6008 · Audit & Accounting	SD5	-1,537.50
			Zoom - June 2023 (AJE FY22-23)	6018.1 · Meetings & Travel	Belvedere	-35.67
			Zoom - June 2023 (AJE FY22-23)	6018.1 · Meetings & Travel	Tiburon:P...	-2.20
			Zoom - June 2023 (AJE FY22-23)	6018.1 · Meetings & Travel	Tiburon	-50.10
			SD5 BBQ - July 2023	6018.1 · Meetings & Travel	SD5	-69.45
			Loew's Hotel, KC, MO - June 2023 (AJE FY22-23)	6018.1 · Meetings & Travel	Belvedere	-288.81
			Loew's Hotel, KC, MO - June 2023 (AJE FY22-23)	6018.1 · Meetings & Travel	Tiburon:P...	-17.81
			Loew's Hotel, KC, MO - June 2023 (AJE FY22-23)	6018.1 · Meetings & Travel	Tiburon	-405.61
			38th Annual Tri-State Registration (3) + 2 SWA Tickets + Rental car +Go...	6018.1 · Meetings & Travel	SD5	-1,207.75
			CWEA Redwood Empire Con't Ed - June 2023 (AJE FY22-23)	6020 · Continuing Education	Belvedere	-16.22
			CWEA Redwood Empire Con't Ed - June 2023 (AJE FY22-23)	6020 · Continuing Education	Tiburon:P...	-1.00
			CWEA Redwood Empire Con't Ed - June 2023 (AJE FY22-23)	6020 · Continuing Education	Tiburon	-22.78
			CWEA Redwood Empire Con't Ed + QWI G4/5 Review - July 2023	6020 · Continuing Education	SD5	-725.00
			Home Depot (TR) - June 2023 (AJE FY22-23)	7021 · Plant Maintenance Su...	Belvedere	-23.09
			Home Depot (TR) - June 2023 (AJE FY22-23)	7021 · Plant Maintenance Su...	Tiburon	-32.56
			Home Depot (TR), MOJO cleaning solution - July 2023	7021 · Plant Maintenance Su...	SD5	-605.28
			Janitorial Supplies + Alhambra H2O - June, 2023 (AJE FY22-23)	7023 · Janitorial Supplies & ...	Belvedere	-124.33
			Janitorial Supplies + Alhambra H2O - June, 2023 (AJE FY22-23)	7023 · Janitorial Supplies & ...	Tiburon	-175.25
			Janitorial Supplies - July 2023	7023 · Janitorial Supplies & ...	SD5	-68.13
			#0822/9545: Amazon - lab supplies - May - June 2023 (AJE FY22-23)	7025 · Lab Supplies & Chem...	Belvedere	-225.08
			#0822/9545: Amazon - lab supplies - May - June 2023 (AJE FY22-23)	7025 · Lab Supplies & Chem...	Tiburon	-317.28
			#0822/9545: Amazon - lab supplies - July 2023	7025 · Lab Supplies & Chem...	SD5	-530.82
			Propane Exchange (2) + Petroleum (on back-order) - July 2023	7071 · Fuel	SD5	-140.39
			Napa Auto - June 2023 (AJE FY22-23)	7072 · Maintenance	Belvedere	-14.29
			Napa Auto - June 2023 (AJE FY22-23)	7072 · Maintenance	Tiburon:P...	-0.88
			Napa Auto - June 2023 (AJE FY22-23)	7072 · Maintenance	Tiburon	-20.07
			Safety Training (CMC Rescue) - July 2023	8515 · Safety	SD5	-1,777.47
TOTAL						-8,434.82

08/10/23

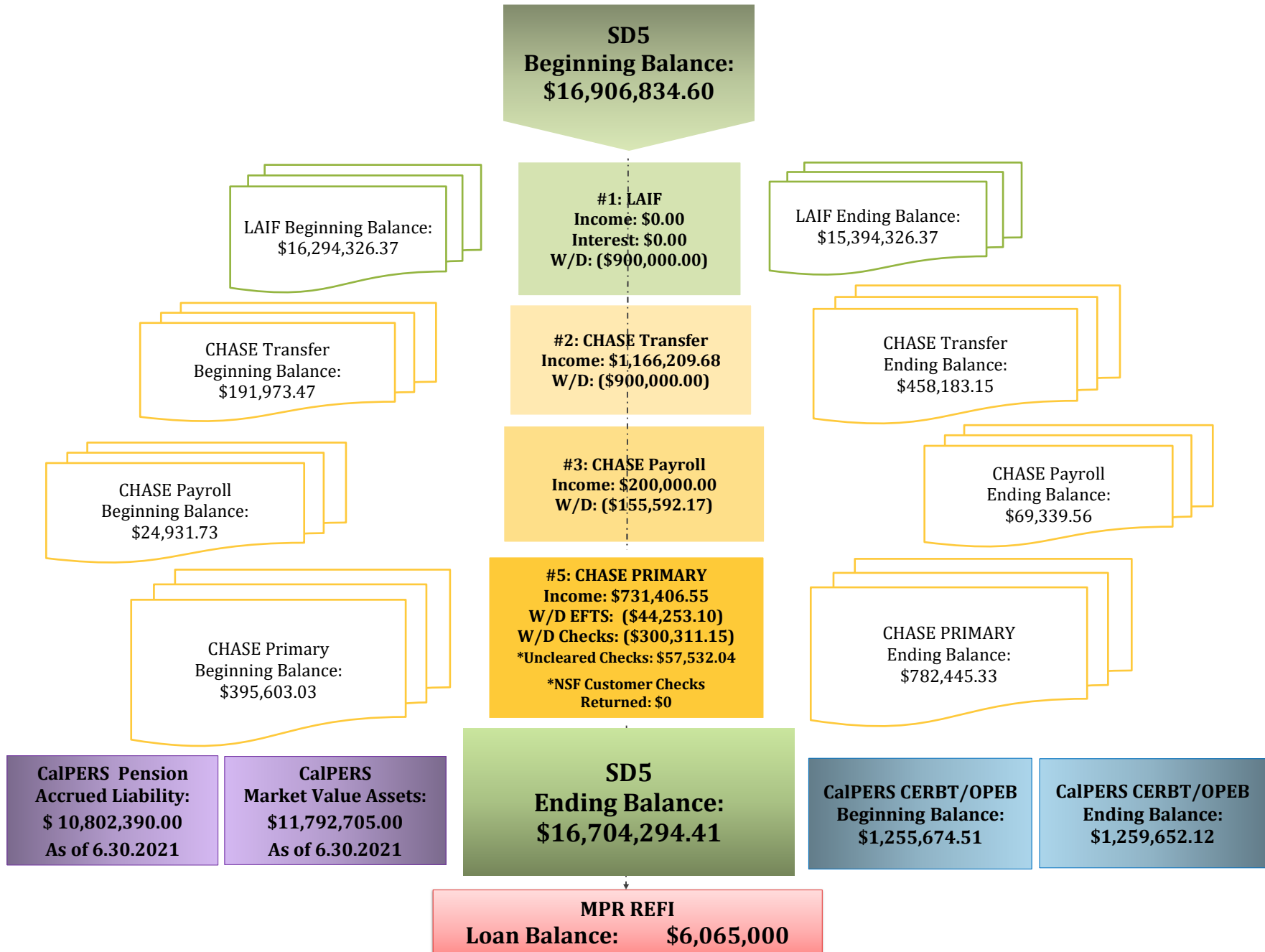
**Sanitary Distr. No.5 of Marin Co.
Warrant List Detail - REVISED**

July 18 through August 10, 2023

Num	Date	Name	Memo	Account	Class	Paid Am...
9953	08/10/23	USABlueBook	Cust #933682, M.P. Parts & Lab Supplies - July 2023	JP Morgan Chase - Primar...		
			Inv #00073899 (PO#AB754160), Latex Gloves - July 2023	8515 · Safety	SD5	-1,072.09
			Inv #00086236 + Inv #00088089 (PO#AB754170), PlantPro 10# BioBloc...	7025 · Lab Supplies & Chem...	SD5	-2,765.78
TOTAL						-3,837.87
9954	08/10/23	USP Technologies	Cust #: UCO500893, Chemicals - July 2023	JP Morgan Chase - Primar...		
			Inv #CIN470013108 (PO #RC754212) Sulfelox Totes (\$7.5500/Gal) - Ju...	7024 · Main Plant Chemicals	SD5	-8,139.26
TOTAL						-8,139.26
9955	08/10/23	Verizon Wireless	Acct #0342125502-00001: iPhones & BPS Comm - June - July 2023 (...)	JP Morgan Chase - Primar...		
			Inv #9934368494: Monthly SD5 EE Cell phone Charges (@ \$175/mo.Pla...	8531 · Main Plant Telephones	Belvedere	-170.89
			Inv #9934368494: Monthly SD5 EE Cell phone Charges (@ \$175/mo.Pla...	8532 · Paradise Cove Telep...	Tiburon:P...	-0.11
			Inv #9934368494: Monthly SD5 EE Cell phone Charges (@ \$175/mo.Pla...	8531 · Main Plant Telephones	Tiburon	-240.12
			Inv #9934368494: Monthly Charges for BPS Telephone lines (BPS#2, #...	8533 · Pumps & Lines Telep...	Belvedere	-19.32
			Inv #9934368494: Monthly Charges for P.C. PS Telephone lines (SF#1+...	8533 · Pumps & Lines Telep...	Tiburon:P...	-19.32
			Inv #9934368494: Taxes, Gov't Surcharges & Fees - June 2023 (AJE Y2...	8531 · Main Plant Telephones	Belvedere	-7.97
			Inv #9934368494: Taxes, Gov't Surcharges & Fees - June 2023 (AJE Y2...	8532 · Paradise Cove Telep...	Tiburon:P...	-0.49
			Inv #9934368494: Taxes, Gov't Surcharges & Fees - June 2023 (AJE Y2...	8531 · Main Plant Telephones	Tiburon	-11.20
			Inv #9934368494: Monthly SD5 EE Cell phone Charges - July 2023	8531 · Main Plant Telephones	SD5	-76.94
			Inv #9934368494: Monthly Charges for BPS + P.C. Telephone lines - Jul...	8532 · Paradise Cove Telep...	SD5	-3.43
TOTAL						-549.79
9956	08/10/23	Water Components & ...	Acct #454, M.P. Supplies - July 2023	JP Morgan Chase - Primar...		
			Inv #30612601 (PO#PC952170), M.P. Maint. Supplies - July 2023	7021 · Plant Maintenance Su...	SD5	-72.54
TOTAL						-72.54

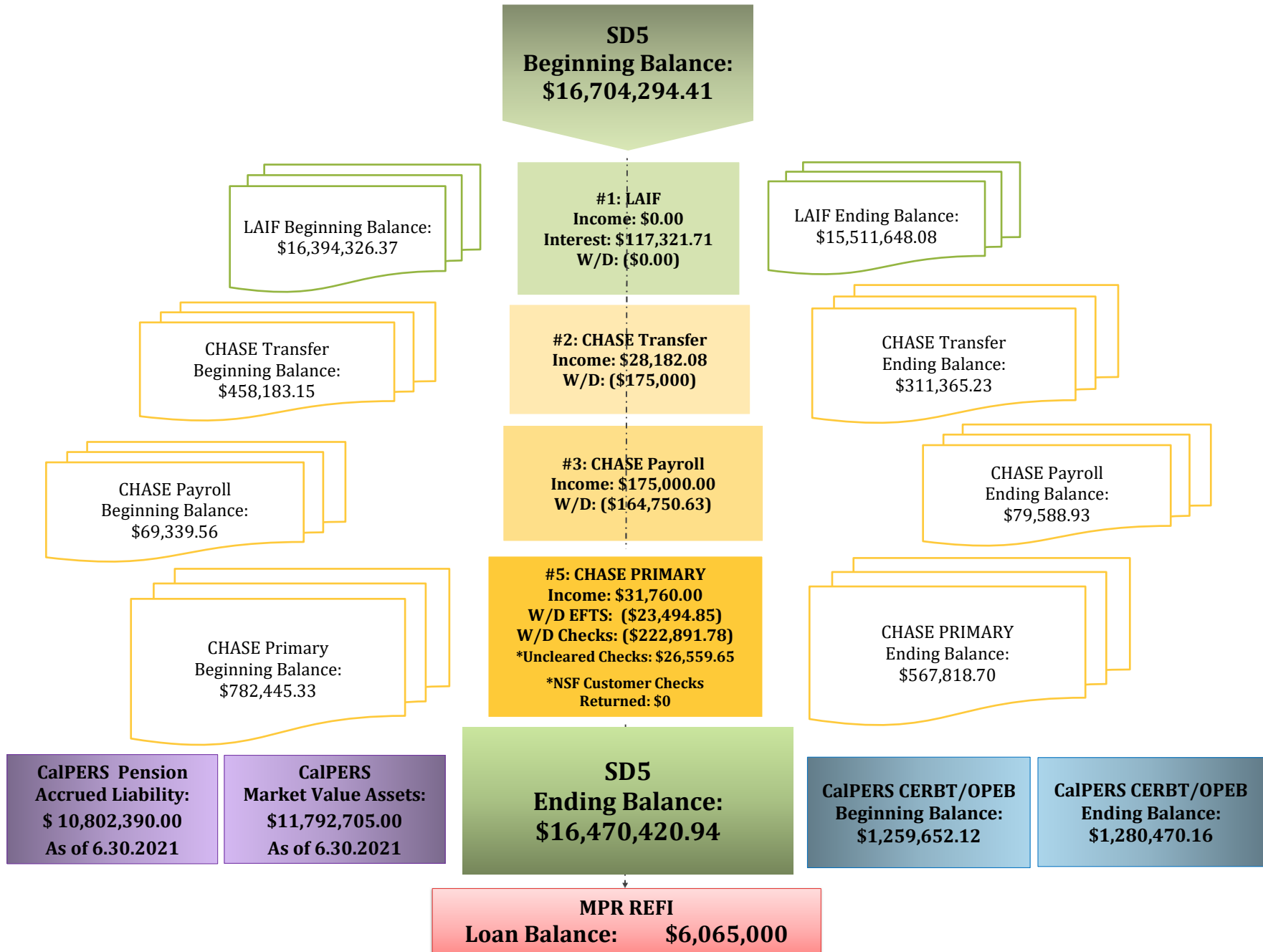
CASH FLOW CHART

SANITARY DISTRICT NO. 5 OF MARIN COUNTY: June 2023



CASH FLOW CHART

SANITARY DISTRICT NO. 5 OF MARIN COUNTY: July 2023





NOTICE OF AUTOMATIC PAYMENT

Paychex of New York LLC
1535 Scenic Avenue Suite 100
Costa Mesa CA 92626

Client # 0082 Y400-2116
Invoice # 2023071201

AUTOMATIC PAYMENT \$344.23

This amount will be deducted from the following bank account at or after 12:01 A.M on 7/14/23.

XXXXXXXXXXXXXXXX506

ADDRESS SERVICE REQUESTED

0082 Y400-2116
SANITARY DISTRICT NO 5
2001 Paradise Dr
Tiburon, California 94920-1937

For questions regarding your account, please call (844) 729-9247

Page 1 of 1

ACCOUNT SUMMARY				AMOUNT
Previous Balance on Invoice#2023062801 Due 06/30/23				334.98
Payment Received - Thank You				-334.98
Balance Forward				0.00
Total New Charges				344.23
Account Balance (Includes Balance Forward, New Charges, and Pending Automatic Payments)				344.23

CHECK DATE	DESCRIPTION OF SERVICE	PROCESSING DATE	# TRANSACTIONS	AMOUNT
NEW CHARGES				
07/14/23	Paychex Productivity	07/12/23	15	364.50
	Quarter End Delivery			4.00
	Delivery		1	16.54
	Client Discount			-40.81
	Total New Charges			344.23
Automatic Payment (Includes New Charges and applicable credits from Balance Forward above)				344.23

64
2

Thank you for choosing Paychex.

CASH REQUIREMENTS

CASH REQUIRED FOR NEGOTIABLE CHECKS &/OR ELECTRONIC FUNDS TRANSFERS (EFT) FOR CHECK DATE 07/14/23: \$86,749.93

IMPORTANT COVID-19 INFORMATION: If you filed IRS Form 7200, please notify your Paychex representative to avoid owing a balance at the end of the quarter and ensure your Form 941 is accurate.

TRANSACTION SUMMARY

SUMMARY BY TRANSACTION TYPE -	TOTAL ELECTRONIC FUNDS TRANSFER (EFT)	86,749.93	
	CASH REQUIRED FOR NEGOTIABLE CHECKS &/OR EFT	86,749.93	
	TOTAL REMAINING DEDUCTIONS / WITHHOLDINGS / LIABILITIES	10,177.80	
	CASH REQUIRED FOR CHECK DATE 07/14/23	<u>96,927.73</u>	

TRANSACTION DETAIL

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

<u>TRANS. DATE</u>	<u>BANK NAME</u>	<u>ACCOUNT NUMBER</u>	<u>PRODUCT</u>	<u>DESCRIPTION</u>		BANK DRAFT AMOUNTS & OTHER TOTALS
07/13/23	JPMORGAN CHASE BANK,	xxxxxxxxxxxxx506	Direct Deposit	Net Pay Allocations	60,474.47	60,474.47
07/13/23	JPMORGAN CHASE BANK,	xxxxxxxxxxxxx506	Taxpay®	Employee Withholdings		
				Social Security	5,556.90	
				Medicare	1,299.61	
				Fed Income Tax	8,722.23	
				CA Income Tax	3,717.85	
				Total Withholdings	<u>19,296.59</u>	
				Employer Liabilities		
				Social Security	5,556.90	
				Medicare	1,299.61	
				Fed Unemploy	2.90	
				CA Disability	101.60	
				CA Unemploy	17.38	
				CA Emp Train	0.48	
				Total Liabilities	<u>6,978.87</u>	26,275.46
				EFT FOR 07/13/23		86,749.93
				TOTAL EFT		86,749.93

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

<u>TRANS. DATE</u>	<u>BANK NAME</u>	<u>ACCOUNT NUMBER</u>	<u>PRODUCT</u>	<u>DESCRIPTION</u>		<u>TOTAL</u>
07/14/23	Refer to your records for account	Information	Payroll	Employee Deductions		
				401A Member Contribu	4,514.07	
				Calpers 457B Roth	1,012.00	
				Calpers 457B TRDL	1,834.06	
				Med 125	194.61	

NOTICE OF AUTOMATIC PAYMENT



Paychex of New York LLC
 1535 Scenic Avenue Suite 100
 Costa Mesa CA 92626

Client # 0082 Y400-2116
 Invoice # 2023072701

AUTOMATIC PAYMENT \$334.98

This amount will be deducted from the following bank account at or after 12:01 A.M on 7/31/23.

XXXXXXXXXXXXXXXXX506

ADDRESS SERVICE REQUESTED

0082 Y400-2116
 SANITARY DISTRICT NO 5
 2001 Paradise Dr
 Tiburon, California 94920-1937

For questions regarding your account, please call (844) 729-9247

Page 1 of 1

ACCOUNT SUMMARY				AMOUNT
Previous Balance on Invoice#2023071201 Due 07/14/23				344.23
Payment Received - Thank You				-344.23
Balance Forward				0.00
Total New Charges				334.98
Account Balance (Includes Balance Forward, New Charges, and Pending Automatic Payments)				334.98

CHECK DATE	DESCRIPTION OF SERVICE	PROCESSING DATE	# TRANSACTIONS	AMOUNT
NEW CHARGES				
07/31/23	Paychex Productivity	07/27/23	14	358.60
	Delivery		1	16.54
	Client Discount			-40.16
	Total New Charges			334.98
Automatic Payment (Includes New Charges and applicable credits from Balance Forward above)				334.98

Thank you for choosing Paychex.

CASH REQUIREMENTS

(Prior to Processing)

CASH REQUIRED FOR NEGOTIABLE CHECKS &/OR ELECTRONIC FUNDS TRANSFERS (EFT) FOR CHECK DATE 07/31/23: \$71,985.35


IMPORTANT COVID-19 INFORMATION: If you filed IRS Form 7200, please notify your Paychex representative to avoid owing a balance at the end of the quarter and ensure your Form 941 is accurate.

TRANSACTION SUMMARY

SUMMARY BY TRANSACTION TYPE -	TOTAL ELECTRONIC FUNDS TRANSFER (EFT)	71,985.35
	CASH REQUIRED FOR NEGOTIABLE CHECKS &/OR EFT	<u>71,985.35</u>
	TOTAL REMAINING DEDUCTIONS / WITHHOLDINGS / LIABILITIES	10,169.47
	CASH REQUIRED FOR CHECK DATE 07/31/23	<u>82,154.82</u>

TRANSACTION DETAIL

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

<u>TRANS. DATE</u>	<u>BANK NAME</u>	<u>ACCOUNT NUMBER</u>	<u>PRODUCT</u>	<u>DESCRIPTION</u>		BANK DRAFT AMOUNTS & OTHER TOTALS
07/28/23	JPMORGAN CHASE BANK,	xxxxxxxxxxxxx506	Direct Deposit	Net Pay Allocations	45,285.36	45,285.36
07/28/23	JPMORGAN CHASE BANK,	xxxxxxxxxxxxx506	Taxpay®	Employee Withholdings		
				Social Security	4,706.40	
				Medicare	1,100.69	
				Fed Income Tax	10,517.07	
				CA Income Tax	4,452.00	
				Total Withholdings	<u>20,776.16</u>	
				Employer Liabilities		
				Social Security	4,706.38	
				Medicare	1,100.69	
				Fed Unemploy	2.16	
				CA Disability	101.27	
				CA Unemploy	12.97	
				CA Emp Train	0.36	
				Total Liabilities	<u>5,923.83</u>	26,699.99
				EFT FOR 07/28/23		71,985.35 
				TOTAL EFT		71,985.35

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

<u>TRANS. DATE</u>	<u>BANK NAME</u>	<u>ACCOUNT NUMBER</u>	<u>PRODUCT</u>	<u>DESCRIPTION</u>		<u>TOTAL</u>
07/31/23	Refer to your records for account	Information	Payroll	Employee Deductions		
				401A Member Contribu	4,565.70	
				Calpers 457B Roth	1,012.00	
				Calpers 457B TRDL	1,838.13	
				Med 125	194.61	

Sanitary Distr. No.5 of Marin Co.
Comparative Balance Sheet
As of July 31, 2023

	<u>Jul 31, 23</u>	<u>Jun 30, 23</u>	<u>\$ Change</u>
ASSETS			
Current Assets			
Checking/Savings			
JP Morgan Chase - Payroll 7506	78,821.26	68,571.89	10,249.37
JP Morgan Chase - Primary 7399	942,624.83	1,131,691.04	-189,066.21
JP Morgan Chase - Transfer 7522	-88,634.77	58,183.15	-146,817.92
Local Agency Investment Fund			
Belvedere			
Belvedere Capital & CIP Reserve	4,585,323.71	4,585,323.71	0.00
Belvedere Disaster RecoveryFund	356,250.00	356,250.00	0.00
Belvedere Operating	1,159,193.96	1,159,193.96	0.00
Belvedere Operating Reserve	516,923.05	516,923.05	0.00
Belvedere PERS Retirement Trust	356,250.00	356,250.00	0.00
Total Belvedere	<u>6,973,940.72</u>	<u>6,973,940.72</u>	<u>0.00</u>
Tiburon			
Tiburon Capital & CIP Reserve	5,139,742.28	5,139,742.28	0.00
Tiburon Disaster Recovery Fund	643,750.00	643,750.00	0.00
Tiburon Operating	1,426,535.08	1,309,213.37	117,321.71
Tiburon Operating Reserve	683,930.00	683,930.00	0.00
Tiburon PERS Retirement Trust	643,750.00	643,750.00	0.00
Total Tiburon	<u>8,537,707.36</u>	<u>8,420,385.65</u>	<u>117,321.71</u>
Total Local Agency Investment Fund	<u>15,511,648.08</u>	<u>15,394,326.37</u>	<u>117,321.71</u>
Total Checking/Savings	16,444,459.40	16,652,772.45	-208,313.05
Accounts Receivable	25,528.05	0.00	25,528.05
Other Current Assets	881.92	881.92	0.00
Total Current Assets	<u>16,470,869.37</u>	<u>16,653,654.37</u>	<u>-182,785.00</u>
Fixed Assets	19,118,200.30	19,118,200.30	0.00
TOTAL ASSETS	<u>35,589,069.67</u>	<u>35,771,854.67</u>	<u>-182,785.00</u>
LIABILITIES & EQUITY	35,589,069.67	35,771,854.67	-182,785.00

Sanitary Distr. No.5 of Marin Co.
Annual Budget vs Actual Expenses
 July 2023 through June 2024

	Jul '23 - Jun 24	Budget	\$ Over Budget	% of Bu...
Ordinary Income/Expense				
Income				
5000 · Property Taxes / AD VALOREM				
5001.2 · TEETER	4,818.52	905,000.00	-900,181.48	0.5%
5002 · UNSEC	0.00	15,000.00	-15,000.00	0.0%
5003 · PUNS / PRIOR UNSECURED	0.00	1,500.00	-1,500.00	0.0%
5004 · REDEMPTION / RDMPT	131.35	0.00	131.35	100.0%
5006 · SPLU	0.00	0.00	0.00	0.0%
5041 · SUPSEC	1,428.58	20,000.00	-18,571.42	7.1%
5043 · SECU	0.00	0.00	0.00	0.0%
5046 · Excess ERAF	0.00	255,314.00	-255,314.00	0.0%
5280 · HOPTR	0.00	3,000.00	-3,000.00	0.0%
5483 · Other tax	0.00	7,000.00	-7,000.00	0.0%
Total 5000 · Property Taxes / AD VALOREM	6,378.45	1,206,814.00	-1,200,435.55	0.5%
5007 · Sewer Service Charge				
5007.1 · Sewer Service - Tiburon Ops	11,879.14	4,861,118.00	-4,849,238.86	0.2%
5007.2 · Sewer Service-Belv Ops	7,578.44	0.00	7,578.44	100.0%
5007.3 · Sewer Service-Belv Cap	2,346.05	0.00	2,346.05	100.0%
5007.4 · Other User Fees	0.00	38,700.00	-38,700.00	0.0%
5007.5 · Sewer Service - Tiburon Cap	0.00	246,296.00	-246,296.00	0.0%
Total 5007 · Sewer Service Charge	21,803.63	5,146,114.00	-5,124,310.37	0.4%
5201 · Interest				
5201.1 · Interest County of Marin	0.00	0.00	0.00	0.0%
5201.2 · Interest LAIF	117,321.71	100,000.00	17,321.71	117.3%
Total 5201 · Interest	117,321.71	100,000.00	17,321.71	117.3%
5900.10 · Paradise Sewer Line Ext. Fees	0.00	15,479.10	-15,479.10	0.0%
5900.3 · Connection Fees				
5900.30 · Connection Permit Fees	600.00	16,250.00	-15,650.00	3.7%
5900.31 · Collection	8,019.00	200,000.00	-191,981.00	4.0%
5900.34 · Treatment	15,515.00	200,000.00	-184,485.00	7.8%
Total 5900.3 · Connection Fees	24,134.00	416,250.00	-392,116.00	5.8%
5900.4 · Inspection Permit Fees	400.00	16,250.00	-15,850.00	2.5%
5900.5 · SASM Expense Reimb.	25,528.05	75,000.00	-49,471.95	34.0%
5900.9 · Other Income	0.00	100.00	-100.00	0.0%
Total Income	195,565.84	6,976,007.10	-6,780,441.26	2.8%
Gross Profit	195,565.84	6,976,007.10	-6,780,441.26	2.8%
Expense				
6000 · Administrative Expenses				
6001 · Advertising	0.00	2,000.00	-2,000.00	0.0%
6002 · Outreach & Newsletter	0.00	0.00	0.00	0.0%
6008 · Audit & Accounting	2,453.28	40,000.00	-37,546.72	6.1%
6017 · Consulting Fees	12,350.70	100,000.00	-87,649.30	12.4%
6018 · Travel & Meetings				
6018.1 · Meetings & Travel	3,175.06	15,000.00	-11,824.94	21.2%
6018.2 · Standby Mileage Expense Reimb	307.29	8,000.00	-7,692.71	3.8%
Total 6018 · Travel & Meetings	3,482.35	23,000.00	-19,517.65	15.1%
6020 · Continuing Education	2,456.50	10,000.00	-7,543.50	24.6%
6021 · County Fees	3,356.05	16,590.00	-13,233.95	20.2%
6024 · Director Fees	4,800.00	9,000.00	-4,200.00	53.3%
6025 · Dues & Subscriptions	1,906.80	33,000.00	-31,093.20	5.8%
6026 · Elections	0.00	0.00	0.00	0.0%

Sanitary Distr. No.5 of Marin Co.
Annual Budget vs Actual Expenses
 July 2023 through June 2024

	Jul '23 - Jun 24	Budget	\$ Over Budget	% of Bu...
6033 · Insurance				
6033.1 · Insurance - SD5 Property	63,641.62	100,000.00	-36,358.38	63.6%
6033.2 · Insurance - SD5 Liability	0.00	60,000.00	-60,000.00	0.0%
6033.3 · Insurance - SD5 Auto	3,505.00	10,000.00	-6,495.00	35.1%
Total 6033 · Insurance	67,146.62	170,000.00	-102,853.38	39.5%
6039 · Legal	2,870.00	50,000.00	-47,130.00	5.7%
6047 · Office Supplies	1,024.94	11,000.00	-9,975.06	9.3%
6056 · Postage	0.00	1,300.00	-1,300.00	0.0%
6059 · Pollution Prevention/Public Edu	0.00	5,500.00	-5,500.00	0.0%
6065 · Miscellaneous Expense	0.00	0.00	0.00	0.0%
Total 6000 · Administrative Expenses	101,847.24	471,390.00	-369,542.76	21.6%
7000 · Ops & Maintenance Expenses				
7010 · Pumps & Lines Maintenance				
7011 · Pumps & Lines Maintenance	6,970.23	200,000.00	-193,029.77	3.5%
7013 · Emergency Line Repair	0.00	100,000.00	-100,000.00	0.0%
Total 7010 · Pumps & Lines Maintenance	6,970.23	300,000.00	-293,029.77	2.3%
7020 · Main Plant Maintenance				
7021 · Plant Maintenance Supplies	8,376.71	80,000.00	-71,623.29	10.5%
7022 · Plant Maint. Parts & Service	68,970.45	300,000.00	-231,029.55	23.0%
7023 · Janitorial Supplies & Service	1,572.83	10,000.00	-8,427.17	15.7%
7024 · Main Plant Chemicals	13,453.58	165,000.00	-151,546.42	8.2%
7025 · Lab Supplies & Chemicals	7,985.39	25,000.00	-17,014.61	31.9%
7027 · Electrical & Instrument	5,109.66	30,000.00	-24,890.34	17.0%
7028 · Grounds Maintenance	0.00	8,000.00	-8,000.00	0.0%
7029 · Main Plant Sludge Disposal	12,941.84	55,000.00	-42,058.16	23.5%
Total 7020 · Main Plant Maintenance	118,410.46	673,000.00	-554,589.54	17.6%
7040 · Paradise Cove Plant Maint				
7041 · Paradise Parts & Service	14,199.41	20,000.00	-5,800.59	71.0%
7042 · Paradise Supplies & Chemicals	3,905.14	6,500.00	-2,594.86	60.1%
7043 · Paradise Sludge Disposal	0.00	3,000.00	-3,000.00	0.0%
Total 7040 · Paradise Cove Plant Maint	18,104.55	29,500.00	-11,395.45	61.4%
7050 · Monitoring				
7051 · Main Plant Lab Monitoring	6,420.32	50,000.00	-43,579.68	12.8%
7052 · Paradise Cove Monitoring	407.45	10,000.00	-9,592.55	4.1%
7053 · Chronic Toxicity	3,030.00	15,000.00	-11,970.00	20.2%
Total 7050 · Monitoring	9,857.77	75,000.00	-65,142.23	13.1%
7060 · Permits/Fees				
7061 · Main Plant NPDES Renewal	0.00	0.00	0.00	0.0%
7062 · Permits/Fees - General	13,021.65	50,000.00	-36,978.35	26.0%
7063 · Paradise Cove Permits/Fees	83.90	9,000.00	-8,916.10	0.9%
7064 · Paradise Cove NPDES Renewal	0.00	0.00	0.00	0.0%
Total 7060 · Permits/Fees	13,105.55	59,000.00	-45,894.45	22.2%
7070 · Truck Maintenance				
7071 · Fuel	3,775.80	20,000.00	-16,224.20	18.9%
7072 · Maintenance	706.60	30,000.00	-29,293.40	2.4%
Total 7070 · Truck Maintenance	4,482.40	50,000.00	-45,517.60	9.0%
Total 7000 · Ops & Maintenance Expenses	170,930.96	1,186,500.00	-1,015,569.04	14.4%

Sanitary Distr. No.5 of Marin Co. Annual Budget vs Actual Expenses July 2023 through June 2024

	Jul '23 - Jun 24	Budget	\$ Over Budget	% of Bu...
8000 · Salaries and Benefits Expenses				
8001 · Salaries	122,844.81	1,598,548.00	-1,475,703.19	7.7%
8003 · Overtime	8,391.20	100,000.00	-91,608.80	8.4%
8004 · Standby Pay	6,934.73	80,000.00	-73,065.27	8.7%
8005 · Employee Incentives	19,000.00	60,000.00	-41,000.00	31.7%
8006 · Vacation Buyout	8,968.00	80,000.00	-71,032.00	11.2%
8013 · Payroll Taxes	12,930.60	110,000.00	-97,069.40	11.8%
8015 · Payroll/Bank Fees	679.21	7,000.00	-6,320.79	9.7%
8016 · Car Allowance	6,000.00	6,000.00	0.00	100.0%
8019 · PERS Retirement				
8019.05 · PERS Retirement	39,255.57	272,332.00	-233,076.43	14.4%
8019.08 · PERS Retirement - CalPERS UAL	0.00	0.00	0.00	0.0%
Total 8019 · PERS Retirement	39,255.57	272,332.00	-233,076.43	14.4%
8020 · Employee Health				
8020.05 · Employee Health	24,793.24	290,000.00	-265,206.76	8.5%
8021 · Employee Health Deductions	-389.22	0.00	-389.22	100.0%
Total 8020 · Employee Health	24,404.02	290,000.00	-265,595.98	8.4%
8022 · Retiree Health				
8022.05 · Retiree Health	1,079.49	80,144.00	-79,064.51	1.3%
8022.10 · CERBT/OPEB Annual Arc Contribtn	0.00	140,000.00	-140,000.00	0.0%
Total 8022 · Retiree Health	1,079.49	220,144.00	-219,064.51	0.5%
8023 · Workers Comp Insurance	48,373.00	58,000.00	-9,627.00	83.4%
Total 8000 · Salaries and Benefits Expenses	298,860.63	2,882,024.00	-2,583,163.37	10.4%
8500 · Other Operating Expenses				
8510 · Data/Alarms/IT Supp & Licensing	12,933.58	100,000.00	-87,066.42	12.9%
8515 · Safety	20,425.73	60,000.00	-39,574.27	34.0%
8520 · Personal Protection/Safety Wear	1,000.69	15,000.00	-13,999.31	6.7%
8530 · Telephone				
8531 · Main Plant Telephones	1,136.88	11,000.00	-9,863.12	10.3%
8532 · Paradise Cove Telephones	460.38	500.00	-39.62	92.1%
8533 · Pumps & Lines Telephones	1,071.03	7,000.00	-5,928.97	15.3%
Total 8530 · Telephone	2,668.29	18,500.00	-15,831.71	14.4%
8540 · Utilities				
8541 · Water	1,716.14	9,000.00	-7,283.86	19.1%
8542 · Main Plant Utilities	39,713.65	230,000.00	-190,286.35	17.3%
8543 · Paradise Cove Utilities	4,131.63	22,000.00	-17,868.37	18.8%
8544 · Pump Station Utilities	8,945.77	48,000.00	-39,054.23	18.6%
Total 8540 · Utilities	54,507.19	309,000.00	-254,492.81	17.6%
Total 8500 · Other Operating Expenses	91,535.48	502,500.00	-410,964.52	18.2%
Total Expense	663,174.31	5,042,414.00	-4,379,239.69	13.2%
Net Ordinary Income	-467,608.47	1,933,593.10	-2,401,201.57	-24.2%
Other Income/Expense				
Other Expense				
9100 · Capital Expenditures				
9200 · Main Plant Equipment Capital				
9201.1 · M.P. Roll-Up Doors	0.00	75,000.00	-75,000.00	0.0%
9201.2 · M.P. Corrosion Protection	0.00	150,000.00	-150,000.00	0.0%
9208 · M.P. Chem Feed Trx Pump Rplcmnt	19,382.74	0.00	19,382.74	100.0%
9213 · M.P. Digester				
9213.1 · Digester Rehab	6,395.53	600,000.00	-593,604.47	1.1%
Total 9213 · M.P. Digester	6,395.53	600,000.00	-593,604.47	1.1%

Sanitary Distr. No.5 of Marin Co. Annual Budget vs Actual Expenses July 2023 through June 2024

	Jul '23 - Jun 24	Budget	\$ Over Budget	% of Bu...
9216 · M.P. Secondary Clarifier				
9216.1 · Scum Removal Project FY22-23	0.00	300,000.00	-300,000.00	0.0%
Total 9216 · M.P. Secondary Clarifier	0.00	300,000.00	-300,000.00	0.0%
9217 · SD5 Shop Rplcmnt /Ops Control				
9217.1 · FY23-24 Shop Rehab	0.00	100,000.00	-100,000.00	0.0%
Total 9217 · SD5 Shop Rplcmnt /Ops Control	0.00	100,000.00	-100,000.00	0.0%
9229.8 · Vehicle Replacement	58,971.50			
Total 9200 · Main Plant Equipment Capital	84,749.77	1,225,000.00	-1,140,250.23	6.9%
9300 · Pumps & Lines Capital				
9301 · Tiburon Sewer Line Rehab Prog	0.00	0.00	0.00	0.0%
9303 · CCTV Sewer Project	0.00	250,000.00	-250,000.00	0.0%
9304 · Belvedere Sewer Line Rehab Prog	0.00	0.00	0.00	0.0%
9305 · Valve/Wet Well Replacements				
9305.2 · Tiburon Wet Well Rehab	0.00	50,000.00	-50,000.00	0.0%
Total 9305 · Valve/Wet Well Replacements	0.00	50,000.00	-50,000.00	0.0%
9306 · PS Pump & Valve Replacements	0.00	100,000.00	-100,000.00	0.0%
9309 · BPS #1 Generator Replcmnt	0.00	600,000.00	-600,000.00	0.0%
9313 · Manholes/Rodholes	5,000.00	75,000.00	-70,000.00	6.7%
Total 9300 · Pumps & Lines Capital	5,000.00	1,075,000.00	-1,070,000.00	0.5%
9400 · Paradise Cove Capital				
9407 · P.C. Pump Replacement	0.00	25,000.00	-25,000.00	0.0%
9408 · P.C. Access Rd Imprvmnts	0.00	100,000.00	-100,000.00	0.0%
Total 9400 · Paradise Cove Capital	0.00	125,000.00	-125,000.00	0.0%
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%
Total 9500 · Undesignated Capital	0.00	125,000.00	-125,000.00	0.0%
Total 9100 · Capital Expenditures	89,749.77	2,550,000.00	-2,460,250.23	3.5%
9700 · Debt Service				
9730 · Debt Service - MPR Project				
9730.01 · MPR Loan - Principal	0.00	595,000.00	-595,000.00	0.0%
9730.02 · MPR Loan - Interest	0.00	157,790.00	-157,790.00	0.0%
Total 9730 · Debt Service - MPR Project	0.00	752,790.00	-752,790.00	0.0%
Total 9700 · Debt Service	0.00	752,790.00	-752,790.00	0.0%
Total Other Expense	89,749.77	3,302,790.00	-3,213,040.23	2.7%
Net Other Income	-89,749.77	-3,302,790.00	3,213,040.23	2.7%
Net Income	-557,358.24	-1,369,196.90	811,838.66	40.7%

**Sanitary Distr. No.5 of Marin Co.
Zone Report
July 2023**

08/07/23

Item #3C

	Paradise Cove (Tiburon)	Tiburon - Ot... (Tiburon)	Total Tiburon	Belvedere	TOTAL
Ordinary Income/Expense					
Income					
5000 · Property Taxes / AD VALOREM					
5001.2 · TEETER	205.75	4,612.77	4,818.52	0.00	4,818.52
5004 · REDEMPTION / RDMPT	5.61	125.74	131.35	0.00	131.35
5041 · SUPSEC	61.00	1,367.58	1,428.58	0.00	1,428.58
Total 5000 · Property Taxes / AD VALOREM	272.36	6,106.09	6,378.45	0.00	6,378.45
5007 · Sewer Service Charge					
5007.1 · Sewer Service - Tiburon Ops	507.24	11,371.90	11,879.14	0.00	11,879.14
5007.2 · Sewer Service-Belv Ops	0.00	0.00	0.00	7,578.44	7,578.44
5007.3 · Sewer Service-Belv Cap	0.00	0.00	0.00	2,346.05	2,346.05
5007.5 · Sewer Service - Tiburon Cap	0.00	0.00	0.00	0.00	0.00
Total 5007 · Sewer Service Charge	507.24	11,371.90	11,879.14	9,924.49	21,803.63
5201 · Interest					
5201.2 · Interest LAIF	0.00	58,902.07	58,902.07	58,419.64	117,321.71
Total 5201 · Interest	0.00	58,902.07	58,902.07	58,419.64	117,321.71
5900.5 · SASM Expense Reimb.	0.00	14,158.94	14,158.94	11,369.11	25,528.05
Total Income	779.60	90,539.00	91,318.60	79,713.24	171,031.84
Gross Profit	779.60	90,539.00	91,318.60	79,713.24	171,031.84
Expense					
6000 · Administrative Expenses					
6001 · Advertising	0.00	0.00	0.00	0.00	0.00
6008 · Audit & Accounting	0.00	0.00	0.00	0.00	0.00
6017 · Consulting Fees	153.51	3,675.16	3,828.67	2,608.73	6,437.40
6018 · Travel & Meetings					
6018.1 · Meetings & Travel	27.44	625.12	652.56	445.10	1,097.66
6018.2 · Standby Mileage Expense Reimb	0.00	0.00	0.00	0.00	0.00
6018.3 · SASM Mileage Reimbursement	0.00	0.00	0.00	0.00	0.00
Total 6018 · Travel & Meetings	27.44	625.12	652.56	445.10	1,097.66
6020 · Continuing Education	28.51	649.22	677.73	462.27	1,140.00
6024 · Director Fees	120.00	2,733.60	2,853.60	1,946.40	4,800.00
6025 · Dues & Subscriptions	0.80	18.11	18.91	12.89	31.80
6039 · Legal	20.68	470.98	491.66	335.34	827.00
6047 · Office Supplies	9.46	215.26	224.72	153.28	378.00
6056 · Postage	0.00	0.00	0.00	0.00	0.00
6065 · Miscellaneous Expense	0.00	0.00	0.00	0.00	0.00
Total 6000 · Administrative Expenses	360.40	8,387.45	8,747.85	5,964.01	14,711.86
7000 · Ops & Maintenance Expenses					
7010 · Pumps & Lines Maintenance					
7011 · Pumps & Lines Maintenance	0.00	0.00	0.00	5,000.00	5,000.00
Total 7010 · Pumps & Lines Maintenance	0.00	0.00	0.00	5,000.00	5,000.00
7020 · Main Plant Maintenance					
7021 · Plant Maintenance Supplies	0.00	1,387.06	1,387.06	983.98	2,371.04
7022 · Plant Maint. Parts & Service	0.00	22,083.69	22,083.69	15,666.21	37,749.90
7023 · Janitorial Supplies & Service	0.00	367.91	367.91	261.21	629.12
7024 · Main Plant Chemicals	0.00	-5,349.12	-5,349.12	-3,794.68	-9,143.80
7025 · Lab Supplies & Chemicals	0.00	2,425.67	2,425.67	1,720.76	4,146.43
7026 · SASM Supplies & Chem	0.00	11,514.22	11,514.22	8,168.21	19,682.43
7027 · Electrical & Instrument	94.65	2,155.99	2,250.64	1,535.13	3,785.77
7028 · Grounds Maintenance	0.00	0.00	0.00	0.00	0.00
7029 · Main Plant Sludge Disposal	0.00	4,872.88	4,872.88	3,456.83	8,329.71
Total 7020 · Main Plant Maintenance	94.65	39,458.30	39,552.95	27,997.65	67,550.60

**Sanitary Distr. No.5 of Marin Co.
Zone Report
July 2023**

08/07/23

	Paradise Cove (Tiburon)	Tiburon - Ot... (Tiburon)	Total Tiburon	Belvedere	TOTAL
7040 · Paradise Cove Plant Maint					
7041 · Paradise Parts & Service	6,000.00	0.00	6,000.00	0.00	6,000.00
7042 · Paradise Supplies & Chemicals	3.30	0.00	3.30	0.00	3.30
Total 7040 · Paradise Cove Plant Maint	6,003.30	0.00	6,003.30	0.00	6,003.30
7050 · Monitoring					
7051 · Main Plant Lab Monitoring	0.00	1,801.69	1,801.69	1,278.13	3,079.82
7052 · Paradise Cove Monitoring	352.45	0.00	352.45	0.00	352.45
Total 7050 · Monitoring	352.45	1,801.69	2,154.14	1,278.13	3,432.27
7070 · Truck Maintenance					
7071 · Fuel	0.62	14.06	14.68	10.01	24.69
7072 · Maintenance	5.36	122.02	127.38	86.87	214.25
Total 7070 · Truck Maintenance	5.98	136.08	142.06	96.88	238.94
Total 7000 · Ops & Maintenance Expenses	6,456.38	41,396.07	47,852.45	34,372.66	82,225.11
8000 · Salaries and Benefits Expenses					
8001 · Salaries	0.00	-4,512.12	-4,512.12	-3,200.90	-7,713.02
8005 · Employee Incentives	325.00	7,403.50	7,728.50	5,271.50	13,000.00
8019 · PERS Retirement					
8019.05 · PERS Retirement	561.36	12,787.70	13,349.06	9,105.20	22,454.26
Total 8019 · PERS Retirement	561.36	12,787.70	13,349.06	9,105.20	22,454.26
8020 · Employee Health					
8021 · Employee Health Deductions					
8021.05 · EE Health & Wellness	45.00	1,025.10	1,070.10	729.90	1,800.00
Total 8021 · Employee Health Deductions	45.00	1,025.10	1,070.10	729.90	1,800.00
Total 8020 · Employee Health	45.00	1,025.10	1,070.10	729.90	1,800.00
Total 8000 · Salaries and Benefits Expenses	931.36	16,704.18	17,635.54	11,905.70	29,541.24
8500 · Other Operating Expenses					
8510 · Data/Alarms/IT Supp & Licensing	190.82	4,346.89	4,537.71	3,095.10	7,632.81
8515 · Safety	34.82	793.34	828.16	564.87	1,393.03
8520 · Personal Protection/Safety Wear	16.54	377.44	393.98	291.00	684.98
8530 · Telephone					
8531 · Main Plant Telephones	0.00	0.00	0.00	0.00	0.00
8532 · Paradise Cove Telephones	73.16	0.00	73.16	0.00	73.16
8533 · Pumps & Lines Telephones	10.10	725.38	735.48	0.00	735.48
Total 8530 · Telephone	83.26	725.38	808.64	0.00	808.64
8540 · Utilities					
8541 · Water	0.00	887.86	887.86	828.28	1,716.14
8542 · Main Plant Utilities	0.00	11,419.34	11,419.34	8,100.90	19,520.24
8543 · Paradise Cove Utilities	2,030.35	0.00	2,030.35	0.00	2,030.35
8544 · Pump Station Utilities	302.28	2,963.93	3,266.21	1,510.11	4,776.32
Total 8540 · Utilities	2,332.63	15,271.13	17,603.76	10,439.29	28,043.05
Total 8500 · Other Operating Expenses	2,658.07	21,514.18	24,172.25	14,390.26	38,562.51
Total Expense	10,406.21	88,001.88	98,408.09	66,632.63	165,040.72
Net Ordinary Income	-9,626.61	2,537.12	-7,089.49	13,080.61	5,991.12

Sanitary Distr. No.5 of Marin Co.
Zone Report
July 2023

	Paradise Cove (Tiburon)	Tiburon - Ot... (Tiburon)	Total Tiburon	Belvedere	TOTAL
Other Income/Expense					
Other Expense					
9100 · Capital Expenditures					
9200 · Main Plant Equipment Capital					
9208 · M.P. Chem Feed Trx Pump Rplcmnt	0.00	11,338.91	11,338.91	8,043.83	19,382.74
9213 · M.P. Digester	0.00	3,316.11	3,316.11	2,352.46	5,668.57
Total 9200 · Main Plant Equipment Capital	0.00	14,655.02	14,655.02	10,396.29	25,051.31
9300 · Pumps & Lines Capital					
9313 · Manholes/Rodholes	0.00	0.00	0.00	5,000.00	5,000.00
Total 9300 · Pumps & Lines Capital	0.00	0.00	0.00	5,000.00	5,000.00
Total 9100 · Capital Expenditures	0.00	14,655.02	14,655.02	15,396.29	30,051.31
Total Other Expense	0.00	14,655.02	14,655.02	15,396.29	30,051.31
Net Other Income	0.00	-14,655.02	-14,655.02	-15,396.29	-30,051.31
Net Income	-9,626.61	-12,117.90	-21,744.51	-2,315.68	-24,060.19

2:55 PM

Sanitary Distr. No.5 of Marin Co.

08/07/23

Monthly O.T. Report

Accrual Basis

July 2023

Item #3D

Type	Date	Num	Name	Memo	Amount	Balance
Alvarez, Joel						
Check	07/30/23	526	Alvarez, Joel	02.00 Hrs. O.T. @ 1.5x	147.57	147.57
Total Alvarez, Joel					147.57	147.57
Balf, Abigail						
Check	07/14/23	512	Balf, Abigail	02.00 Hrs. O.T. @ 1.5x	120.72	120.72
Check	07/30/23	527	Balf, Abigail	02.00 Hrs. O.T. @ 1.5x	175.27	295.99
Check	07/30/23	527	Balf, Abigail	Pro-rated reimbursement Salary (7.15.2023)	6.76	302.75
Total Balf, Abigail					302.75	302.75
Bilsborough, Chad						
Check	07/14/23	513	Bilsborough, Chad	04.00 Hrs O.T. @ 1.5x	308.14	308.14
Check	07/30/23	528	Bilsborough, Chad	04.00 Hrs O.T. @ 1.5x	488.07	796.21
Check	07/30/23	528	Bilsborough, Chad	12.00 Hrs. O.T. @ 2.0x	1,301.52	2,097.73
Check	07/30/23	528	Bilsborough, Chad	04.00 Hrs O.T. @ 1.5x	17.25	2,114.98
Total Bilsborough, Chad					2,114.98	2,114.98
Cottrell, Rulon						
Check	07/14/23	515	Cottrell, Rulon	09.00 Hrs. O.T. @ 1.5x	975.55	975.55
Check	07/14/23	515	Cottrell, Rulon	01.50 Hrs. O.T. @ 2.0x	216.79	1,192.34
Check	07/30/23	530	Cottrell, Rulon	09.00 Hrs. O.T. @ 1.5x	457.86	1,650.20
Check	07/30/23	530	Cottrell, Rulon	01.50 Hrs. O.T. @ 2.0x	763.10	2,413.30
Check	07/30/23	530	Cottrell, Rulon	Pro-rated reimbursement Salary (7.27.2023)	54.63	2,467.93
Check	07/30/23	530	Cottrell, Rulon	Pro-rated reimbursement Salary (7.27.2023)	12.14	2,480.07
Total Cottrell, Rulon					2,480.07	2,480.07
Dohrmann, Robin						
Check	07/14/23	516	Dohrmann, Robin	01.50 Hrs. O.T. @ 1.5x	140.45	140.45
Check	07/30/23	531	Dohrmann, Robin	01.50 Hrs. O.T. @ 1.5x	296.64	437.09
Check	07/30/23	531	Dohrmann, Robin	Pro-rated reimbursement Salary (7.27.2023)	7.87	444.96
Total Dohrmann, Robin					444.96	444.96
La Torre, Daniel P.						
Check	07/14/23	519	La Torre, Daniel P.	04.00 Hrs. O.T. @ 1.5x	131.09	131.09
Check	07/30/23	534	La Torre, Daniel P.	01.00 Hrs. O.T. @ 1.5x	103.83	234.92
Check	07/30/23	534	La Torre, Daniel P.	Pro-rated reimbursement Salary (7.27.2023)	7.34	242.26
Check	07/30/23	534	La Torre, Daniel P.	Pro-rated reimbursement Salary (7.27.2023)	11.01	253.27
Total La Torre, Daniel P.					253.27	253.27
Rosser, John						
Check	07/14/23	521	Rosser, John	00.00 Hrs. @ 1.5x	1,613.67	1,613.67
Check	07/30/23	536	Rosser, John	00.00 Hrs. @ 1.5x	448.43	2,062.10
Check	07/30/23	536	Rosser, John	Pro-rated reimbursement Salary (7.27.2023)	90.36	2,152.46
Check	07/30/23	536	Rosser, John	Pro-rated reimbursement Salary (7.27.2023)	81.55	2,234.01
Total Rosser, John					2,234.01	2,234.01
Salazar, Ignacio						
Check	07/14/23	524	Salazar, Ignacio	02.00 Hrs. O.T. @ 1.5x	109.49	109.49
Check	07/30/23	538	Salazar, Ignacio	02.00 Hrs. O.T. @ 1.5x	28.91	138.40
Check	07/30/23	538	Salazar, Ignacio	Pro-rated reimbursement Salary (7.27.2023)	6.13	144.53
Total Salazar, Ignacio					144.53	144.53
Triola, Joseph						
Check	07/14/23	525	Triola, Joseph	03.00 Hrs. O.T. @ 1.5x	254.79	254.79
Check	07/30/23	539	Triola, Joseph	Pro-rated reimbursement Salary (7.27.2023)	14.27	269.06
Total Triola, Joseph					269.06	269.06
TOTAL					8,391.20	8,391.20

Sanitary District No. 5 of Marin County



District Management Report

July 2023

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: July 20, 2023
To: Board of Directors
From: Tony Rubio, District Manager
Subject: Management Report for July 2023

Fiscal Status

Period Covered: July 1, 2023 –August 17, 2023
Percent of Fiscal Year: 8.3%
Percent of Budgeted Income to Date: 2.8%
Percent of Budgeted Expenditures to Date: 13.2% (operating only)

Personnel

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

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 July 2023 Include:

Financial/Budgetary/Business Administration

- FY 2023-24 Sewer Service Charges Submitted to County of Marin
- Business Server file clean up ongoing.
- Quickbooks Clean Up Scheduled to Begin late august (historical data)
- Upstairs shop files relocated next to scanning room/DM office for proper scanning and recycling that is consistent with the Districts records retention policy

HR and Personnel

- RFP sent out for Staff Climate Survey now that the District is fully staffed.

Continuing Education and Safety Training

- Work with DKF solutions on District safety program updates on-going
- Confined Space Entry and Rescue Training Completed (see pics below)





Collection System Performance

Main Plant Tiburon/Belvedere:

- Submitted no spill report for the month of June to RWQCB on CIWQS
- Rodder and Vactor work being performed by staff
- 0 Odor complaints for reporting period

Paradise Cove:

- Submitted No Spill report for month of June to RWQCB on CIWQS.

Treatment Plant Performance

Paradise Cove:

- Submitted 2nd Quarter SMR and DMR to RWQCB on CIWQS

Main Plant:

- Submitted June 2023 Monthly SMR and DMR to the RWQCB on CIWQS.
- NPDES Permit renewal- Tentative order out for public comment – Included as Environmental Correspondence in packet.

Pollution Prevention Activities

- KC and CB worked Public Education Booth at Marin County fair.

Capital Improvement Projects

- 2022 Sewer Rehab - Project completed- awaiting final progress payment
- CIP Occupancy Evaluation and CIP program review completed- Edits sent to Engineer for incorporation and producing a final report
- Cove Road MCC and Generator replacement project design underway Site layout – priority for discussions with City of Belvedere – zone flyover taken for accuracy purposes
- Digester Rehab Project 60% design work and plans and specs being reviewed by District staff .
- Ford Mavericks delivered- now being scheduled to be outfitted with decals, spray in bedliner, emergency lighting and radios.

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...

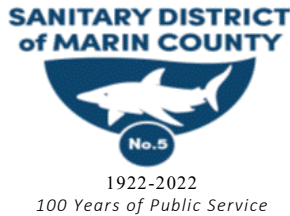
- **Disinfection:** This is the end point for the wastewater- at this point wastewater flows through the chlorine contact tank. This contact tank allows for enough contact time for chlorine solution to disinfect the wastewater. Sodium bisulfite is introduced at the end of the tank to neutralize any residual 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	CPUC	California Public Utilities Commission
CIWQS	California Integrated Water Quality System	CTR	California Toxics Rule
CSO	Combined Sewer Overflow	CWAP	Clean Water Action Plan
CWA	Clean Water Act	CWEA	California Water Environment Association
CWARA	Clean Water Authority Restoration Act	DTSC	Dept. of Toxic Substances Control
DHS	Dept. of Health Services	EDW	Effluent Dominated Water body
EBEP	Enclosed Bays and Estuaries Plan	EPA	Environmental Protection Agency
EIS/EIR	Environmental Impact Statement/Report	ESMP	Electronic Self-Monitoring Report
ERAF	Educational Reserve Augmentation Fund	GASB	Government Accounting Standards Board
FOG	Fats, Oils and Grease	JPA	Joint Powers Authority
ISWP	Inland Surface Waters Plan	LOCC	League of California Cities
LAFCO	Local Agency Formation Commission	MCL	Maximum Contaminant Level
MACT	Maximum Achievable Control Technology (air controls)	MOU	Memorandum of Understanding
MMP	Mandatory Minimum Penalty	NACWA	National Association of Clean Water Agencies
MUN	Municipal Drinking Water Use	NOX	Nitrogen Oxides
NGOs	Non-Governmental Organizations	NRDC	Natural Resources Defense Council
NPDES	Nat'l Pollutant Discharge Elimination System	OWP:	Office of Water Programs
NTR	National Toxics Rule	PCBs	Poly Chlorinated Biphenyls
OSHA:	Occupational Safety and Health Administration	PPCPs	Pharmaceutical and personal Care Products
POTWs	Publicly Owned Treatment Works	Region	IX Western Region of EPA (CA, AZ, NV & HI)
QA/QC	Quality Assurance / Quality Control	RMP	Risk Management Program
RFP	Request For Proposals	RWQCB	Regional Water Quality Control Board
RFQ	Request For Qualifications	SIP	State Implementation Policy (CTR/NTR criteria)
SEP	Supplementary Environmental Projects	SRF	State Revolving Fund
SFEI:	San Francisco Estuary Institute	SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow	TMDL	Total Maximum Daily Load
SWRCB	State Water Resources Control Board	WEF	Water Environment Federation
WDR	Waste Discharge Requirements	WET	Whole Effluent Toxicity or Waste Extraction Test
WERF	Water Environment Research Foundation	WRFP	Water Recycling Funding Program
WMI	Watershed Management Initiative	WWTP	Wastewater Treatment Plant
WRDA	Water Resource Development Act	WWWIFA	Water & Wastewater Infrastructure Financing Agency
WQBEL	Water Quality Based Effluent Limitation		

Management

Tony Rubio District Manager
Robin Dohrmann Office Manger
2001 Paradise Drive
Tiburon CA 9420
415-435-1501 Tel
415-435-0221 fax
www.sani5.org



Board of Directors

Tod Moody	President
Omar Arias Montez	Vice President
John Carapiet	Secretary
Catherine Benediktsson	Director
Richard Snyder	Director

Date: August 17, 2023

To: Board of Directors – Regular Board Meeting

From: District Manager – Tony Rubio

Subject: Review of the Districts Current Sewer Lateral Inspection Program Notification of Compliant and Non-Compliant Sewer Laterals and discussion regarding possible additional notifications to the County of Marin Public Health Official of Non-Compliant sewer laterals that are not brought into compliance within the allowed permit time.

STAFF REPORT:

The district operates and maintains a 34-mile wastewater collection system. This publicly owned infrastructure is maintained by a combination of district staff and private contractors. There are about 3200 privately owned sewer laterals that connect private plumbing fixtures to the district's wastewater collection system. Unfortunately, many of these laterals are old, poorly maintained, or damaged. Failing sewer laterals introduce water intrusion, roots, and debris into the districts sewer system, which can lead to raw sewage overflows into local streets, storm drains, and creeks.

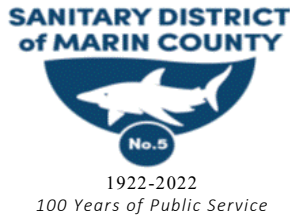
The districts sewer lateral inspection program was established in (2015) to address the increasing number of public and private sewer spills caused by private sewer laterals. Throughout the years, the sewer lateral inspection program continues to develop and evolve in response to the community's needs.

The district requires CCTV video submission of the private sewer lateral inspections for staff to review. To better organize and streamline the submittal process, the district most recently began requiring the use of the Forward Lateral cloud software program as a means of receiving, organizing, and reviewing sewer lateral inspections from plumbing contractors. The service is a cloud-based review/approval program for sewer lateral inspections between the district, the plumbing contractor, and property owner/real estate agents.

Upon completion of the review of the sewer lateral video submitted to the District, PACP certified District staff (Inspector or Permits and Business Administrative Tech) issue a Certificate of Compliance for sewer laterals in conformance with the District Standard Specifications and Sewer Use Ordinance 2014-02. If a lateral is not in compliance with the above-mentioned Specifications or Ordinance, then a permit is issued for the property owner to come into compliance with the Districts Specifications. The permit is

Management

Tony Rubio District Manager
Robin Dohrmann Office Manger
2001 Paradise Drive
Tiburon CA 9420
415-435-1501 Tel
415-435-0221 fax
www.sani5.org



Board of Directors

Tod Moody	President
Omar Arias Montez	Vice President
John Carapiet	Secretary
Catherine Benediktsson	Director
Richard Snyder	Director

valid for 180 days. If work has not begun within that 180-day period, as courtesy the district sends out a reminder letter of non-compliance and allow the property owners to renew the permit due to several factors including and not limited to contractor availability, weather concerns, etc.

This means of communication and reminders have been largely successful in getting sewer laterals into compliance. However, there are a handful of parcels that have been difficult to reach due to not having up to date contact information for these properties or simple disregard of District notices. When this occurs, District counsel is advised of the non-compliant sewer laterals, and they take over for noticing the property owners. Often, the response is quick and a plan for corrective action is implemented/scheduled.

Most recently an editorial came out in the Marin IJ about Marin County Public Health responding to reports of public health issues in public housing which led to a question from staff about whether the district should be contacting/notifying the Marin Public health department about delinquent non-compliant sewer laterals to help incentivize compliance before the application of fines as prescribed in the Districts Sewer Use Ordinance?

Attached are template letters district staff use to alert customers of the sewer lateral inspection requirements of the district and their responsibilities for compliance.

In summary, should the district consider notifying the public health department about non-compliant sewer laterals?

FISCAL IMPACT:

None

CEQA (California Environmental Quality Act)

Exempt

Recommendation:

My recommendation would be to seek additional information from the County Health Department about this topic to see if they can be of assistance to this topic of Sewer Lateral non-compliance.

ATTACHMENTS:

PSL Home Sale Trigger and SD5 Permit Requirements

SANITARY DISTRICT NO. 5 OF MARIN COUNTY
2001 PARADISE DRIVE
P.O. BOX 227
TIBURON, CALIFORNIA 94920
TELEPHONE (415) 435-1501
FAX (415) 435-0221

Item #5



Private Sewer Lateral Home Sale Trigger

Sanitary District No. 5 of Marin County Ordinance 2014-02

All properties- Covering the city of Belvedere and the Town of Tiburon East of Gilmartin Drive

A property owner shall have the lateral sewer of his property inspected and provide the District with a **report and video** as described in SD5MCC [3.05.340](#), and have any necessary repairs to the sewer lateral made, upon the occurrence of any of the following events:

Transfer of Property Title

Where the sale of any real property with sewer improvements is proposed, the seller shall have the lateral sewer inspected prior to transfer of property title. The responsibility for any repair of a lateral sewer is an issue between the buyer and the seller. Should the seller fail to have the inspection conducted and any necessary repairs made prior to the sale of the property, the District shall require the new owner to conduct an inspection and/or make any necessary repairs to the lateral sewer.

As part of any application for a connection permit for residential and commercial structures, the owner shall provide the District with a current report and video, not older than one year, and conducted by a licensed contractor, of the entire lateral sewer serving the structure. The report and video shall include a written and graphic description of the owner's lateral sewer, and a compact disc containing photographs of any notable features of the lateral sewer. Based on the information contained in the report, the District may require repairs or modifications of the lateral sewer. In the event that a lateral sewer is shared by multiple properties, the District will notify all of the affected properties of their shared responsibility of the lateral sewer, absent a maintenance agreement between the properties; the property owners shall be jointly and severally liable for the repairs of the shared lateral sewer.

Exception

The owner shall provide proof of any prior lateral sewer replacement, inspection, and repair in the form of a certificate, paid bill, or other sufficient documentation that ensures such prior replacement, repair, or inspection. The form and content of the document or proof must be deemed sufficient by the District or its authorized representative.

Certificate of Compliance

Issued to homeowner once the District inspector has completed the side sewer lateral inspection and the home is within Sanitary District No. 5 compliance standards.

Fees

Residential permit fee is **\$100.00**. Made payable to by check to, Sanitary District No.5.

Cash is accepted

Credit card payments not accepted

SANITARY DISTRICT NO. 5 OF MARIN COUNTY
2001 PARADISE DRIVE
P.O. BOX 227
TIBURON, CALIFORNIA 94920
TELEPHONE (415) 435-1501



Permit issue requirements and conditions for Sanitary District 5 of Tiburon/Belvedere.

All Contractors must email Existing and Proposed architectural plans to permits@sani5.org for fixture count review.

All projects must have a Sanitary District #5 final inspection completed by the District Inspector before Town of Tiburon, City of Belvedere or The County of Marin's job card is signed off.

Sanitary District #5 permit issued before construction starts:

- Sewer line lateral video (Section. #610)
- Check valve installation/confirmation (Section. #612)
- All remodels, new construction, or any work equal to or greater than \$50k (Section. #408. & # 611. (a))

For Residential and Commercial projects

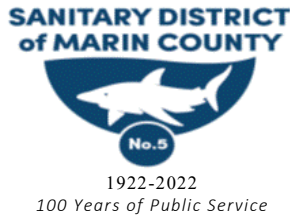
- o Connection fees for additional bath/kitchen/laundry fixtures
- o Require set of existing plans, as well as proposed plans, for comparison purposes
- Any bathroom or kitchen remodel work (Section. #901.)
- New Construction: Connection fees for new lot/home Residential and Commercial
- For Commercial Properties w/ Kitchens: installation/confirmation of grease trap or interceptor
- Payment for new fixture fees and permit
- Permit issue for all outside sewer work lateral repairs or replacements to city main sewer

House sales:

- Real estate agents must provide the Sanitary District with a sewer line lateral video before the sale of a property. The Sanitary District inspector will determine if the line needs repair or replacement and confirm if the property has a Clean-Check Valve, Contra Costa Valve, and Screw-Cap Cleanout. (Section. #408 & #611 (b))

Management

Tony Rubio District Manager
Robin Dohrmann Office Manger
2001 Paradise Drive
Tiburon CA 9420
415-435-1501 Tel
415-435-0221 fax
www.sani5.org



Board of Directors

Tod Moody	President
Omar Arias Montez	Vice President
John Carapiet	Secretary
Catherine Benediktsson	Director
Richard Snyder	Director

Date: August 17, 2023

To: Board of Directors – Regular Board Meeting

From: District Manager – Tony Rubio

Subject: Review and Discuss HF&H Contract Amendment for completion of the Sewer Rate Study and for the Proposed work for the upcoming connection fee update

STAFF REPORT:

The District in consultation with HF&H Completed the most recent Sewer Rate Study in April of 2023 which was approved on June 22, 2023 and rate increases went into effect on July 1, 2023. As part of that process the District requested additional presentations to the finance committee and the Board of Directors at regular meetings. Those extra meetings are billed at a total of \$6,000 through a contract amendment, which is coupled with a sewer connection fee model update.

The list of meetings is noted in the attached proposal. Please note that the meeting of March 28, 2023 is not listed as that meeting was not billed due to the error found at that meeting and corresponding work to make those corrections.

The \$6,000 contract amendment for the additional meetings is being billed at \$210/hr for Gabe and \$300/hr for Rick (around 23 additional hrs when averaged= 11.5hrs a per person)

The other part of the contact amendment is for \$14,000 to conduct the connection fee study work plan. See Page 2 of 3 of the attachment for details regarding the Connection Fee study work plan.

FISCAL IMPACT:

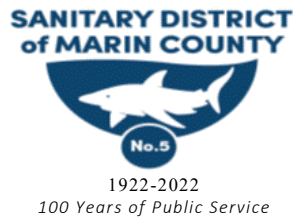
\$20,000 in consulting fees- \$6,000 for contract amendment for additional work requested and completed by consultant on the sewer rate study and \$14,000 for the Connection Fee Study Work Plan.

CEQA (California Environmental Quality Act)

Exempt

Management

Tony Rubio District Manager
Robin Dohrmann Office Manger
2001 Paradise Drive
Tiburon CA 9420
415-435-1501 Tel
415-435-0221 fax
www.sani5.org



Board of Directors

Tod Moody	President
Omar Arias Montez	Vice President
John Carapiet	Secretary
Catherine Benediktsson	Director
Richard Snyder	Director

Recommendation:

To accept amendment request from HF&H Consultants and direct the District Manager to begin the work on the connection fee study work plan.

ATTACHMENTS:

Sewer Rate Study- Amendment Request

590 Ygnacio Valley Road, Suite 105
Walnut Creek, California 94596
Telephone: 925/977-6950
www.hfh-consultants.com

John W. Farnkopf, PE
Laith B. Ezzet, CMC
Richard J. Simonson
Marva M. Sheehan, CPA
Robert C. Hilton

July 31, 2023

Tony Rubio
District Manager
Sanitary District No. 5 of Marin County
P.O. Box
Tiburon, CA 94920

Submitted electronically to trubio@sani5.org

Subject: Sewer Rates Study – Amendment Request

Dear Tony Rubio:

Sanitary District No. 5 of Marin County (District) hired HF&H Consultants LLC to conduct a two-phased, sewer rate study to set rates for FY 2022-23 through FY 2027-28. Except for assessing the District's miscellaneous fees, we have completed all items that were part of the initial scope.

Request for Additional Work Performed

At the District's request, we made additional presentations to the Finance Committee and Board of Directors as part of the rate study. The original scope of the contract specified making one presentation to the District's Finance Committee and making two presentations to the Board of Directors. We made the following additional presentations at the District's request:

- Jan 11 – Finance Committee Meeting
- Jan 19 – Board of Directors Meeting
- Feb 16 – Board of Directors Meeting
- March 16 – Board of Directors Meeting
- April 20 – Board of Directors Meeting

We are requesting a budget amendment of \$6,000 to the original contract for the additional presentations made to the District to support the rate study. As of July 1, 2023, \$223.72 remains from the original contract total of \$64,095. With this transmittal, we are requesting a change order for \$6,000 to complete the original remaining scope for the District.

Beyond the initial rate study, the District has separately requested additional support from HF&H to conduct a connection fee study.

Tony Rubio
July 31, 2023
Page 2 of 3

Amendment for Supplemental Scope

The District's Connection Fee is subject to Section 66000 of the Government Code, referred to as the Mitigation Fee Act. The purpose of the fee is to reimburse existing rate payers for the cost they incurred providing capacity for future connections. Section 66013(a) states that connection fees for service "shall not exceed the estimated reasonable cost of providing the service". Agencies that charge connection fees are therefore responsible for providing documentation that demonstrates that their connection fees are not excessive.

The courts generally regard fees as being reasonable if they are not capricious, arbitrary, or discriminatory. Fees are capricious if there is no factual basis for the underlying data used to make the calculations. Fees are arbitrary if there is no logical rationale for choosing among alternatives. Fees are discriminatory if they disproportionately allocate costs to one class of service at the expense of another class.

Connection Fee Study Work Plan

With the foregoing considerations in mind, the following work plan is proposed.

Task 1. Collection and Review Data. Working with District staff, we will collect and review the District's inventory of existing facilities that currently provide service and the recent capital improvement plan for future improvements to existing facilities and/or construction of new facilities. The previous model will be referenced to guide our data request.

Task 2. Calculate Connection Fees. With the information collected in Task 1, we will estimate the cost of existing facilities by escalating the original costs from the date of acquisition to today. If the District's records are incomplete, we will work with District staff to create a reasonable approximation of the sewer system's facilities, which we will carefully document for future reference.

The value of future, planned facilities will also be included in the calculation. A simple spreadsheet model will be prepared consolidating the inventory, cost, and acquisition date information for the sewer system's existing and future facilities. The model will also reflect any adjustments that are warranted. For example, significant developer contributions may be excluded because they do not constitute costs borne by rate payers for which reimbursement is required. The nature of any adjustments will be discussed with District staff prior to including them in the model.

Task 3. Communicate Results. A brief report or technical memorandum will be prepared describing the derivation of the connection fees. The report will be prepared in draft and final form. The report will contain an appendix of the assets that are included in the calculation and any other support documents. The report text and appendix will document the current connection fees as well as provide a solid basis for future updates.

We will present the final report to the Board at a public hearing.

Tony Rubio
July 31, 2023
Page 3 of 3

Staffing, Budget Estimate, and Schedule

The project will continue to be staffed by Gabe Sasser and me, with assistance from qualified staff. We will compile background information, prepare the analyses, develop a model, and produce a report. This approach will allow us to complete the project in a timely manner. We estimate that a total not-to-exceed budget of \$14,000 is required for this additional scope to complete the connection fee study. The District will be billed on a time-and-expenses basis, according to the contract's schedule of hourly rates previously approved.

Work can begin immediately in August once the best available data is compiled. Depending on the condition of the data and level of assistance, that is needed, 60 to 90 days should be sufficient to complete the work.

Amendment Summary

Collectively, we are requesting a budget amendment for \$20,000. We are requesting \$6,000 for previous out-of-scope work performed as part of the rate study, at the request of the District. Further, we are submitting an additional scope and budget amendment for \$14,000 to conduct the connection fee study requested by the District. These budget amendments will increase the total not-to-exceed project budget to \$84,095.

* * * * *

We appreciate your consideration of this request and look forward to continuing to be of assistance to the District. If you have any questions regarding our request, please do not hesitate to contact me at 925-977-6957 or rsimonson@hfh-consultants.com.

Sincerely,
HF&H CONSULTANTS, LLC



Richard J. Simonson
Senior Vice President

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

**NOTICE OF OPPORTUNITY TO COMMENT AND PUBLIC HEARING
FOR
DISCHARGE PERMIT**

**Sanitary District No. 5 of Marin County
Sanitary District No. 5 Main Wastewater Treatment Plant
2001 Paradise Drive, Marin County**

Board staff has prepared a draft National Pollutant Discharge Elimination System permit for the above discharger in accordance with the Clean Water Act and Porter-Cologne Water Quality Control Act.

Sanitary District No. 5 of Marin County owns and operates a municipal wastewater treatment plant and collection system serving the Town of Tiburon, City of Belvedere, and the surrounding unincorporated area. The facility serves a population of about 8,400 people. It discharges about 0.56 million gallons per day of secondary treated wastewater to Raccoon Strait in Central San Francisco Bay through a deepwater outfall about 840 feet offshore. The draft permit would continue to allow this discharge.

The deadline for receipt of comments on the draft permit is **5:00 p.m. on September 13, 2023**. Comments must be sent to the **attention of Natlie Lee**. Persons wishing to file written comments on any aspect of this matter must do so no later than this deadline so that such comments may be considered.

The Board will consider adopting the draft permit during a meeting to commence at 9:00 a.m. on **October 11, 2023**. Interested persons are invited to express their views at this hearing.

Pursuant to California Code of Regulations Title 23 section 2050(c), any party who challenges the Board's action through a petition to the State Water Resources Control Board under Water Code section 13320 will be limited to raising only those substantive issues that were raised before the Board at the hearing or in timely submitted correspondence.

All documents related to the draft permit may be inspected at the Board office. The draft permit and developments on this matter are available at www.waterboards.ca.gov/sanfranciscobay. Board staff responses to comments will be posted on that website a week prior to the hearing. Contact **Natlie Lee** at **(510) 622-2325** or natlie.lee@waterboards.ca.gov if you have questions.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**
1515 Clay Street, Suite 1400, Oakland, California 94612
waterboards.ca.gov/sanfranciscobay

**TENTATIVE ORDER R2-2023-00XX
NPDES PERMIT CA0037753**

The following Discharger is subject to the waste discharge requirements (WDRs) set forth in this Order:

Discharger **Sanitary District No. 5 of Marin County**
 Name of Facility **Sanitary District No. 5 Main Wastewater Treatment Plant and its collection system**
 Facility Address **2001 Paradise Drive
Tiburon, CA 94920
Marin County**

Table 1. Discharge Locations

Discharge Point	Effluent Description	Discharge Point Latitude (North-South)	Discharge Point Longitude (East-West)	Receiving Water
001	Secondary-Treated Municipal Wastewater	37.8700°	-122.4514°	Raccoon Strait in Central San Francisco Bay

This Order was adopted on: **XXXXXX, 2023**
 This Order shall become effective on: **December 1, 2023**
 This Order shall expire on: **November 30, 2028**
 CIWQS regulatory measure number: **XXXXXX**

The Discharger shall file a Report of Waste Discharge as an application for updated WDRs in accordance with title 23, California Code of Regulations, and an application for reissuance of a National Pollutant Discharge Elimination System (NPDES) permit no later than **February 29, 2028**. The U.S. Environmental Protection Agency (U.S. EPA) and the California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board) have classified this discharge as “**minor**.”

I hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the Regional Water Board on the date indicated above.

Eileen White, Executive Officer

CONTENTS

1. FACILITY INFORMATION.....	3
2. FINDINGS.....	3
3. DISCHARGE PROHIBITIONS.....	4
4. EFFLUENT LIMITATIONS.....	4
5. RECEIVING WATER LIMITATIONS.....	6
6. PROVISIONS.....	7

TABLES

TABLE 1. DISCHARGE LOCATIONS.....	1
TABLE 2. EFFLUENT LIMITATIONS.....	5
TABLE 3. SPECIFIC TASKS TO REDUCE WET WEATHER BYPASSES.....	12
TABLE 4. COPPER ACTION PLAN.....	14
TABLE 5. CYANIDE ACTION PLAN.....	15

ATTACHMENTS

ATTACHMENT A – DEFINITIONS AND ABBREVIATIONS.....	A-1
ATTACHMENT B – MAPS.....	B-1
ATTACHMENT C – PROCESS FLOW DIAGRAM.....	C-1
ATTACHMENT D – STANDARD PROVISIONS.....	D-1
ATTACHMENT E – MONITORING AND REPORTING PROGRAM.....	E-1
ATTACHMENT F – FACT SHEET.....	F-1
ATTACHMENT G – REGIONAL STANDARD PROVISIONS, AND MONITORING AND REPORTING REQUIREMENTS (SUPPLEMENT TO ATTACHMENT D).....	G-1

1. FACILITY INFORMATION

Information describing the Sanitary District No. 5 Main Wastewater Treatment Plant and its wastewater collection system (collectively, Facility) is summarized on the cover page and in Fact Sheet (Attachment F) sections 1 and 2. Fact Sheet section 1 also includes information regarding the permit application.

2. FINDINGS

The Regional Water Board finds the following:

- 2.1. Legal Authorities.** This Order serves as WDRs pursuant to California Water Code article 4, chapter 4, division 7 (commencing with § 13260). This Order is also issued pursuant to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by U.S. EPA and Water Code chapter 5.5, division 7 (commencing with § 13370). It shall serve as an NPDES permit authorizing the Discharger to discharge into waters of the United States as described in Table 1 subject to the WDRs in this Order.
- 2.2. Background and Rationale for Requirements.** The Regional Water Board developed the requirements in this Order based on information the Discharger submitted as part of its application, information obtained through monitoring and reporting programs, and other available information. The Fact Sheet contains background information and rationale for the requirements in this Order and is hereby incorporated into and constitutes findings for this Order. Attachments A through E and G are also incorporated into this Order.
- 2.3. Notification of Interested Parties.** The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe these WDRs and has provided an opportunity to submit written comments and recommendations. Fact Sheet section 8.1 provides details regarding the notification.
- 2.4. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Fact Sheet section 8.3 provides details regarding the public hearing.

THEREFORE, IT IS HEREBY ORDERED that Order R2-2018-0038 (previous order), as amended by Orders R2-2021-0019 and R2-2021-0028, is rescinded upon the effective date of this Order, except for enforcement purposes, and, in order to meet the provisions contained in Water Code division 7 (commencing with § 13000) and regulations adopted thereunder and the provisions of the CWA and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order. This action in no way prevents the Regional Water Board from taking enforcement action for violations of the previous order.

3. DISCHARGE PROHIBITIONS

- 3.1. Discharge of treated or partially-treated wastewater at a location or in a manner different from that described in this Order is prohibited.
- 3.2. Bypass of untreated or partially-treated wastewater to waters of the United States is prohibited, except as provided for in Attachment D section 1.7.

Blended wastewater is biologically-treated wastewater blended with wastewater that bypasses biological treatment units. Such discharges are approved under the bypass conditions stated in 40 C.F.R. section 122.41(m)(4) when (1) the Discharger's peak wet weather influent flow exceeds the capacity of the biological treatment units of 2.3 MGD, (2) the discharge complies with the effluent and receiving water limitations contained in this Order, and (3) the Discharger complies with Provision 6.3.5.1 of this Order. Furthermore, the Discharger shall operate the Facility as designed and in accordance with the Operation and Maintenance Manual for the Facility. This means it shall optimize storage and use of equalization units and shall fully use the biological treatment units prior to blending wastewater. The Discharger shall report incidents of wet weather bypasses in routine monitoring reports and shall monitor blended discharges as specified in the Monitoring and Reporting Program (MRP) (Attachment E).

- 3.3. Discharge at Discharge Point 001 is prohibited when treated wastewater does not receive an initial dilution of at least 63:1, as modeled. Compliance shall be achieved by proper operation and maintenance of the discharge outfall to ensure that it (or its replacement, in whole or part) is in good working order and is consistent with or can achieve better mixing than that described in Fact Sheet section 4.3.4.2. The Discharger shall address measures taken to ensure this in its application for permit reissuance.
- 3.4. Average dry weather influent flow in excess of 0.98 MGD is prohibited. Average dry weather influent flow shall be determined from three consecutive dry weather months each year, with compliance measured at Monitoring Location INF-001 as described in the Monitoring and Reporting Program (MRP, Attachment E).
- 3.5. Any sanitary sewer overflow that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.

4. EFFLUENT LIMITATIONS

- 4.1. **Effluent Limitations.** The discharge at Discharge Point 001 shall meet the following effluent limitations, with compliance measured at Monitoring Locations EFF-001, EFF-001D, or EFF-001B, as described in the Monitoring and Reporting Program (MRP, Attachment E):

Table 2. Effluent Limitations

Parameter	Units	Average Monthly	Average Weekly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Biochemical Oxygen Demand (5-day @ 20°C)	mg/L	30	45	-	-	-
Total Suspended Solids	mg/L	30	45	-	-	-
pH ^[1]	standard units	-	-	-	6.0	9.0
Chlorine, Total Residual	mg/L	-	-	-	-	0.0
Ammonia, Total	mg/L	100	-	190	-	-
Copper, Total Recoverable	µg/L	35	-	73	-	-
Cyanide, Total	µg/L	16	-	45	-	-
Dioxin-TEQ	µg/L	1.4 x 10 ⁻⁸	-	2.8 x 10 ⁻⁸	-	-

Footnote:

^[1] If the Discharger monitors pH continuously, pursuant to 40 C.F.R. section 401.17 the Discharger shall be in compliance with this pH limitation provided that both of the following conditions are satisfied: (i) the total time during which the pH is outside the required range shall not exceed 7 hours and 26 minutes in any calendar month; and (ii) no individual excursion from the required pH range shall exceed 60 minutes.

4.2. Percent Removal. The average monthly percent removal of biochemical oxygen demand (BOD) and total suspended solids (TSS) at Discharge Point 001 shall not be less than 85 percent (i.e., in each calendar month, the arithmetic mean of BOD and TSS, by concentration, of effluent samples collected at Monitoring Locations EFF-001 and EFF-001B as described in the MRP shall not exceed 15 percent of the arithmetic mean of the BOD and TSS, by concentration, for influent samples collected at Monitoring Location INF-001 as described in the MRP at approximately the same times during the same period). For a calendar week or month in which the Discharger discharges blended effluent at Discharge Point 001, the BOD and TSS weekly arithmetic mean, monthly arithmetic mean, and percent removal shall include results of blended effluent samples collected at Monitoring Location EFF-001B flow-weighted with effluent samples collected at Monitoring Location EFF-001.

4.3. Enterococcus Bacteria. The discharge at Discharge Point 001 shall meet the following enterococcus effluent limitations, with compliance measured at Monitoring Location EFF-001D and EFF-001B, as described in the MRP:

4.3.1. The six-week rolling geometric mean of enterococcus bacteria, calculated weekly, shall not exceed 290 colony forming units per 100 milliliters (CFU/100 mL). Compliance with this limit shall be determined weekly by calculating the geometric mean of all enterococcus sample results from the past six weeks; and

4.3.2. No more than 10 percent of all enterococcus bacteria samples collected in a calendar month shall exceed 1,100 CFU/100 mL. Compliance with this limit shall be determined based on measured sample results. The Discharger shall not report interpolated results. If the Discharger has 9 or fewer sample results in

a calendar month, compliance shall be based on the highest result. If the Discharger has 10 to 19 sample results, compliance shall be based on the second highest result, and so on.

5. RECEIVING WATER LIMITATIONS

5.1. The discharge shall not cause the following conditions at any place in receiving waters:

- 5.1.1. Floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses;
- 5.1.2. Alteration of suspended sediment in such a manner as to cause nuisance or adversely affect beneficial uses or detrimental increase in the concentrations of toxic pollutants in sediments or aquatic life;
- 5.1.3. Suspended material in concentrations that cause nuisance or adversely affect beneficial uses;
- 5.1.4. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;
- 5.1.5. Alteration of temperature beyond present natural background levels unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses;
- 5.1.6. Changes in turbidity that cause nuisance or adversely affect beneficial uses, or increases from normal background light penetration or turbidity greater than 10 percent in areas where natural turbidity is greater than 50 nephelometric turbidity units, or above 55 nephelometric turbidity units in areas where natural turbidity is less than or equal to 50 nephelometric turbidity units;
- 5.1.7. Coloration that causes nuisance or adversely affects beneficial uses;
- 5.1.8. Visible, floating, suspended, or deposited oil or other products of petroleum origin; or
- 5.1.9. Toxic or other deleterious substances in concentrations or quantities that cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.

5.2. The discharge shall not cause the following limits to be exceeded at any place in receiving waters within one foot of the water surface:

- 5.2.1. Dissolved Oxygen 5.0 mg/L, minimum

The median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation. When natural factors cause concentrations less than that specified above, the discharge shall not cause further reduction in ambient dissolved oxygen concentrations.

- 5.2.2. Dissolved Sulfide Natural background levels
- 5.2.3. pH The pH shall not be depressed below 6.5 nor raised above 8.5. The discharge shall not cause changes greater than 0.5 pH units in normal ambient pH levels.
- 5.2.4. Nutrients Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
- 5.3.** The discharge shall not cause a violation of any water quality standard for receiving waters adopted by the Regional Water Board or State Water Resources Control Board (State Water Board) as required by the CWA and regulations adopted thereunder beyond any mixing zone established through this Order. If more stringent water quality standards are promulgated or approved pursuant to CWA section 303, or amendments thereto, the Regional Water Board may revise or modify this Order in accordance with the more stringent standards.

6. PROVISIONS

6.1. Standard Provisions

- 6.1.1. The Discharger shall comply with all “Standard Provisions” in Attachment D.
- 6.1.2. The Discharger shall comply with all applicable provisions of the “Regional Standard Provisions, and Monitoring and Reporting Requirements for NPDES Wastewater Discharge Permits” in Attachment G.
- 6.1.3. If there is any conflict, duplication, or overlap between provisions in this Order, the more stringent provision shall apply.

6.2. Monitoring and Reporting Provisions

The Discharger shall comply with the Monitoring and Reporting Program (MRP, Attachment E) and future revisions thereto, and applicable monitoring and reporting requirements in Attachments D and G.

6.3. Special Provisions

6.3.1. **Reopener Provisions.** The Regional Water Board may modify or reopen this Order prior to its expiration date in any of the following circumstances as allowed by law or as otherwise authorized by law. The Discharger may request a permit modification based on any of these circumstances. With any such request, the Discharger shall include antidegradation and anti-backsliding analyses as necessary.

6.3.1.1. If present or future investigations demonstrate that the discharges governed by this Order have or will have a reasonable potential to cause or contribute to adverse impacts on water quality or beneficial uses of the receiving waters;

6.3.1.2. If new or revised water quality objectives or total maximum daily loads (TMDLs) come into effect for San Francisco Bay or contiguous water bodies (whether statewide, regional, or site-specific). In such cases, effluent limitations in this Order may be modified as necessary to reflect the updated water quality objectives or wasteload allocations. Adoption of the effluent limitations in this Order does not restrict in any way future modifications based on legally-adopted water quality objectives or TMDLs or as otherwise permitted under federal regulations governing NPDES permit modifications;

6.3.1.3. If translator, dilution, or other water quality studies provide a basis for determining that a permit condition should be modified;

6.3.1.4. If a State Water Board precedential decision, new policy, new law, or new regulation is adopted;

6.3.1.5. If an administrative or judicial decision on a separate NPDES permit or WDRs addresses requirements similar to this discharge; or

6.3.1.6. If the Discharger requests adjustments in effluent limits due to the implementation of stormwater diversion pursuant to the Municipal Regional Stormwater Permit (NPDES Permit CAS612008) for redirecting dry weather and first flush discharges from a storm drain system to the sanitary sewer system as a stormwater pollutant control strategy.

6.3.2. Effluent Characterization Study and Report

6.3.2.1. **Study Elements.** The Discharger shall characterize and evaluate the discharge from Discharge Point 001 as required by the MRP to verify that the reasonable potential analysis conclusions of this Order remain valid and to inform the next permit reissuance. If concentrations of any of the priority pollutants listed in Attachment G, Table B, significantly increase over past performance, the Discharger shall investigate the cause of any such increase. The investigation may include, but need not be limited to, an

increase in monitoring frequency, monitoring of internal process streams, and monitoring of influent sources. The Discharger shall establish remedial measures addressing any increase resulting in reasonable potential to cause or contribute to an exceedance of applicable water quality objectives. This requirement may be satisfied through identification of the constituent as a “pollutant of concern” in the Discharger’s Pollutant Minimization Program, described in Provision 6.3.3.

6.3.2.2. **Reporting Requirements.** The Discharger shall summarize the data evaluation and any applicable source investigation in the annual self-monitoring report associated with the year in which samples were collected. The Discharger shall also report the pollutants detected at or above applicable water quality objectives (see Fact Sheet Table F-8 for the objectives) in the report’s transmittal letter. This requirement does not apply to pollutants with effluent limitations (see Table 2 of this Order).

6.3.3. **Pollutant Minimization Program**

6.3.3.1. The Discharger shall continue to improve its existing Pollutant Minimization Program to promote minimization of pollutant loadings to the treatment plant and therefore to the receiving waters.

6.3.3.2. The Discharger shall submit an annual report no later than **February 28** of each calendar year. Each annual report shall include at least the following information:

6.3.3.2.1. **Brief description of treatment plant.** The description shall include the service area and treatment plant processes.

6.3.3.2.2. **Discussion of current pollutants of concern.** Periodically, the Discharger shall analyze its circumstances to determine which pollutants are currently a problem and which pollutants may be potential future problems. This discussion shall include the reasons for choosing the pollutants.

6.3.3.2.3. **Identification of sources for pollutants of concern.** This discussion shall include how the Discharger intends to estimate and identify pollutant sources. The Discharger shall include sources or potential sources not directly within the ability or authority of the Discharger to control, such as pollutants in the potable water supply and air deposition.

6.3.3.2.4. **Identification of tasks to reduce the sources of pollutants of concern.** This discussion shall identify and prioritize tasks to address the Discharger’s pollutants of concern. The Discharger may implement the tasks by itself or participate in group, regional, or national tasks that address its pollutants of concern. The Discharger is strongly encouraged to participate in group, regional, or national tasks that address its

pollutants of concern whenever it is efficient and appropriate to do so. An implementation timeline shall be included for each task.

- 6.3.3.2.5. **Outreach to employees.** The Discharger shall inform employees about the pollutants of concern, potential sources, and how they might be able to help reduce the discharge of these pollutants of concern into the Facility. The Discharger may provide a forum for employees to provide input.
- 6.3.3.2.6. **Continuation of Public Outreach Program.** The Discharger shall prepare a pollution prevention public outreach program for its service area. Outreach may include participation in existing community events, such as county fairs; initiating new community events, such as displays and contests during Pollution Prevention Week; conducting school outreach programs; conducting plant tours; and providing public information in newspaper articles or advertisements, radio or television stories or spots, newsletters, utility bill inserts, or web sites. Information shall be specific to target audiences. The Discharger shall coordinate with other agencies as appropriate.
- 6.3.3.2.7. **Discussion of criteria used to measure Pollutant Minimization Program and task effectiveness.** The Discharger shall establish criteria to evaluate the effectiveness of its Pollutant Minimization Program. This discussion shall identify the specific criteria used to measure the effectiveness of each task in Provisions 6.3.3.2.3, 6.3.3.2.4, 6.3.3.2.5, and 6.3.3.2.6.
- 6.3.3.2.8. **Documentation of efforts and progress.** This discussion shall detail all of the Discharger's Pollutant Minimization Program activities during the reporting year.
- 6.3.3.2.9. **Evaluation of Pollutant Minimization Program and task effectiveness.** The Discharger shall use the criteria established in Provision 6.3.3.2.7 to evaluate the program and task effectiveness.
- 6.3.3.2.10. **Identification of specific tasks and timelines for future efforts.** Based on the evaluation, the Discharger shall explain how it intends to continue or change its tasks to more effectively reduce the amount of pollutants flowing to the treatment plant, and subsequently in its effluent.
- 6.3.3.3. The Discharger shall develop and conduct a Pollutant Minimization Program as described below when there is evidence that a priority pollutant is present in the effluent above an effluent limitation (e.g., sample results reported as detected but not quantified [DNQ] when the effluent limitation is less than the method detection limit [MDL], sample results from analytical methods more sensitive than those methods required by this Order, presence of aquatic toxicity, health advisories for fish consumption, or results of benthic or aquatic organism tissue sampling) and either:

- 6.3.3.3.1. A sample result is reported as DNQ and the effluent limitation is less than the Reporting Level (RL); or
- 6.3.3.3.2. A sample result is reported as not detected (ND) and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in the MRP.
- 6.3.3.4. If triggered for a reason set forth in Provision 6.3.3.3, above, the Discharger's Pollutant Minimization Program shall include, but not be limited to, the following actions and submittals:
 - 6.3.3.4.1. An annual review and semi-annual monitoring of potential sources of the reportable priority pollutants, which may include fish tissue monitoring and other bio-uptake sampling, or alternative measures when source monitoring is unlikely to produce useful analytical data;
 - 6.3.3.4.2. Quarterly monitoring for the reportable priority pollutants in the influent to the wastewater treatment system. The Executive Officer may approve alternative measures when influent monitoring is unlikely to produce useful analytical data;
 - 6.3.3.4.3. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutants in the effluent at or below the effluent limitation;
 - 6.3.3.4.4. Implementation of appropriate cost-effective control measures for the reportable priority pollutants, consistent with the control strategy; and
 - 6.3.3.4.5. Inclusion of the following specific items within the annual report required by Provision 6.3.3.2, above:
 - 6.3.3.4.5.1. All Pollutant Minimization Program monitoring results for the previous year;
 - 6.3.3.4.5.2. List of potential sources of the reportable priority pollutants;
 - 6.3.3.4.5.3. Summary of all actions undertaken pursuant to the control strategy; and
 - 6.3.3.4.5.4. Description of actions to be taken in the following year.

6.3.4. **Special Provisions for Publicly-Owned Treatment Works**

6.3.4.1. **Sludge and Biosolids Management**

- 6.3.4.1.1. Sludge and biosolids treatment and storage shall not create a nuisance, such as objectionable odors or flies, or result in groundwater contamination.

- 6.3.4.1.2. The sludge and biosolids treatment and storage site shall have facilities adequate to divert surface runoff from adjacent areas, to protect site boundaries from erosion, and to prevent conditions that would cause drainage from the stored materials. Adequate protection is defined as protection from at least a 100-year storm and the highest possible tidal stage that may occur.
- 6.3.4.1.3. This Order does not authorize permanent onsite sludge or biosolids storage or disposal. The Discharger shall file a Report of Waste Discharge and bring the site into compliance with applicable regulations prior to commencement of any such activity.
- 6.3.4.2. **Collection System Management.** The Discharger shall properly operate and maintain its collection system (see Attachments D and G, section 1.4), report any noncompliance with respect to its collection system (see Attachment D, section 5.5.1, and Attachment G, sections 5.5.1 and 5.5.2), and mitigate any discharges in violation of this Order associated with its collection system (see Attachments D and G, section 1.3).

State Water Board Order WQ 2022-0103-DWQ (Statewide Waste Discharge Requirements General Order for Sanitary Sewer Systems) (statewide WDRs) contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. The statewide WDRs clearly and specifically stipulate requirements for operation and maintenance and for reporting and mitigating sanitary sewer overflows. Implementing the requirements for operation and maintenance and mitigation of sanitary sewer overflows set forth in the statewide WDRs (and any subsequent order updating these requirements) shall satisfy the corresponding federal NPDES requirements specified in Attachments D and G of this Order for the collection systems. Following the reporting requirements set forth in the statewide WDRs (and any subsequent order updating those requirements) shall satisfy the NPDES reporting requirements for sanitary sewer overflows specified in Attachments D and G.

6.3.5. **Other Special Provisions**

- 6.3.5.1. **Specific Tasks to Reduce Wet Weather Bypasses.** The Discharger shall implement the following tasks to minimize wet weather bypasses in accordance with the following time schedule:

Table 3. Specific Tasks to Reduce Wet Weather Bypasses

Task No.	Task	Deadline
1	Continue to Implement Wet Weather Improvement Plan. Continue to implement a comprehensive Wet Weather Improvement Plan (WWIP) that establishes measurable goals to minimize and eventually eliminate wet weather bypasses. The WWIP shall include all feasible	<i>Plan submitted March 18, 2014.</i>

Task No.	Task	Deadline
	<p>alternatives to reduce wet weather bypasses caused by inflow and infiltration during peak flows. The WWIP shall specify measures to be implemented at the treatment plant and the wastewater collection system (e.g., wet weather flow management procedures; collection system maintenance, inspection, and rehabilitation schedules; and necessary upgrades) and identify their costs, implementation schedules, and proposed funding mechanisms. The WWIP shall incorporate the wet weather improvement projects that are part of the 15-year Capital Improvement Plan (FY 2021/2022 – FY 2035/2036), including annual Sewer Rehabilitation Projects. The Discharger shall review the WWIP annually and update it as necessary.</p>	<p>Implementation shall be ongoing</p>
2	<p>Complete Sewer Rehabilitation Projects. Complete at least 10,000 linear feet of sewer pipe rehabilitation. The Discharger shall prioritize sewer pipe rehabilitation in areas known or suspected to have high inflow and infiltration.</p>	<p>November 30, 2028</p>
3	<p>Clean and Assess Conditions of Collection System. Clean and perform closed-circuit video camera inspections, document the condition of the collection system, and identify high-priority areas for rehabilitation. When the Discharger inspects a sewer pipe, it shall also inspect all associated maintenance holes.</p>	<p>November 30, 2028</p>
4	<p>Rehabilitate High Priority Sewer Mains. Complete at least \$3,500,000 in collection system improvements as part of the budgeted projects specified in <i>Utility Analysis for Wet Weather Bypass of Secondary Treatment</i> (January 2023), including sewer line and force main rehabilitation and pump station upgrades. When the Discharger rehabilitates a sewer main, it shall also rehabilitate, as needed, all associated maintenance holes and ensure that abandoned sewer laterals are not connected to that sewer main. The Discharger shall prioritize sewer pipe rehabilitation in areas known or suspected to have high inflow and infiltration.</p>	<p>November 30, 2028</p>
5	<p>Report on Collection System Improvement Status Report status of collection system inspections and wet weather improvement efforts required in tasks 1, 2, 3, and 4. The Discharger shall include, at a minimum, the unique feet and percent of sewer pipe cleaned, inspected, and rehabilitated each year; dollars spent on sewer pipe rehabilitation each year; number of maintenance holes inspected and rehabilitated; number of abandoned sewer laterals found to be connected to the sewer main; and number of abandoned sewer laterals disconnected from the sewer main. The Discharger shall also report on planned rehabilitation projects for the following year.</p>	<p>Annually, with the Annual Self-Monitoring Report due February 1 each year</p>
6	<p>Report Private Sewer Lateral Program Status Report on the status and effectiveness of the Discharger's private sewer lateral ordinance (Ordinance 2014-02, effective March 4, 2015). At a minimum, the Discharger shall report the number of private residences that triggered ordinance requirements and the number of those private sewer laterals inspected, those found to be in compliance, and those replaced or repaired.</p>	<p>Annually, with the Annual Self-Monitoring Report due February 1 each year</p>

Task No.	Task	Deadline
7	<p>Prepare Utility Analysis (No Feasible Alternatives Analysis) If seeking to continue bypassing peak wet weather flows around the biological treatment units based on 40 C.F.R. 122.41(m)(4)(i)(A)-(C), the Discharger shall complete a utility analysis that contains all elements described in part 1 of the No Feasible Alternatives Analysis Process in U.S. EPA's proposed peak wet weather policy (<i>National Pollutant Discharge Elimination System Permit Requirements for Peak Wet Weather Discharges from Publicly Owned Treatment Works Treatment Plants Serving Separate Sanitary Sewer Collection Systems</i>, Fed. Reg. Vol. 70, No. 245, pages 76013-76018, December 22, 2005) and demonstrate that the Discharger has met the requirements for Regional Water Board approval pursuant to Attachment D section I.G.3. The submittal shall list and describe all feasible actions the Discharger could implement during the next order term.</p>	With Report of Waste Discharge due February 29, 2028

6.3.5.2. **Copper Action Plan.** The Discharger shall implement source control and pollution prevention for copper in accordance with the following tasks and time schedule:

Table 4. Copper Action Plan

Task No.	Task	Deadline
1	Implement Copper Control Program. Continue implementing existing program to reduce identified copper sources.	Implementation shall be ongoing
2	Implement Additional Actions. If the Regional Water Board notifies the Discharger that the three-year rolling mean dissolved copper concentration in Central San Francisco Bay exceeds 2.2 µg/L, then within 90 days of the notification, evaluate the effluent copper concentration trend and, if it is increasing, develop and begin implementation of additional measures to control copper discharges. Report the conclusion of the trend analysis and provide a schedule for any new actions to be taken within the next 12 months.	With next annual pollution minimization program report due February 28 (at least 90 days following notification)
3	Report Status. Submit an annual report documenting copper control program implementation that evaluates the effectiveness of the actions taken, including any additional actions required by Task 2 above, and provides a schedule for actions to be taken within the next 12 months.	Annually, with annual pollution minimization program report due February 28 each year

6.3.5.3. **Cyanide Action Plan.** The Discharger shall implement monitoring and surveillance, source control, and pollution prevention for cyanide in accordance with the following tasks and time schedule:

Table 5. Cyanide Action Plan

Task No.	Task	Deadline
1	<p>Review Potential Cyanide Sources. Submit an up-to-date inventory of potential cyanide sources. If no cyanide source is identified, Tasks 2 and 3, below, are not required unless the Discharger receives a request to discharge detectable levels of cyanide to the sewer. In such case, notify the Executive Officer and implement Tasks 2 and 3.</p>	<p>With annual pollution minimization program report due February 28, 2024</p>
2	<p>Implement Cyanide Control Program. Implement a control program to minimize cyanide discharges consisting, at a minimum, of the following elements:</p> <ul style="list-style-type: none"> a. Inspect each potential source to assess the need to include that source in the control program. b. Inspect sources included in the control program annually. Inspection elements may be based on U.S. EPA guidance, such as <i>Industrial User Inspection and Sampling Manual for POTWs</i> (EPA 831 B 94 01). c. Develop and distribute educational materials regarding the need to prevent cyanide discharges to sources included in the control program. d. Prepare an emergency monitoring and response plan to be implemented if a significant cyanide discharge occurs. <p>If the plant influent cyanide concentration exceeds 10 µg/L, the Discharger shall collect a follow-up sample within 5 days of becoming aware of the laboratory results. If the results of the follow-up sample also exceed 10 µg/L, then a “significant cyanide discharge” is occurring.</p>	<p>Implementation shall be ongoing following Executive Officer notification under Task 1</p>
3	<p>Implement Additional Measures. If the Regional Water Board notifies the Discharger that ambient monitoring shows cyanide concentrations are 1.0 µg/L or higher in the main body of San Francisco Bay, then within 90 days of the notification, commence actions to identify and abate cyanide sources responsible for the elevated ambient concentrations, report on the progress and effectiveness of the actions taken, and provide a schedule for actions to be taken within the next 12 months.</p>	<p>With next annual pollution minimization program report due February 28 (at least 90 days following notification)</p>
4	<p>Report Status of Cyanide Control Program. Submit an annual report documenting cyanide control program implementation and addressing the effectiveness of actions taken, including any additional cyanide controls required by Task 3, above, and provide a schedule for actions to be taken within the next 12 months.</p>	<p>Annually, with annual pollution minimization program report due February 28 each year</p>

6.3.5.4. **Anaerobically-Digestible Material.** If the Discharger receives hauled-in anaerobically-digestible material for injection into an anaerobic digester, the Discharger shall notify the Regional Water Board and develop and implement Standard Operating Procedures for this activity. The Standard Operating Procedures shall be developed prior to initiation of hauling. The Standard Operating Procedures shall address material handling, including unloading, screening, or other processing prior to anaerobic digestion; transportation; spill prevention; spill response; avoidance of the introduction of materials that

could cause interference, pass through, or upset of the treatment processes; avoidance of prohibited material; vector control; odor control; operation and maintenance; and the disposition of any solid waste segregated from introduction to the digester. The Discharger shall train its staff on the Standard Operating Procedures and maintain records for a minimum of three years for each load received, describing the hauler, waste type, and quantity received. In addition, the Discharger shall maintain records for a minimum of three years for the disposition, location, and quantity of cumulative pre-digestion segregated solid waste hauled offsite.

- 6.3.5.5. **Average Annual Selenium Load.** The Discharger shall report the average annual selenium load with its application for permit reissuance. The average annual load shall be the arithmetic mean of the annual mass discharges for the previous order term. Annual mass emissions shall be computed as follows:

$$\text{Annual Mass emission rate (kg/day)} = (3.785/N) \sum Q_i C_i$$

where:

N = number of samples in a year

Q_i = flow rate (MGD) associated with the i^{th} sample, valid until a new sample is collected

C_i = selenium concentration (mg/L) associated with the i^{th} sample, valid until a new sample is collected

When calculating selenium loads, the Discharger shall use estimated values and assume data reported below the method detection limit equal half of the detection limit.

ATTACHMENT A – DEFINITIONS AND ABBREVIATIONS

DEFINITIONS

Alternative Hypothesis

Statement used to propose a statistically significant relationship in a set of given observations. Under the TST approach, when the Null Hypothesis is rejected, the Alternative Hypothesis is accepted in its place, indicating a relationship between variables and an acceptable level of toxicity.

Arithmetic Mean (μ)

Also called the average, sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

$$\text{Arithmetic mean} = \mu = \Sigma x / n$$

where: Σx is the sum of the measured ambient water concentrations,
and n is the number of samples

Average Monthly Effluent Limitation (AMEL)

Highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)

Highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Bioaccumulative

Taken up by an organism from its surrounding medium through gill membranes, through epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Calendar Month(s)

Period from the first day of a month through the last day of a month (e.g., January 1 to January 31). For toxicity monitoring, the period is from the first day of a routine monitoring test to the day before the corresponding day of the next month (e.g., from June 15 to July 14), or to the last day of the next month if there is no corresponding day (e.g., January 31 to February 28).

Carcinogenic

Known to cause cancer in living organisms.

Coefficient of Variation (CV)

Measure of data variability calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Daily Discharge

Either: (1) the total mass of a constituent discharged over a calendar day (12:00 a.m. through 11:59 p.m.) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit) for a constituent with limitations expressed in units of mass; or (2) the unweighted arithmetic mean measurement of a constituent over a day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period is considered the result for the calendar day in which the 24-hour period ends.

Detected, but Not Quantified (DNQ)

Sample results less than the RL, but greater than or equal to the laboratory's MDL. Sample results reported as DNQ are estimated concentrations.

Dilution Credit

Amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Effluent Concentration Allowance (ECA)

Value derived from the water quality criterion or objective, dilution credit, and ambient background concentration that is used, in conjunction with the CV for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as wasteload allocation (WLA) as used in U.S. EPA guidance (*Technical Support Document for Water Quality-based Toxics Control*, March 1991, second printing, EPA/505/2-90-001).

Effective Concentration (EC)

The EC is a point estimate of the toxicant concentration that would cause an adverse effect on a quantal, "all or nothing," response (such as death, immobilization, or serious incapacitation) in a given percent of the test organisms. If the effect is death or immobility, the term lethal concentration (LC) may be used. EC values may be calculated using point estimation techniques such as probit, logit, and Spearman-Kärber. EC25 is the concentration of toxicant (in percent effluent) that causes a response in 25 percent of the test organisms.

Enclosed Bays

Indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest

distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Estimated Chemical Concentration

Concentration that results from the confirmed detection of a substance below the ML by the analytical method.

Estuaries

Waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters are considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220; Suisun Bay; Carquinez Strait downstream to the Carquinez Bridge; and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

Inhibition Concentration (IC)

The IC is a point estimate of the toxicant concentration that would cause a given percent reduction in a nonlethal, nonquantal biological measurement, such as growth. For example, an IC25 is the estimated concentration of toxicant that would cause a 25 percent reduction in average young per female or growth. IC values may be calculated using a linear interpolation method such as U.S. EPA's Bootstrap Procedure.

Inland Surface Waters

All surface waters of the state that are not the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation

Highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation

Lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Instream Waste Concentration (IWC)

Concentration of effluent in the receiving water after any dilution credit is applied. The IWC is the inverse of 1 plus the dilution credit, D, or $IWC = 1/(1+D)$, expressed as a percentage (e.g., if D = 9, the IWC is 10 percent). If no dilution credit is granted, the IWC is 100 percent.

Maximum Daily Effluent Limitation (MDEL)

Highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For toxicity, the MDEL is based on the outcome of the TST and the percent effect at the IWC (applied to the results of any single bioassay). For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Maximum Daily Effluent Target (MDET)

Target based on a single independent toxicity test using the TST used to determine whether a TRE should be conducted. Not meeting the MDET is not a violation of an effluent limitation. The MDET only applies to discharges with no numeric toxicity limits.

Median

Middle measurement in a data set. The median of a data set is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2+1)})/2$ (i.e., the midpoint between $n/2$ and $n/2+1$).

Median Monthly Effluent Limitation (MMEL)

Highest allowable median of daily discharges over a calendar month, calculated as the median of all daily discharges measured during a calendar month. For aquatic toxicity, the MMEL is an effluent limitation based on a maximum of three independent toxicity tests analyzed using the TST during a calendar month.

Median Monthly Effluent Target (MMET)

Target based on a maximum of three independent toxicity tests using the TST during a calendar month used to determine whether a TRE should be conducted. Not meeting a MMET is not a violation of an effluent limitation.

Method Detection Limit (MDL)

Minimum concentration of a substance that can be reported with 99 percent confidence that the measured concentration is distinguishable from method blank results, as defined in 40 C.F.R. part 136, Appendix B.

Minimum Level (ML)

Concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Mixing Zone

Limited volume of receiving water allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

M MEL Compliance Test

For chronic toxicity monitoring, one of up to two tests used in addition to a routine monitoring test to determine compliance with the chronic toxicity M MEL and M DEL.

M MET Test

For chronic toxicity monitoring, one of up to two tests used in addition to a routine monitoring test to evaluate if the discharge meets the chronic toxicity M MET and M DET.

No Observed Effect Concentration (NOEC)

The NOEC is the highest tested concentration of an effluent or a toxicant at which no adverse effects are observed on the aquatic test organisms at a specific time of observation. It is determined using hypothesis testing.

No Observed Effect level (NOEL)

For compliance determination, the NOEL is equal to IC25 or EC25. If the IC25 or EC25 cannot be statistically determined, the NOEL shall be equal to the NOEC derived using hypothesis testing.

Not Detected (ND)

Sample results less than the laboratory's MDL.

Null Hypothesis

Statement used in statistical testing that has been put forward either because it is believed to be true or because it is to be used as a basis for argument, but has not been proved.

Percent Effect

Value that denotes the difference in response between a test concentration and a control, divided by the mean control response and multiplied by 100.

Persistent Pollutants

Substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program

Program of waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of a Pollutant Minimization Program is to reduce all potential sources of a priority pollutant through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. Cost effectiveness may be considered when establishing the requirements of a Pollutant Minimization Program. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), is considered to fulfill the Pollutant Minimization Program requirements.

Pollution Prevention

Any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State Water Resources Control Board or Regional Water Board.

Regulatory Management Decision (RMD)

Decision that represents the maximum allowable error rates and thresholds for toxicity and non-toxicity that would result in an acceptable risk to aquatic life.

Reporting Level (RL)

ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order, including an additional factor if applicable as discussed herein. For priority pollutants, the MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from State Implementation Plan (SIP) Appendix 4 in accordance with SIP section 2.4.2 or established in accordance with SIP section 2.4.3. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Response

Measured biological effect (e.g., on survival, reproduction, growth) of exposure to a stimulus.

Routine Monitoring

Regular chronic toxicity monitoring required during the permit term. Routine monitoring results may trigger MMEL compliance tests or MMET tests. If a violation of the MDEL or MMEL occurs, or if the discharge does not meet the MDET or MMET, routine monitoring also includes one sample collected during the following month (regardless of the regular monitoring frequency), which is used to determine if a TRE is necessary. Routine monitoring does not include surveillance monitoring.

Source of Drinking Water

Any water designated as municipal or domestic supply (MUN) beneficial use.

Standard Deviation (σ)

Measure of variability calculated as follows:

$$\text{Standard deviation} = \sigma = (\Sigma[(x - \mu)^2]/(n - 1))^{0.5}$$

where: x is the observed value
 μ is the arithmetic mean of the observed values
 n is the number of samples

Surveillance Monitoring

Chronic toxicity monitoring performed using the most sensitive species at an effluent concentration at least double the IWC. Surveillance monitoring results are not for assessing compliance with the chronic toxicity MMEL or MDEL.

Test of Significant Toxicity (TST)

Statistical approach used to analyze aquatic toxicity test data, as described in section III.B.3 of State Water Board's *State Policy for Water Quality Control: Toxicity Provisions*.

Toxicity Reduction Evaluation (TRE)

Study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. A TIE is a set of procedures to identify the specific chemicals responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.

ABBREVIATIONS

°F	degrees Fahrenheit
°C	degrees Celsius
%	Percent
µg/L	Micrograms per liter
µS/cm	Microsiemens per centimeter
1/Blending Event	Once per blending event
1/Discharge	Once per discharge
1/Day	Once per day
1/Month	Once per month
1/Quarter	Once per quarter
1/Week	Once per week
1/Year	Once per year
2/Month	Two times per month
2/Week	Twice per week

2/Year	Twice per year
3/Week	Three times per week
4/Week	Four times per week
5/Week	Five times per week
AMEL	Average monthly effluent limitation
AWEL	Average weekly effluent limitation
B	Background concentration
C	Water quality criterion or objective
C-24	24-hour composite
CFU/100 mL	Colony forming units per 100 milliliters
CIWQS	California Integrated Water Quality System
Continuous	Measured continuously
Continuous/D	Measured continuously, and recorded and reported daily
Continuous/H	Measured continuously, and recorded and reported hourly
CTR	California Toxics Rule
CV	Coefficient of Variation
DMR	Discharge Monitoring Report
DNQ	Detected, but not quantified
DL	Detection level
ECA	Effluent Concentration Allowance
Grab	Grab sample
IWC	Instream Waste Concentration
MDEL	Maximum Daily Effluent Limitation
MDET	Maximum Daily Effluent Target
MDL	Method detection limit
MEC	Maximum effluent concentration
MG	Million gallons
mg/L	Milligrams per liter
mg/L as N	Milligrams per liter as nitrogen
MGD	Million gallons per day
ML	Minimum level
MMEL	Median Monthly Effluent Limitation

MMET	Median Monthly Effluent Target
MPN/100 mL	Most probable number per 100 milliliters
MRP	Monitoring and Reporting Program (Attachment E)
ND	Not detected
NTR	National Toxics Rule
NTU	Nephelometric turbidity units
ppt	Parts per thousand
RL	Reporting level
RPA	Reasonable potential analysis
SIP	<i>Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy)</i>
SMR	Self-Monitoring Report
s.u.	Standard pH units
TIE	Toxicity identification evaluation
TRE	Toxicity reduction evaluation
TST	Test of Significant Toxicity
TUa	Acute toxicity units
TUc	Chronic toxicity units
WDRs	Waste discharge requirements
WQBEL	Water quality-based effluent limitation

ATTACHMENT B – MAPS

Figure B-1. Facility Location

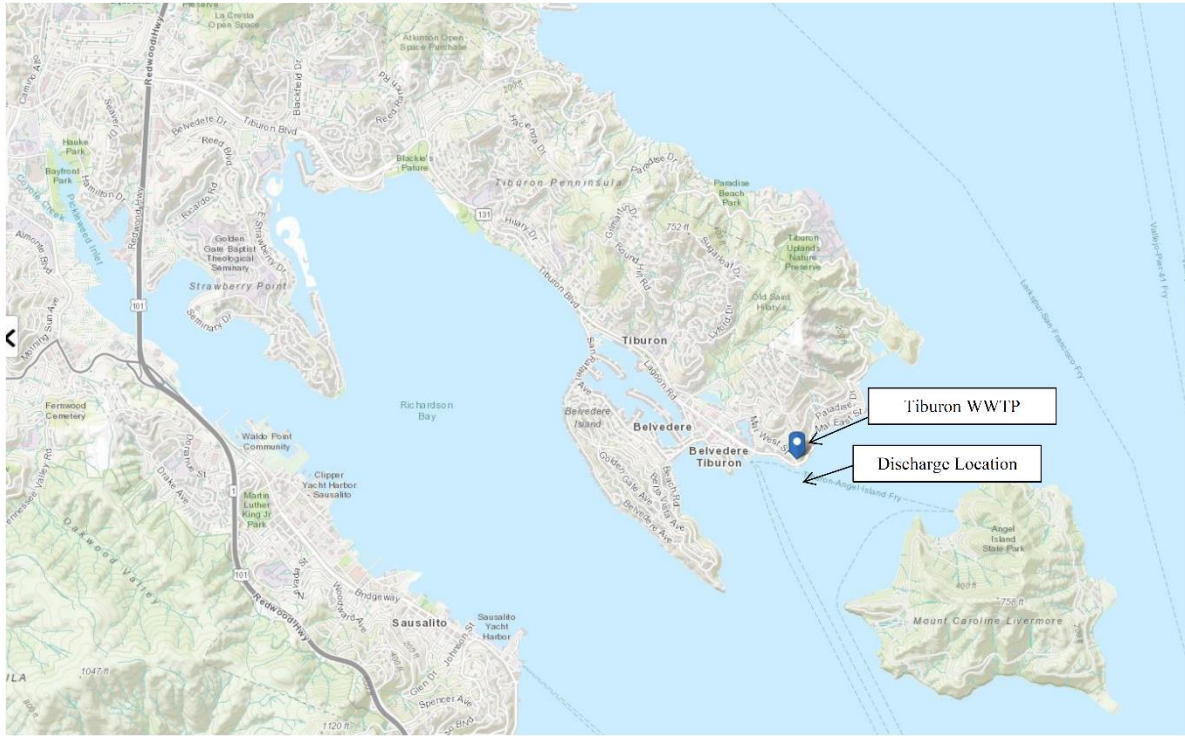
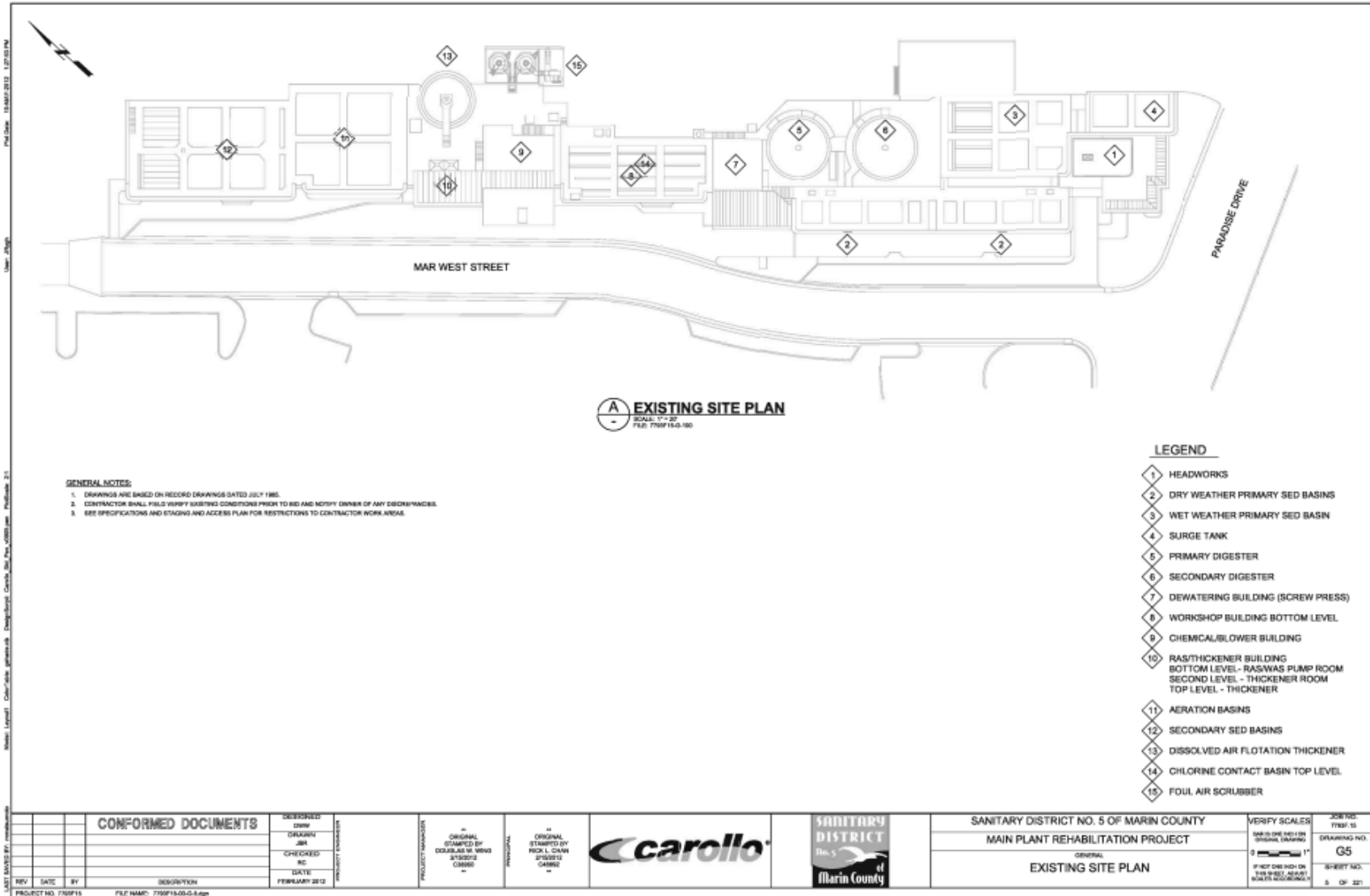
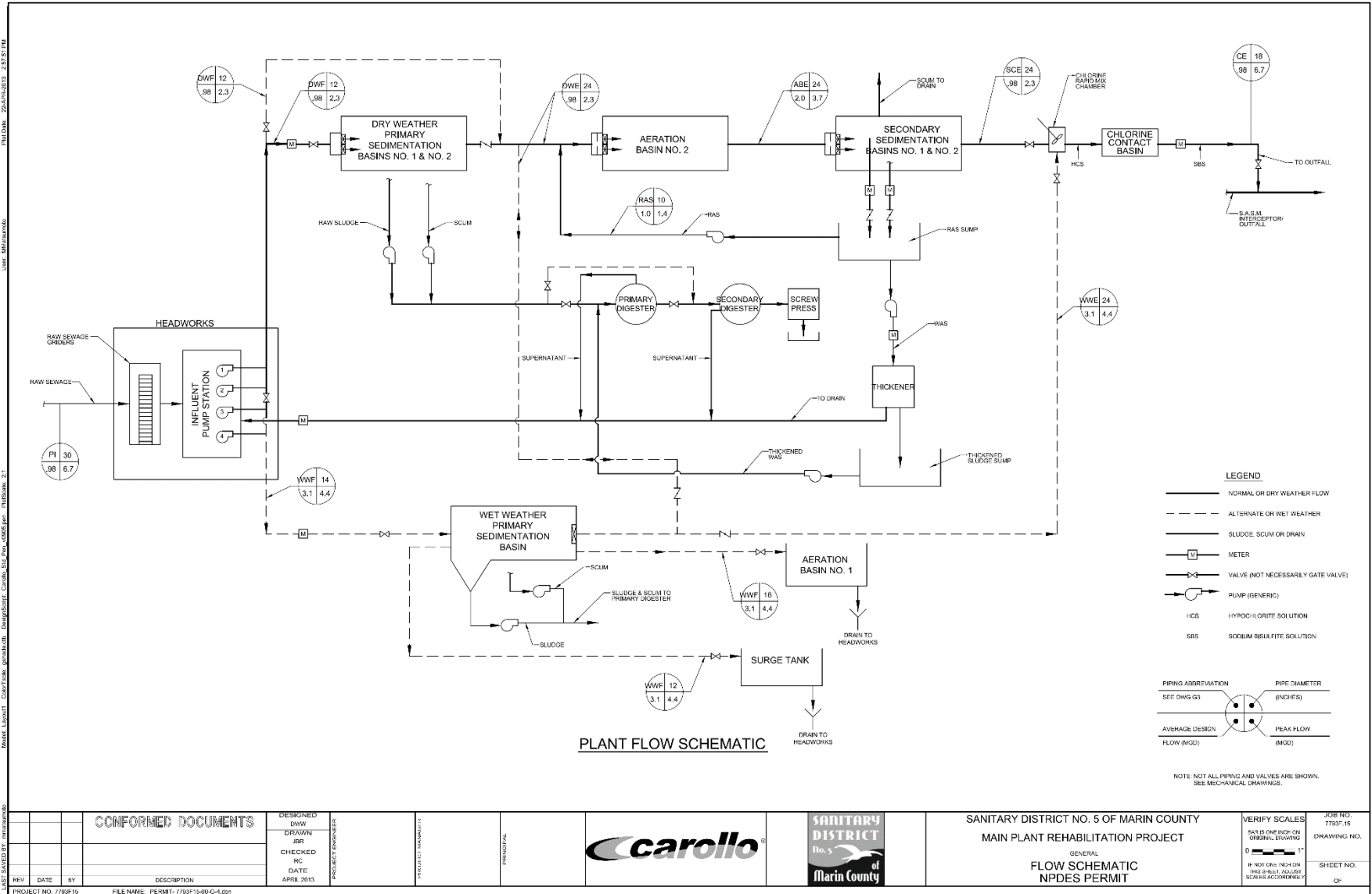


Figure B-2. Facility Site Layout



ATTACHMENT C – PROCESS FLOW DIAGRAM



ATTACHMENT D – STANDARD PROVISIONS

CONTENTS

1. STANDARD PROVISIONS – PERMIT COMPLIANCE	D-2
2. STANDARD PROVISIONS – PERMIT ACTION.....	D-5
3. STANDARD PROVISIONS – MONITORING	D-6
4. STANDARD PROVISIONS – RECORDS	D-6
5. STANDARD PROVISIONS – REPORTING	D-7
6. STANDARD PROVISIONS – ENFORCEMENT	D-12
7. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS.....	D-12

ATTACHMENT D – STANDARD PROVISIONS

1. STANDARD PROVISIONS – PERMIT COMPLIANCE

1.1. Duty to Comply

- 1.1.1. The Discharger must comply with all of the terms, requirements, and conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action; permit termination, revocation and reissuance, or modification; denial of a permit renewal application; or a combination thereof. (40 C.F.R. § 122.41(a); Wat. Code, §§ 13261, 13263, 13265, 13268, 13000, 13001, 13304, 13350, 13385.)
- 1.1.2. The Discharger shall comply with effluent standards or prohibitions established under CWA section 307(a) for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

1.2. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. (40 C.F.R. § 122.41(c).)

1.3. Duty to Mitigate. The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

1.4. Proper Operation and Maintenance. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 C.F.R. § 122.41(e).)

1.5. Property Rights

- 1.5.1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)
- 1.5.2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 C.F.R. § 122.5(c).)

1.6. Inspection and Entry. The Discharger shall allow the Regional Water Board, State Water Board, U.S. EPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i); Wat. Code, §§ 13267, 13383):

- 1.6.1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(i); 40 C.F.R. § 122.41(i)(1); Wat. Code, §§ 13267, 13383);
- 1.6.2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(2); Wat. Code, §§ 13267, 13383);
- 1.6.3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (33 U.S.C. § 1318(a)(4)(B)(ii); 40 C.F.R. § 122.41(i)(3); Wat. Code, §§ 13267, 13383); and
- 1.6.4. Sample or monitor, at reasonable times, for the purposes of ensuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (33 U.S.C. § 1318(a)(4)(B); 40 C.F.R. § 122.41(i)(4); Wat. Code, §§ 13267, 13383.)

1.7. Bypass

1.7.1. Definitions

- 1.7.1.1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)
- 1.7.1.2. "Severe property damage" means substantial physical damage to property; damage to the treatment facilities, which causes them to become inoperable; or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)
- 1.7.2. **Bypass not exceeding limitations.** The Discharger may allow any bypass to occur that does not cause exceedances of effluent limitations, but only if it is for essential maintenance to ensure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance sections 1.7.3, 1.7.4, and 1.7.5 below. (40 C.F.R. § 122.41(m)(2).)

- 1.7.3. **Prohibition of bypass.** Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):
- 1.7.3.1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));
 - 1.7.3.2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and
 - 1.7.3.3. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance section 1.7.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)
- 1.7.4. **Approval.** The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance section 1.7.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)
- 1.7.5. **Notice**
- 1.7.5.1. **Anticipated bypass.** If the Discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the date of the bypass. The notice shall be sent to the Regional Water Board. As of December 21, 2025, a notice shall also be submitted electronically to the initial recipient defined in Standard Provisions – Reporting section 5.10 below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(m)(3)(i).)
 - 1.7.5.2. **Unanticipated bypass.** The Discharger shall submit a notice of an unanticipated bypass as required in Standard Provisions – Reporting section 5.5 below (24-hour notice). The notice shall be sent to the Regional Water Board. As of December 21, 2025, a notice shall also be submitted electronically to the initial recipient defined in Standard Provisions – Reporting section 5.10 below. Notices shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(m)(3)(ii).)
- 1.8. **Upset.** Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error,

improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

- 1.8.1. **Effect of an upset.** An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance section 1.8.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)
- 1.8.2. **Conditions necessary for a demonstration of upset.** A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):
 - 1.8.2.1. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));
 - 1.8.2.2. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));
 - 1.8.2.3. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting section 5.5.2.2 below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and
 - 1.8.2.4. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance section 1.3 above. (40 C.F.R. § 122.41(n)(3)(iv).)
- 1.8.3. **Burden of proof.** In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

2. STANDARD PROVISIONS – PERMIT ACTION

- 2.1. **General.** This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 C.F.R. § 122.41(f).)
- 2.2. **Duty to Reapply.** If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 C.F.R. § 122.41(b).)

2.3. Transfers. This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and Water Code. (40 C.F.R. §§ 122.41(l)(3), 122.61.)

3. STANDARD PROVISIONS – MONITORING

- 3.1.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)
- 3.2.** Monitoring must be conducted according to test procedures approved under 40 C.F.R. part 136 for the analyses of pollutants unless another method is required under 40 C.F.R. chapter 1, subchapter N. Monitoring must be conducted according to sufficiently sensitive test methods approved under 40 C.F.R. part 136 for the analysis of pollutants or pollutant parameters or as required under 40 C.F.R. chapter 1, subchapter N. For the purposes of this paragraph, a method is sufficiently sensitive when:
- 3.2.1. The method minimum level (ML) is at or below the level of the most stringent effluent limitation established in the permit for the measured pollutant or pollutant parameter, and either the method ML is at or below the level of the most stringent applicable water quality criterion for the measured pollutant or pollutant parameter or the method ML is above the applicable water quality criterion but the amount of the pollutant or pollutant parameter in the facility's discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or
- 3.2.2. The method has the lowest ML of the analytical methods approved under 40 C.F.R. part 136 or required under 40 C.F.R. chapter 1, subchapter N, for the measured pollutant or pollutant parameter.

In the case of pollutants or pollutant parameters for which there are no approved methods under 40 C.F.R. part 136 or otherwise required under 40 C.F.R. chapter 1, subchapter N, monitoring must be conducted according to a test procedure specified in this Order for such pollutants or pollutant parameters. (40 C.F.R. §§ 122.21(e)(3), 122.41(j)(4), 122.44(i)(1)(iv).)

4. STANDARD PROVISIONS – RECORDS

- 4.1.** The Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report, or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 C.F.R. § 122.41(j)(2).)

4.2. Records of monitoring information shall include:

- 4.2.1. The date, exact place, and time of sampling or measurements (40 C.F.R. § 122.41(j)(3)(i));
- 4.2.2. The individual(s) who performed the sampling or measurements (40 C.F.R. § 122.41(j)(3)(ii));
- 4.2.3. The date(s) analyses were performed (40 C.F.R. § 122.41(j)(3)(iii));
- 4.2.4. The individual(s) who performed the analyses (40 C.F.R. § 122.41(j)(3)(iv));
- 4.2.5. The analytical techniques or methods used (40 C.F.R. § 122.41(j)(3)(v)); and
- 4.2.6. The results of such analyses. (40 C.F.R. § 122.41(j)(3)(vi).)

4.3. Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):

- 4.3.1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and
- 4.3.2. Permit applications and attachments, permits, and effluent data. (40 C.F.R. § 122.7(b)(2).)

5. STANDARD PROVISIONS – REPORTING

5.1. Duty to Provide Information. The Discharger shall furnish to the Regional Water Board, State Water Board, or U.S. EPA within a reasonable time, any information that the Regional Water Board, State Water Board, or U.S. EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or U.S. EPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, §§ 13267, 13383.)

5.2. Signatory and Certification Requirements

- 5.2.1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or U.S. EPA shall be signed and certified in accordance with Standard Provisions – Reporting sections 5.2.2, 5.2.3, 5.2.4, 5.2.5, and 5.2.6 below. (40 C.F.R. § 122.41(k).)
- 5.2.2. For a corporation, all permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (2) the

manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)

For a partnership or sole proprietorship, all permit applications shall be signed by a general partner or the proprietor, respectively. (40 C.F.R. § 122.22(a)(2).)

For a municipal, state, federal, or other public agency, all permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of U.S. EPA). (40 C.F.R. § 122.22(a)(3).)

- 5.2.3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or U.S. EPA shall be signed by a person described in Standard Provisions – Reporting section 5.2.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - 5.2.3.1. The authorization is made in writing by a person described in Standard Provisions – Reporting section 5.2.2 above (40 C.F.R. § 122.22(b)(1));
 - 5.2.3.2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and
 - 5.2.3.3. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)
- 5.2.4. If an authorization under Standard Provisions – Reporting section 5.2.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting section 5.2.3 above must be

submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)

- 5.2.5. Any person signing a document under Standard Provisions – Reporting section 5.2.2 or 5.2.3 above shall make the following certification:

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

- 5.2.6. Any person providing the electronic signature for documents described in Standard Provisions – Reporting sections 5.2.1, 5.2.2, or 5.2.3 that are submitted electronically shall meet all relevant requirements of Standard Provisions – Reporting section 5.2, and shall ensure that all relevant requirements of 40 C.F.R. part 3 (Cross-Media Electronic Reporting) and 40 C.F.R. part 127 (NPDES Electronic Reporting Requirements) are met for that submission. (40 C.F.R. § 122.22(e).)

5.3. Monitoring Reports

- 5.3.1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.41(l)(4).)
- 5.3.2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board. All reports and forms must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting section 5.10 and comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. (40 C.F.R. § 122.41(l)(4)(i).)
- 5.3.3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under 40 C.F.R. part 136, or another method required for an industry-specific waste stream under 40 C.F.R. chapter 1, subchapter N, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Regional Water Board or State Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)

5.3.4. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this Order. (40 C.F.R. § 122.41(l)(4)(iii).)

5.4. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order shall be submitted no later than 14 days following each schedule date. (40 C.F.R. § 122.41(l)(5).)

5.5. Twenty-Four Hour Reporting

5.5.1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written report shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

For noncompliance related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (i.e., combined sewer overflow, sanitary sewer overflow, or bypass event), type of overflow structure (e.g., manhole, combined sewer overflow outfall), discharge volume untreated by the treatment works treating domestic sewage, types of human health and environmental impacts of the event, and whether the noncompliance was related to wet weather.

As of December 21, 2025, all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events must be submitted to the Regional Water Board and must be submitted electronically to the initial recipient defined in Standard Provisions – Reporting section 5.10. The reports shall comply with 40 C.F.R. part 3, 40 C.F.R. section 122.22, and 40 C.F.R. part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(6)(i).)

5.5.2. The following shall be included as information that must be reported within 24 hours:

5.5.2.1. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)

5.5.2.2. Any upset that exceeds any effluent limitation in this Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

5.5.3. The Regional Water Board may waive the above required written report on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(ii)(B).)

5.6. Planned Changes. The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 C.F.R. § 122.41(l)(1)):

5.6.1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 C.F.R. section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or

5.6.2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order unless the discharge is an existing manufacturing, commercial, mining, or silvicultural discharge as referenced in 40 C.F.R. section 122.42(a). (40 C.F.R. § 122.41(l)(1)(ii).) If the discharge is an existing manufacturing, commercial, mining, or silvicultural discharge as referenced in 40 C.F.R. section 122.42(a), this notification applies to pollutants that are subject neither to effluent limitations in this Order nor to notification requirements under 40 C.F.R. section 122.42(a)(1) (see Additional Provisions – Notification Levels section 7.1.1). (40 C.F.R. § 122.41(l)(1)(ii).)

5.7. Anticipated Noncompliance. The Discharger shall give advance notice to the Regional Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with this Order's requirements. (40 C.F.R. § 122.41(l)(2).)

5.8. Other Noncompliance. The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting sections 5.3, 5.4, and 5.5 above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting section 5.5 above. For noncompliance related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports shall contain the information described in Standard Provision – Reporting section 5.5 and the applicable required data in appendix A to 40 C.F.R. part 127. The Regional Water Board may also require the Discharger to electronically submit reports not related to combined sewer overflows, sanitary sewer overflows, or bypass events under this section. (40 C.F.R. § 122.41(l)(7).)

5.9. Other Information. When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or U.S. EPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

5.10. Initial Recipient for Electronic Reporting Data. The owner, operator, or duly authorized representative is required to electronically submit NPDES information specified in appendix A to 40 C.F.R. part 127 to the initial recipient defined in 40 C.F.R. § 7.2(b). U.S. EPA will identify and publish the list of initial recipients on its website and in the Federal Register, by state and by NPDES data group [see 40 C.F.R. § 127.2(c)]. U.S. EPA will update and maintain this list. (40 C.F.R. § 122.41(l)(9).)

6. STANDARD PROVISIONS – ENFORCEMENT

6.1. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, Water Code sections 13268, 13385, 13386, and 13387.

7. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

7.1. Non-Municipal Facilities. Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Regional Water Board as soon as they know or have reason to believe (40 C.F.R. § 122.42(a)):

7.1.1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following “notification levels” (40 C.F.R. § 122.42(a)(1)):

7.1.1.1. 100 micrograms per liter ($\mu\text{g/L}$) (40 C.F.R. § 122.42(a)(1)(i));

7.1.1.2. 200 $\mu\text{g/L}$ for acrolein and acrylonitrile; 500 $\mu\text{g/L}$ for 2,4 dinitrophenol and 2-methyl 4,6 dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));

7.1.1.3. Five (5) times the maximum concentration reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or

7.1.1.4. The level established by the Regional Water Board in accordance with 40 C.F.R. section 122.44(f). (40 C.F.R. § 122.42(a)(1)(iv).)

7.1.2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following “notification levels” (40 C.F.R. § 122.42(a)(2)):

7.1.2.1. 500 micrograms per liter ($\mu\text{g/L}$) (40 C.F.R. § 122.42(a)(2)(i));

7.1.2.2. 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));

- 7.1.2.3. Ten (10) times the maximum concentration reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or
- 7.1.2.4. The level established by the Regional Water Board in accordance with 40 C.F.R. section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

7.2 Publicly Owned Treatment Works (POTWs)

- 7.2.1. All POTWs shall provide adequate notice to the Regional Water Board of any new introduction of pollutants into the POTW from an indirect discharger that would be subject to CWA sections 301 or 306 if it were directly discharging those pollutants (40 C.F.R. § 122.42(b)(1)).
- 7.2.2. All POTWs shall provide adequate notice to the Regional Water Board of any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of adoption of this Order. (40 C.F.R. § 122.42(b)(2).)
- 7.2.3. Adequate notice shall include information on the quality and quantity of effluent introduced into the POTW as well as any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. (40 C.F.R. § 122.42(b)(3).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

CONTENTS

1. GENERAL MONITORING PROVISIONS	E-2
2. MONITORING LOCATIONS	E-3
3. INFLUENT MONITORING	E-3
4. EFFLUENT MONITORING	E-4
5. EFFLUENT MONITORING DURING WET WEATHER BYPASS	E-5
6. TOXICITY MONITORING	E-6
7. RECEIVING WATER MONITORING	E-12
8. RECYCLED WATER POLICY ANNUAL REPORTS	E-12
9. REPORTING REQUIREMENTS	E-12

TABLES

TABLE E-1. MONITORING LOCATIONS	E-3
TABLE E-2. INFLUENT MONITORING	E-3
TABLE E-3. EFFLUENT MONITORING — ROUTINE	E-4
TABLE E-4 EFFLUENT MONITORING — WET WEATHER BYPASS	E-5
TABLE E-5. TOXICITY REDUCTION EVALUATION (TRE) TRIGGERS	E-11
TABLE E-6. CIWQS REPORTING	E-13
TABLE E-7. MONITORING PERIODS	E-14

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

Clean Water Act (CWA) section 308 and 40 C.F.R. sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code section 13383 also authorizes the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. This MRP establishes monitoring, reporting, and recordkeeping requirements that implement the federal and State laws and regulations.

1. GENERAL MONITORING PROVISIONS

- 1.1. The Discharger shall comply with this MRP. The Executive Officer may amend this MRP pursuant to 40 C.F.R. section 122.63. If any discrepancies exist between this MRP and the “Regional Standard Provisions, and Monitoring and Reporting Requirements (Supplement to Attachment D) for NPDES Wastewater Discharge Permits” (Attachment G), this MRP shall prevail.
- 1.2. The Discharger shall conduct all monitoring in accordance with Attachment D section 3, as supplemented by Attachment G. Equivalent test methods must be more sensitive than those specified in 40 C.F.R. section 136 and must be specified in this permit.
- 1.3. For the analysis of monitoring samples, the Discharger shall use laboratories certified by the State Water Resources Control Board (State Water Board) in accordance with Water Code section 13176 and shall obtain quality assurance/quality control data with laboratory reports. For any onsite field tests (e.g., turbidity, pH, temperature, dissolved oxygen, conductivity, disinfectant residual) analyzed by a noncertified laboratory, the Discharger shall implement a Quality Assurance-Quality Control Program. The Discharger shall keep a manual onsite containing the steps followed in this program and shall demonstrate sufficient capability to adequately perform these field tests (e.g., qualified and trained employees, properly calibrated and maintained field instruments). The program shall conform to U.S. EPA guidelines or other approved procedures.
- 1.4. The Discharger shall ensure that the results of the Discharge Monitoring Report-Quality Assurance (DMR-QA) Study or most recent Water Pollution Performance Evaluation Study are submitted annually to the State Water Board at the following address:

State Water Resources Control Board;
Quality Assurance Program Officer;
Office of Information Management and Analysis;
1001 I Street
Sacramento, CA 95814

2. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements of this Order:

Table E-1. Monitoring Locations

Discharge Point	Monitoring Location	Monitoring Location Description
Influent	INF-001	A point in the treatment plant headworks where all waste tributary to the treatment system is present and preceding any phase of treatment
Effluent	EFF-001	A point at the treatment plant following all treatment prior to commingling with Sewerage Agency of Southern Marin flows to the shared outfall into Central San Francisco Bay.
Effluent	EFF-001D	A point in the disinfection system at which adequate contact with the disinfectant is assured. This location may be the same as Monitoring Location EFF-001.
Effluent	EFF-001B	During wet weather bypasses of biological treatment, a point in the treatment plant at which all blended (fully-treated and primary-treated) waste is present prior to combining with Sewerage Agency of Southern Marin flows to the shared outfall into Central San Francisco Bay. This location may be the same as Monitoring Location EFF-001 or EFF-001D.
Toxicity Surveillance	SUR-001	A point at the treatment plant following all treatment prior to commingling with Sewerage Agency of Southern Marin flows to the shared outfall into Central San Francisco Bay. This location may be the same as Monitoring Location EFF-001.

3. INFLUENT MONITORING

The Discharger shall monitor treatment plant influent at Monitoring Location INF-001 as follows:

Table E-2. Influent Monitoring

Parameter	Unit	Sample Type	Minimum Sampling Frequency
Flow ^[1]	MG/MGD	Continuous	Continuous/D
Biochemical Oxygen Demand, 5-day @ 20°C (CBOD)	mg/L	C-24	1/Week
Total Suspended Solids (TSS)	mg/L	C-24	1/Week
Cyanide ^[2]	µg/L	Grab	2/Year

Footnotes:

^[1] The following flow information shall be reported in monthly self-monitoring reports:

- Daily average flow rate (MGD)
- Total monthly flow volume (MG)

^[2] The Discharger may, at its option, analyze for cyanide as weak acid dissociable cyanide using protocols specified in 40 C.F.R. part 136, or an equivalent method in the latest Standard Method edition.

4. EFFLUENT MONITORING

The Discharger shall monitor treatment plant effluent at Monitoring Locations EFF-001 (or, for enterococcus bacteria, Monitoring Location EFF-001D) and SUR-001 (for chronic toxicity surveillance monitoring) as follows:

Table E-3. Effluent Monitoring — Routine

Parameter	Unit	Sample Type	Minimum Sampling Frequency
Flow ^[1]	MG/MGD	Continuous	Continuous/D
Biochemical Oxygen Demand, 5-day @ 20°C (BOD) ^[2]	mg/L	C-24	1/Week
Total Suspended Solids (TSS) ^[2]	mg/L	C-24	1/Week
pH ^[3]	standard units	Continuous or Grab	Continuous/D
Chlorine, Total Residual	mg/L	Continuous	1/2 Hour or Continuous/2 Hour ^{[4][5]}
Enterococcus Bacteria ^[6]	CFU/100mL ^[7]	Grab	4/Year ^[8]
Chronic Toxicity – Routine ^[9]	“pass” or “fail” and % effect ^[10]	C-24	2/Year
Chronic Toxicity - Surveillance ^[11]	“pass” or “fail” and % effect ^[10]	C-24	2/Year
Ammonia, Total	mg/L	Grab or C-24	1/Month
Copper, Total Recoverable	µg/L	C-24	1/Month
Cyanide, Total ^[12]	µg/L	Grab	1/Month
Dioxin-TEQ	µg/L	Grab	Once
Priority Pollutants ^[13]	µg/L	Grab (C-24) ^[14]	Once

Footnotes:

- ^[1] The following flow information shall be reported in monthly self-monitoring reports:
- Daily average flow rate (MGD)
 - Total monthly flow volume (MG)
- ^[2] CBOD₅ and TSS effluent samples shall be collected concurrently with CBOD and TSS influent samples. CBOD and TSS percent removal shall be reported for each calendar month (using the most recent sample results) in accordance with section 4.2 of this Order.
- ^[3] If pH is monitored continuously, the minimum and maximum for each day shall be reported in monthly self-monitoring reports. If continuous pH analyzer is unavailable, grab samples shall be daily.
- ^[4] Effluent residual chlorine concentrations shall be monitored continuously or, at a minimum, every hour. The Discharger shall describe all excursions of the chlorine limit in the transmittal letter of self-monitoring reports as required by Attachment G section 5.3.1.1. If monitoring continuously, the Discharger shall report through data upload to CIWQS, from discrete readings of the continuous monitoring every hour on the hour, the maximum for each day and any other discrete hourly reading that exceed the effluent limit, and, for the purpose of mandatory minimum penalties required by Water Code section 13385(i), compliance shall be based only on these discrete readings. The Discharger shall retain continuous monitoring readings for at least three years. The Regional Water Board reserves the right to use all continuous monitoring data for discretionary enforcement.
- ^[5] The Discharger may elect to use continuous on-line monitoring systems for measuring or determining that a residual dechlorinating agent (e.g., sodium bisulfite) is present. Such monitoring systems may be used to prove that anomalous residual chlorine exceedances measured by online chlorine analyzers are false positives and are not valid total residual chlorine detections because it is chemically improbable to have chlorine present in the presence of a dechlorinating agent. If the data from continuous total residual chlorine analyzers provide convincing evidence that chlorine residual exceedances are false positives, the exceedances shall not be violations of this Order’s total residual chlorine effluent limits.
- ^[6] U.S. EPA Method 1600 or an equivalent method is suggested to measure culturable enterococci.
- ^[7] Results may be reported as either Most Probable Number (MPN)/100 mL if the laboratory method used provides results in MPN/100 mL or Colony Forming Units (CFU)/100 mL if the laboratory method used provides results in CFU/100 mL.

- [8] The four samples shall be collected in different calendar months during the higher recreational water contact season (June to October). If the enterococcus effluent limitation is exceeded, the Discharger shall conduct sampling five times per month for at least three consecutive months. If full compliance is demonstrated after the three-month period, the Discharger may return to the 4/Year sampling frequency.
- [9] Refer to MRP section 5.1.3.1.
- [10] Chronic toxicity monitoring results shall be reported in “pass” or “fail” and percent effect as defined in Toxicity Provisions sections III.B.3 and III.B.4.
- [11] Refer to MRP section 5.4.
- [12] The Discharger may, at its option, analyze for cyanide as weak acid dissociable cyanide using protocols specified in 40 C.F.R. part 136, or an equivalent method in the latest Standard Method edition.
- [13] The Discharger shall monitor for the pollutants listed in Attachment G, Table B.
- [14] The Discharger shall collect C-24 samples for metals.

5. EFFLUENT MONITORING DURING WET WEATHER BYPASS

During wet weather bypasses of biological treatment (blending), the Discharger shall monitor treatment plant effluent at Monitoring Location EFF-001B as follows:

Table E-4 Effluent Monitoring — Wet Weather Bypass

Parameter	Unit	Sample Type ^{[2][3]}	Minimum Sampling Frequency
Flow ^[1]	MG/MGD	Continuous	Continuous/D
Volume of Partially-Treated Wastewater Discharged	MG	Calculated	1/Event
Duration of Blending Event ^[4]	Hours	Calculated	1/Event
Biochemical Oxygen Demand, 5-day @ 20°C (BOD)	mg/L	C-24	1/Year ^[5]
Total Suspended Solids (TSS)	mg/L	C-24	1/Day
pH ^[6]	standard units	Continuous or Grab	Continuous/D
Chlorine, Total Residual ^[7]	mg/L	Continuous or Grab	1/2 Hour or Continuous/2 Hour
Enterococcus Bacteria	CFU/100mL ^[8]	Grab	1/Day
Ammonia, Total	mg/L	Grab or C-24	1/Year ^[5]
Copper, Total Recoverable	µg/L	C-24	1/Year ^[5]
Cyanide, Total ^[9]	µg/L	Grab	1/Year ^[5]

Footnotes:

- [1] The following flow information shall be reported in monthly self-monitoring reports:
- Daily average flow rate (MGD)
 - Total monthly flow volume (MG)
- [2] The 24-hour composites may be made up of discrete grab samples collected over the course of a day and volumetrically or mathematically flow-weighted. Samples for inorganic pollutants may be combined prior to analysis. Samples for organic pollutants shall be analyzed separately. If only one grab sample is collected, it shall be collected during peak flow.
- [3] Grab samples shall be collected coincident with composite samples collected for the analysis of regulated parameters.
- [4] For each blending event, the Discharger shall report the date and time each event starts and ends.
- [5] If a TSS sample collected on the same day exceeds 45 mg/L, the frequency shall be once per day.
- [6] If pH is monitored continuously, the minimum and maximum for each day shall be reported in self-monitoring reports.
- [7] Effluent residual chlorine concentrations shall be monitored continuously or, at a minimum, every two hours. The Discharger shall describe all excursions of the chlorine limit in the transmittal letter of self-monitoring reports as required by Attachment G section 5.3.1.1. If monitoring continuously, the Discharger shall report through data upload to CIWQS, from discrete readings of the effluent limit and, for the purpose of mandatory minimum penalties required by Water Code section 13385(i), compliance

shall be based only on these discrete readings. The Discharger shall retain continuous monitoring readings for at least three years. The Regional Water Board reserves the right to use all continuous monitoring data for discretionary enforcement.

The Discharger may elect to use a continuous on-line monitoring system for measuring or determining that residual dechlorinating agent is present. This monitoring system may be used to prove that anomalous residual chlorine exceedances measured by on-line chlorine analyzers are false positives and are not valid total residual chlorine detections because it is chemically improbable to have chlorine presence in the presence of sodium bisulfite. If Regional Water Board staff finds convincing evidence that chlorine residual exceedances are false positives, the exceedances are not violations of this Order's total residual chlorine limit.

^[8] Results may be reported as Most Probable Number (MPN)/100 mL if the laboratory method used provides results in MPN/100 mL.

^[9] The Discharger may, at its option, analyze for cyanide as weak acid dissociable cyanide using protocols specified in Standard Method Part 4500-CN-I, U.S. EPA Method OI 1677, or an equivalent method in the latest Standard Method edition.

6. TOXICITY MONITORING

6.1. Instream Waste Concentration Monitoring

6.1.1. **Sampling.** The Discharger shall collect 24-hour composite effluent samples at Monitoring Location EFF-001 for critical life stage toxicity testing as indicated below. Effluent samples may be collected before disinfection for toxicity tests. For toxicity tests requiring renewals, the Discharger shall collect 24-hour composite samples on consecutive or alternating days.

6.1.2. **Most Sensitive Species.** The most sensitive species shall be mysid shrimp (*Americamysis bahia*) unless a more sensitive species is identified in accordance with MRP, Appendix E-1. The Discharger shall conduct chronic toxicity species sensitivity screening as described in Appendix E-1. Upon completion of the chronic toxicity species sensitivity screening, the most sensitive species shall be the species exhibiting the highest percent effect at the IWC as determined by the screening.

If testing a particular species proves unworkable (e.g., the Discharger encounters unresolvable test interference or cannot secure a reliable supply of test organisms), the Executive Officer may authorize the temporary use of the next appropriate species as the most sensitive species. If there is no species in the same taxon, the next appropriate species is the species exhibiting the next highest percent effect at the IWC in the species sensitivity screening. The Executive Officer will confirm the temporary use of the next appropriate species in writing.

6.1.3. **Frequency.** The Discharger shall monitor the chronic toxicity as specified below:

6.1.3.1. **Routine Monitoring.** The Discharger shall conduct routine monitoring twice per year at the Instream Waste Concentration (IWC) of 1.1 percent effluent and continue routine monitoring during any Toxicity Reduction Evaluation (TRE).

6.1.3.2. **Effluent Targets.** The discharge at Discharge Point 001 shall the following maximum daily effluent target (MDET) and median monthly effluent target

(MMET) at the IWC using the most sensitive species for effluent from Monitoring Location EFF-001:

- MDET: No chronic aquatic toxicity test result of “fail” for any sub-lethal endpoint and no percent effect greater than or equal to 50 percent for the survival endpoint (if the most sensitive species has a survival endpoint) or greater than or equal to 50 percent for any sub-lethal endpoint (if the most sensitive species has no survival endpoint).
- MMET: No more than one chronic aquatic toxicity test result of “fail” in a calendar month for any endpoint.

If the discharge does not meet the MDET or MMET during a calendar month, the Discharger shall perform additional routine monitoring in accordance with MRP sections 5.1.3.3 and 5.1.3.4 to determine whether a TRE is required. The MDET and MMET are not effluent limitations.

- 6.1.3.3. **Additional Routine Monitoring Tests for TRE Determination.** If the Discharger does not meet the MDET or MMET during a calendar month and is not already conducting a TRE, the Discharger shall conduct an additional routine monitoring test during the following calendar month. This additional routine monitoring test shall be used to determine whether a TRE is necessary according to the process shown in Appendix E-3. If there is not enough effluent available to test in the following calendar month, the Discharger shall return to twice per year routine monitoring as soon as enough effluent is available. The Executive Officer may also require the Discharger to conduct a TRE.
- 6.1.3.4. **MMET Tests and TRE Determination.** If any routine monitoring test result is “fail,” the Discharger shall conduct at least one and at most two MMET tests. The results of these tests shall be used to determine whether a TRE is necessary according to the process shown in Appendix E-3. The Discharger shall initiate these tests within the same calendar month as the failed routine monitoring test. (For the purposes of MMET tests, the “calendar month” shall begin on the calendar day that the failed routine monitoring test was initiated. The “calendar month” shall end on the day before the corresponding day of the following month, or on the last day of the following month if it has no corresponding day [e.g., January 31 through February 28]).
- 6.1.3.4.1. If the first MMET test result is “pass,” then the Discharger shall conduct a second MMET test. If the first MMET test result is “fail,” that result does not meet the MMET and a second MMET test is not required. If any of the failed tests also did not meet the MDET, the Discharger shall conduct a TRE (see MRP § 6.3).

- 6.1.3.4.2. If the second MMET test result is “pass,” then the Discharger shall return to routine monitoring as described in MRP section 6.1.3.1.¹ If the second MMET test result is “fail,” that result does not meet the MMET. If any of the failed tests were also an MDET exceedance, the Discharger shall conduct a TRE (see MRP § 6.3).
- 6.1.3.4.3. If the Discharger cannot conduct an MMET test because not enough effluent is available to test, the Discharger shall return to routine monitoring as soon as enough effluent is available.
- 6.1.4. **Methodology.** Sample collection, handling, and preservation shall be in accordance with U.S. EPA protocols. Bioassays shall be conducted in compliance with the most recently promulgated test methods, as shown in Appendix E-2. These are *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms*, currently 1st edition (EPA/600/R-95-136); *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, currently 3rd edition (EPA-821-R-02-014); and *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, currently 4th edition (EPA-821-R2-02-013). If these protocols prove unworkable, the Executive Officer and the Environmental Laboratory Accreditation Program may grant exceptions in writing upon the Discharger’s request with justification.

Chronic toxicity shall be evaluated using the Test of Significant Toxicity (TST) as described in the State Water Board’s *State Policy for Water Quality Control: Toxicity Provisions* (Toxicity Provisions), section III.B.3. The selected test concentrations shall include the IWC. The TST shall be conducted using the IWC sample and a control as described in Toxicity Provisions section III.B.3. Test sample pH may be controlled to the level of the effluent sample as received by the laboratory prior to being salted up. A result of “fail” indicates toxicity at the IWC.

If the Discharger demonstrates that specific identifiable substances in the discharge are rapidly rendered harmless upon discharge to the receiving water, the evaluation for meeting the chronic toxicity target may be performed after test samples are adjusted to remove the influence of those substances. The adjustment shall not remove the influence of other substances. Written acknowledgement that the Executive Officer concurs with the Discharger’s demonstration must be obtained prior to any such adjustment.

¹ See Appendix E-3, Toxicity Reduction Evaluation Process Flowchart.

6.2. Reporting

The Discharger shall provide toxicity test results with self-monitoring reports and shall include the following, at a minimum, for each test:

- 6.2.1. Sample date
- 6.2.2. Test initiation date
- 6.2.3. Test species
- 6.2.4. End point values for the control and IWC sample (e.g., number of young, growth rate, percent survival). For routine monitoring and MMET tests, the Discharger shall report the results as either “pass” or “fail,” and the percent effect at the IWC for each endpoint. For surveillance monitoring (see MRP § 6.1.4), the Discharger shall report the results as either “pass” or “fail” and the percent effect at 10 percent effluent for each endpoint.
- 6.2.5. End point values for each replicate of the control and IWC sample (e.g., number of young, growth rate, percent survival).
- 5.2.6. Available water quality measurements for each test (e.g., pH, dissolved oxygen, temperature, conductivity, hardness, salinity, ammonia).

6.3. Toxicity Reduction Evaluation (TRE)

- 6.3.1. The Discharger shall prepare a generic TRE work plan within 90 days of the effective date of this Order to be ready to respond to toxicity events. The Discharger shall review and update the generic work plan as necessary so it remains current and applicable to the discharge and discharge facilities.
- 6.3.2. Within 30 days of the following circumstances, the Discharger shall submit a TRE work plan that shall be the generic work plan revised as appropriate for the particular toxicity observed. The circumstances triggering a TRE are as follows:
 - 6.3.2.1 The Discharger does not meet any combination of two or more MDET or MMETs within a single calendar month or two successive calendar months;
 - 6.3.2.2 The Discharger does not meet the MDET or MMET during a calendar month, there is no effluent available to test in the following calendar month, and Executive Officer requires a TRE; or
 - 6.3.2.3 Surveillance monitoring (as described in MRP § 6.4, below) results are “fail” for two consecutive surveillance tests.
- 6.3.3. Within 30 days of submitting the TRE work plan, the Discharger shall initiate a TRE in accordance with the TRE work plan. The TRE shall be specific to the discharge and be in accordance with current technical guidance and reference

materials, including U.S. EPA guidance materials. The Discharger shall conduct the TRE as a tiered evaluation as summarized below:

- 6.3.3.1 Tier 1 shall consist of basic data collection (routine monitoring, additional routine monitoring, and MMET tests);
- 6.3.3.2 Tier 2 shall consist of evaluating treatment processes, including operational practices and process chemicals;
- 6.3.3.3 Tier 3 shall consist of a toxicity identification evaluation (TIE) to identify the substance or combination of substances causing the observed toxicity. The Discharger shall employ all reasonable efforts using currently available TIE methodologies;
- 6.3.3.4 Tier 4 shall consist of a toxicity source evaluation;
- 6.3.3.5 Tier 5 shall consist of a toxicity control evaluation that considers alternative strategies, including treatment process modifications, to reduce or eliminate the toxic substances from the discharge, and
- 6.3.3.6 Tier 6 shall consist of implementing all reasonable toxicity control measures, and follow-up monitoring and confirmation of implementation success.
- 6.3.4. The Discharger may end the TRE at any stage if monitoring finds there is no longer consistent toxicity (i.e., two consecutive test results of “pass”).
- 6.3.5. The Executive Officer may authorize the Discharger to end a TRE if the Discharger documents that it has exhausted all reasonable efforts to identify the cause of the toxicity.
- 6.3.6. Many recommended TRE elements parallel required or recommended efforts related to source control, pollution prevention, and stormwater control programs. TRE efforts should be coordinated with such efforts. To prevent duplication of efforts, evidence of complying with requirements or recommended efforts of such programs may be acceptable to demonstrate compliance with TRE requirements.
- 6.3.7. The routine monitoring frequency shall be a minimum of two tests per calendar year at the IWC when the Discharger is conducting toxicity testing as part of a TRE during that calendar year. The Discharger must return to the routine monitoring frequency specified in MRP section 6.1.3.1 at the conclusion of the TRE or one year after the initiation of the TRE, whichever occurs sooner.

The TRE triggers are set forth below.

Table E-5. Toxicity Reduction Evaluation (TRE) Triggers

Monitoring Type and Frequency	Triggers	TRE Required?
Routine and MMET monitoring, less than monthly frequency	1. The MDET or MMET is not met in a calendar month, AND 2. No discharge during the following calendar month	Executive Officer may require TRE
Routine and MMET monitoring	Any combination of two or more MDETs or MMETs are not met in a single calendar month or successive calendar months	TRE is required
Surveillance monitoring	"Fail" result in two consecutive surveillance samples	TRE is required

6.4. Surveillance Monitoring

The Discharger shall conduct surveillance monitoring and reporting as described below:

- 6.4.1. **Sampling.** The Discharger shall collect 24-hour composite effluent samples for surveillance monitoring at Monitoring Location SUR-001 as otherwise described in MRP section 6.1.1.
- 6.4.2. **Test Species.** The test species shall be the most sensitive species determined as required by MRP section 6.1.2.
- 6.4.3. **Surveillance Monitoring Frequency.** Surveillance monitoring shall be conducted twice per year. Surveillance monitoring tests may be conducted concurrently with routine monitoring. If a surveillance monitoring result is "fail," the Discharger shall conduct an additional surveillance monitoring test no later than the next calendar month in which there is sufficient effluent flow. If the result of the second test is "fail," the Discharger shall conduct a TRE.

 Surveillance monitoring is not required during a TRE. The Discharger must return to surveillance monitoring at the conclusion of the TRE.
- 6.4.4. **Methodology.** Sample collection, handling, and preservation shall be as required by MRP section 6.1.4. Chronic toxicity shall be evaluated using the TST, also as required by MRP section 6.1.4. The selected test concentrations shall include 10 percent effluent and a control. The TST shall be conducted using the 10 percent effluent sample and the control.
- 6.4.5. **Reporting.** The Discharger shall provide toxicity test results as required by MRP section 6.2.

7. RECEIVING WATER MONITORING

The Discharger shall continue to participate in the Regional Monitoring Program (RMP), which collects data on pollutants and toxicity in San Francisco Bay water, sediment, and biota. The Discharger shall also provide supplemental funding to the RMP to support additional studies for constituents of emerging concern. The Discharger shall, either individually or in collaboration with other dischargers, submit or cause to submit a report each year that indicates the status of its RMP payment. The report shall be due on the same day as the letters certifying the Discharger's annual payment in support of RMP receiving water monitoring (currently February 1 each year).

8. RECYCLED WATER POLICY ANNUAL REPORTS

In accordance with Section 3 of the *Water Quality Control Policy for Recycled Water* (Recycled Water Policy), the Discharger shall electronically submit an annual report of monthly data to the State Water Board by April 30 annually covering the previous calendar year using the State Water Board's [GeoTracker website](https://geotracker.waterboards.ca.gov/) (<https://geotracker.waterboards.ca.gov/>). Information for setting up and using the GeoTracker system can be found in the ESI Guide for Responsible Parties document on the State Water Board's website for [Electronic Submittal of Information](https://waterboards.ca.gov/ust/electronic_submittal/index.html) (https://waterboards.ca.gov/ust/electronic_submittal/index.html).

The annual report to GeoTracker must include the volumetric reporting of the items listed in [Section 3.2 of the Recycled Water Policy](https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/121118_7_final_amendment_oal.pdf) (https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/121118_7_final_amendment_oal.pdf).

9. REPORTING REQUIREMENTS

9.1. General Monitoring and Reporting Requirements. The Discharger shall comply with all Standard Provisions (Attachments D and G) related to monitoring, reporting, and recordkeeping.

9.2. Self-Monitoring Reports (SMRs)

9.2.1. **SMR Format.** The Discharger shall electronically submit SMRs using the State Water Board's [California Integrated Water Quality System \(CIWQS\) Program website](https://waterboards.ca.gov/water_issues/programs/ciwqs) (waterboards.ca.gov/water_issues/programs/ciwqs). The CIWQS website will provide additional information for SMR submittal in the event of a planned service interruption for electronic submittal.

9.2.2. **SMR Due Dates and Contents.** The Discharger shall submit SMRs for each calendar month by the due dates, and with the contents, specified below:

9.2.2.1. **Monthly SMRs** — Monthly SMRs shall be due the first day of the second month after the monthly monitoring period. Each SMR shall contain the

applicable items described in Provision 6.3.2 (Effluent Characterization Study and Report) of the Order, Attachment D section 5.2, and Attachment G section 5.3. Each SMR shall include all new monitoring results obtained since the last SMR was submitted. If the Discharger monitors any pollutant more frequently than required by this Order, the Discharger shall include the results of such monitoring in the calculations and reporting for the SMR.

9.2.2.2. **Annual SMR** — Annual SMRs shall be due February 1 each year, covering the previous calendar year. The annual SMR shall contain the applicable items described in Provisions 6.3.2 (Effluent Characterization Study and Report) of the Order and Attachment G section 5.3.1.6.

9.2.3. **Specifications for Submitting SMRs to CIWQS.** The Discharger shall submit analytical results and other information using one of the following methods:

Table E-6. CIWQS Reporting

Parameter	Method of Reporting: EDF/CDF data upload	Attached File
All parameters identified in influent, effluent, and receiving water monitoring tables (except Dissolved Oxygen and Temperature)	Required for all results	-
Dissolved Oxygen, Temperature	Required for monthly maximum and minimum results only ^[1]	Discharger may use this method for all results or keep records
Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Cyanide, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Zinc, Dioxins & Furans (by U.S. EPA Method 1613), Other Pollutants (by U.S. EPA Methods 601, 602, 608, 610, 614, 624, and 625)	Required for all results ^[2]	-
Volume and Duration of Blended Discharge ^[3]	Required for all blended effluent discharges	-
Analytical Method	Not required (Discharger may select "data unavailable") ^[1]	-
Collection Time, Analysis Time	Not required	-

Footnotes:

- ^[1] The Discharger shall continue to monitor at the minimum frequency specified in this MRP, keep records of the measurements, and make the records available upon request.
- ^[2] These parameters require EDF/CDF data upload or manual entry regardless of whether monitoring is required by this MRP or other provisions of this Order (except for biosolids, sludge, or ash provisions).
- ^[3] The requirement for volume and duration of blended discharge applies only if this Order authorizes the Discharger to discharge blended effluent.

The Discharger shall arrange all reported data in a tabular format and summarize data to clearly illustrate whether the Facility is operating in compliance with effluent limitations. The Discharger is not required to duplicate the submittal of data entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a

tabular format, the Discharger shall electronically submit the data in a tabular format as an attachment.

9.2.4. **Monitoring Periods.** Monitoring periods for all required monitoring shall be as set forth below unless otherwise specified:

Table E-7. Monitoring Periods

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period
Continuous/D	Order effective date	All times
1/2 Hour Continuous/2 Hour	Order effective date	Every two-hour period, beginning at midnight (e.g., 12:00 a.m. and continuing through 11:59 p.m.)
1/Hour	Order effective date	Every hour on the hour
1/Day	Order effective date	Any 24-hour period that reasonably represents a calendar day for sampling purposes (e.g., beginning at midnight and continuing through 11:59 p.m.)
1/Week 2/Week 3/Week 4/Week 5/Week	First Sunday following or on Order effective date	Sunday through Saturday
1/Month	First day of calendar month following or on Order effective date ^[2]	First day of calendar month through last day of calendar month ^[2]
1/Quarter	Closest January 1, April 1, July 1, or October 1 before or after Order effective date ^[1]	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31
1/Year	Closest January 1 before or after Order effective date ^[1]	January 1 through December 31
2/Year	Closest January 1 or July 1 before or after Order effective date ^[1]	January 1 through June 30 July 1 through December 31
Once	Order effective date	Once during the term of the Order within 12 months prior to applying for permit reissuance
1/Event	Order effective date	Duration of blending event

Footnotes:

^[1] Monitoring performed during the previous order term may be used to satisfy monitoring required by this Order.

^[2] See Attachment A for the definition of a calendar month for chronic toxicity testing.

9.2.5. **RL and MDL Reporting.** The Discharger shall report with each sample result the Reporting Level (RL) and Method Detection Limit (MDL) as determined by the procedure in 40 C.F.R. part 136. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- 9.2.5.1. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- 9.2.5.2. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

For purposes of data collection, the Discharger shall require the laboratory to write the estimated chemical concentration next to DNQ. The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (\pm a percentage of the reported value), numerical ranges (low to high), or any other means the laboratory considers appropriate.

- 9.2.5.3. Sample results less than the laboratory's MDL shall be reported as "Not Detected", or ND.
- 9.2.5.4. The Discharger shall instruct laboratories to establish calibration standards so that the minimum level (ML) value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
- 9.2.6. **Compliance Determination.** Compliance with effluent limitations shall be determined using sample reporting protocols defined above, in the Fact Sheet, and in Attachments A, D, and G. For purposes of reporting and administrative enforcement by the Regional Water Board and State Water Board, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and, if applicable, greater than or equal to the RL.

- 9.3. **Discharge Monitoring Reports (DMRs).** DMRs are U.S. EPA reporting requirements. The Discharger shall electronically certify and submit DMRs together with SMRs using Electronic Self-Monitoring Reports module eSMR 2.5 or the latest upgraded version. Electronic DMR submittal shall be in addition to electronic SMR submittal. Information about electronic DMR submittal is available at the [DMR website](https://waterboards.ca.gov/water_issues/programs/discharge_monitoring) (waterboards.ca.gov/water_issues/programs/discharge_monitoring).

**APPENDIX E-1
CHRONIC TOXICITY
DEFINITION OF TERMS AND
SCREENING PHASE REQUIREMENTS**

1. Definition of Terms

- 1.1. Continuous Discharger.** Discharger that discharges without interruption throughout its operating hours, except for infrequent shutdowns for maintenance, process changes, or other similar activities, and that discharges throughout the calendar year.
- 1.2. Non-Continuous Discharger.** Discharger that does not discharge in a continuous manner or does not discharge throughout the calendar year (e.g., intermittent and seasonal dischargers).

2. Chronic Toxicity Species Sensitivity Screening

- 2.1.** The Discharger shall perform species sensitivity screening as specified in Toxicity Provisions section III.C.2:
- 2.1.1. The Discharger shall conduct species sensitivity screening and submit a technical report that identifies the most sensitive test species within 18 months of the effective date of this Order if the Discharger has not previously conducted a species sensitivity screening as specified in section III.C.2 of the Toxicity Provisions.
- 2.1.2. The Discharger shall conduct a species sensitivity screening and submit a technical report that identifies the most sensitive test species with the application for permit reissuance. Alternatively, the Discharger may provide species sensitivity screening results from a previous sensitive species screening conducted within the 15 years before the expiration date of this Order if that sensitive species screening was conducted as specified in Toxicity Provisions section III.C.2.
- 2.1.3. The Discharger shall conduct species sensitivity screening and submit a technical report that identifies the most sensitive test species no later than 18 months after any significant change in the nature of the effluent discharged due to changes in sources or treatment, except those changes resulting from reductions in pollutant concentrations attributable to source control efforts.
- 2.2.** Species sensitivity screening shall, at a minimum, reflect the following elements:
- 2.2.1 Test species specified in Appendix E-2, attached, and protocols referenced in those tables. Test species shall be Tier I unless those species are unavailable. In such cases, the Executive Officer may approve a Tier II test species.

- 2.2.2. Continuous Dischargers: four sets of tests, one in each calendar quarter of a calendar year.

Non-continuous Dischargers: at least two sets of tests, one in each calendar quarter with at least 15 days of discharge, unless the Discharger discharges in only one quarter of a calendar year; in that case, both sets of testing shall occur during the same calendar quarter. Testing in a specific species sensitivity screening can be conducted using effluent that is not discharged into surface waters (e.g., effluent discharged onto land because of a summer prohibition on discharges into surface waters) as long as the effluent tested is representative of the effluent that will be discharged to surface waters.

- 2.2.3. Appropriate controls as required by the applicable U.S. EPA test method for the selected test species.
- 2.2.4. Tests conducted at a waste concentration of 10 percent or the IWC, whichever represents a higher concentration of effluent. Alternatively, the Executive Officer may specify a higher waste concentration if needed to increase the likelihood that potential effects might be observed.
- 2.3. The Discharger shall submit a species sensitivity screening proposal at least 30 days prior to initiating any species sensitivity screening. The proposal shall address each of the elements listed above.
- 2.4. Unless the Executive Officer specifies otherwise, the most sensitive species shall be the species exhibiting the highest percent effect.

APPENDIX E-2

SUMMARY OF TOXICITY TEST SPECIES REQUIREMENTS

Table AE-1. West Coast Marine Chronic Toxicity Test Species and Methods

Species	Scientific Name	Tier	Effect	Test Duration	Reference
Giant kelp	<i>Macrocystis pyrifera</i>	I	Percent germination; germ tube length	48 hours	1
Red Abalone	<i>Haliotis rufescens</i>	I	Larval development	48 hours	1
Oyster Mussel	<i>Crassostrea gigas</i> <i>Mytilus sp.</i>	I	Larval development	48 hours	1
Purple Urchin Sand dollar	<i>Strongylocentrotus purpuratus</i> <i>Dendraster excentricus</i>	I	Percent fertilization or larval development	1 hour or 72 hours	1
Shrimp	<i>Americamysis bahia</i>	II	Percent survival; growth	7 days	2
Topsmelt	<i>Atherinops affinis</i>	I	Percent survival; growth	7 days	1
Silverside	<i>Menidia beryllina</i>	II	Larval growth rate; percent survival	7 days	2

Toxicity Test References:

1. Short-term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to West Coast Marine and Estuarine Organisms. EPA/600/R-95/136. August 1995.
2. Short-term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to Marine and Estuarine Organisms. EPA/821/R-02/014. October 2002.

Table AE-2. Freshwater Chronic Toxicity Test Species and Method

Species	Scientific Name	Tier	Effect	Test Duration	Reference
Fathead minnow	<i>Pimephales promelas</i>	I	Survival; growth rate	7 days	1
Water flea	<i>Ceriodaphnia dubia</i>	I	Survival; number of young	7 days	1
Green Alga	<i>Selenastrum capricornutum</i>	I	Final cell density	4 days	1

Toxicity Test Reference:

1. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, fourth Edition Chronic manual (EPA-821-R-02-013, October 2002).

Table AE-3. Toxicity Test Requirements for Species Sensitivity Screening

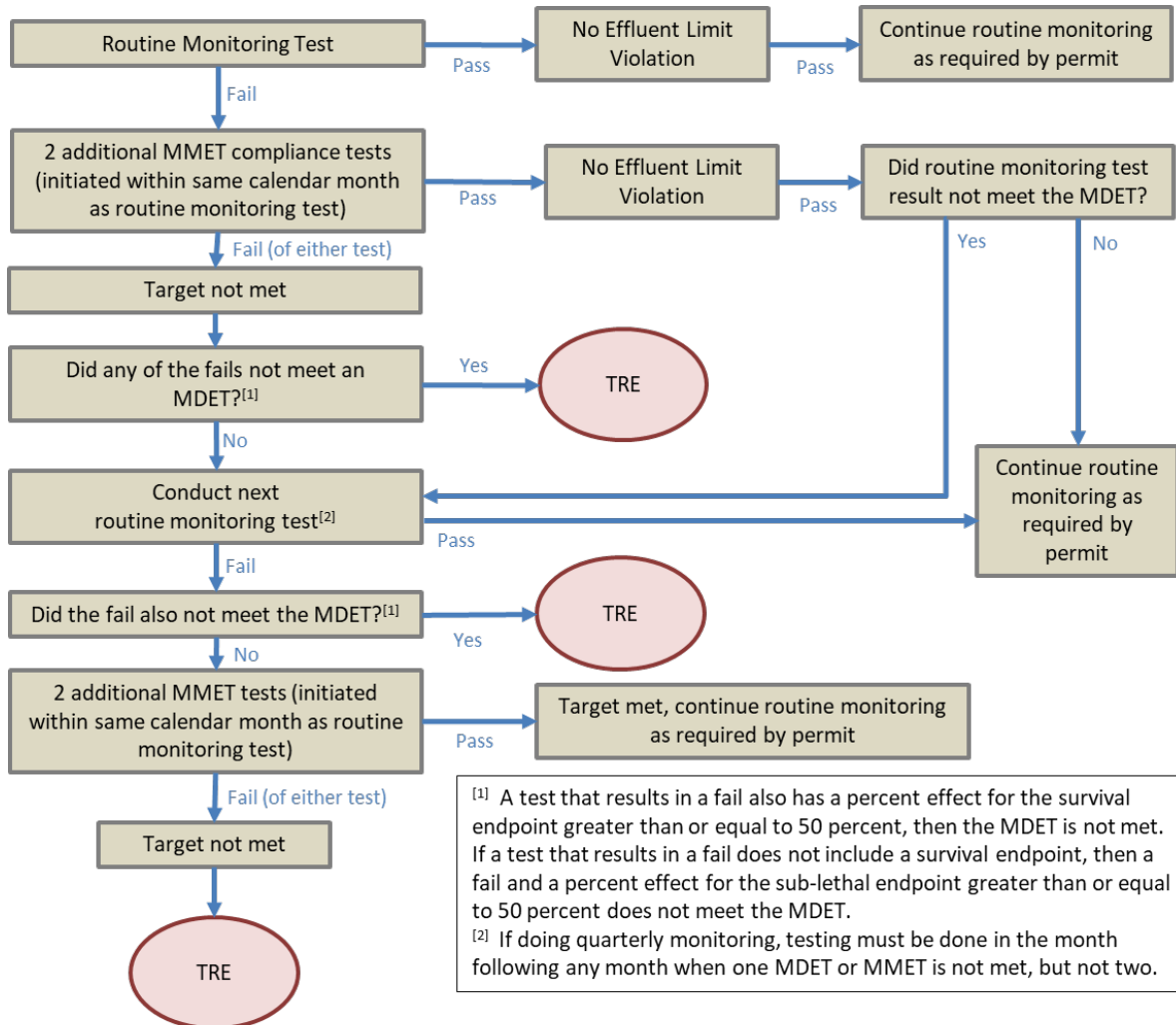
Requirements	Discharges to Marine or Estuarine Water (San Francisco Bay) ^[1]	Discharges to Freshwater ^[1]
Taxonomic diversity	1 plant 1 invertebrate 1 fish	1 plant 1 invertebrate 1 fish
Screening Requirement	A total of 3 Marine and/or Freshwater species from Table AE-1 and Table AE-2	3 Freshwater species from Table AE-2 ^[2]

Footnotes:

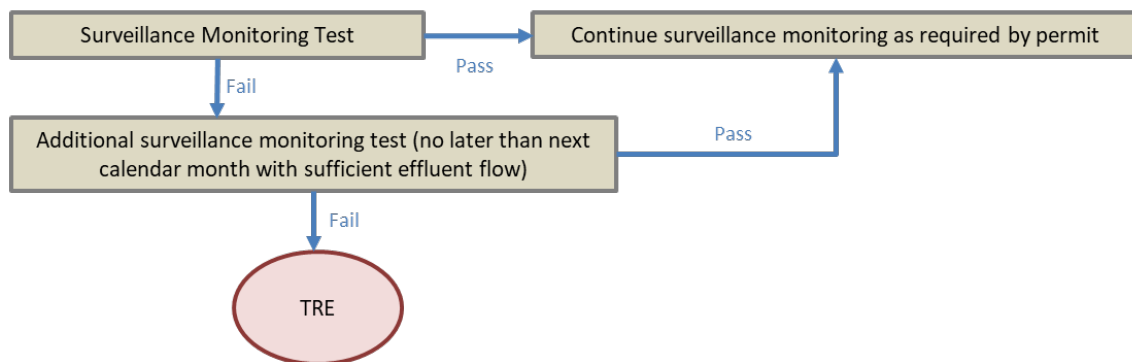
- ^[1] (a) "Marine" refers to receiving water salinities greater than 1.0 parts per thousand (ppt) at least 95 percent of the time during a normal water year.
 (b) "Freshwater" refers to receiving water with salinities less than 1.0 ppt at least 95 percent of the time during a normal water year.
 (c) "Estuarine" refers to all other cases (i.e., when receiving water salinity is above 1.0 less than 95 percent of the time and below 1.0 less than 95% of the time).
- ^[2] The freshwater species may be substituted with a marine species if:
 (a) The salinity of the effluent is above 1 ppt greater than 95 percent of the time, or
 (b) The ionic strength (TDS or conductivity) of the effluent at the IWC is documented to be toxic to the test species.

APPENDIX E-3:

**TOXICITY REDUCTION EVALUATION PROCESS FLOWCHART
 FOR DISCHARGERS WITHOUT EFFLUENT LIMITATIONS**



SURVEILLANCE MONITORING



ATTACHMENT F – FACT SHEET

CONTENTS

1. PERMIT INFORMATION	F-3
2. FACILITY DESCRIPTION	F-5
3. APPLICABLE PLANS, POLICIES, AND REGULATIONS.....	F-10
4. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS. F-13	
4.1. DISCHARGE PROHIBITIONS	F-14
4.2. TECHNOLOGY-BASED EFFLUENT LIMITATIONS	F-15
4.2.1. <i>Scope and Authority</i>	F-15
4.2.2. <i>Technology-Based Effluent Limitations</i>	F-16
4.3. WATER QUALITY-BASED EFFLUENT LIMITATIONS	F-16
4.3.1. <i>Scope and Authority</i>	F-16
4.3.2. <i>Beneficial Uses and Water Quality Criteria and Objectives</i>	F-17
4.3.3. <i>Reasonable Potential Analysis</i>	F-21
4.3.4. <i>Water Quality-Based Effluent Limitations</i>	F-28
4.4. DISCHARGE REQUIREMENT CONSIDERATIONS.....	F-33
5. RATIONALE FOR RECEIVING WATER LIMITATIONS.....	F-35
6. RATIONALE FOR PROVISIONS	F-35
6.1. STANDARD PROVISIONS.....	F-35
6.2. MONITORING AND REPORTING PROVISIONS.....	F-36
6.3. SPECIAL PROVISIONS.....	F-36
6.3.1. <i>Reopener Provisions</i>	F-36
6.3.2. <i>Effluent Characterization Study and Report</i>	F-36
6.3.3. <i>Pollutant Minimization Program</i>	F-36
6.3.4. <i>Special Provisions for Publicly-Owned Treatment Works</i>	F-36
6.3.5. <i>Other Special Provisions</i>	F-37
7. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS	F-39
8. PUBLIC PARTICIPATION.....	F-41

TABLES

TABLE F-1. FACILITY INFORMATION.....	F-3
TABLE F-2. PREVIOUS EFFLUENT LIMITATIONS AND MONITORING DATA.....	F-6
TABLE F-3. COLLECTION SYSTEM AND CATEGORY 1 SSO RATES.....	F-7
TABLE F-4. PREVIOUS WET WEATHER BYPASSES	F-8
TABLE F-5. BENEFICIAL USES	F-11
TABLE F-6. SECONDARY TREATMENT STANDARDS.....	F-16
TABLE F-7. SITE-SPECIFIC TRANSLATORS	F-21
TABLE F-8. REASONABLE POTENTIAL ANALYSIS	F-23
TABLE F-9. MINIMUM INITIAL DILUTION	F-28
TABLE F-10. WQBEL CALCULATIONS	F-30
TABLE F-11. MONITORING REQUIREMENTS SUMMARY	F-41

ATTACHMENT F – FACT SHEET

This Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order. As described in section 2.2 of the Order, the Regional Water Board incorporates this Fact Sheet as findings supporting the issuance of the Order.

1. PERMIT INFORMATION

The following table summarizes administrative information related to the facility.

Table F-1. Facility Information

WDID	2 215021001
CIWQS Place ID	239497
Discharger	Sanitary District No. 5 of Marin County
Facility Name	Sanitary District No. 5 Main Wastewater Treatment Plant and its collection system
Facility Address	2001 Paradise Drive Tiburon, CA 94920 Marin County
Facility Contact, Title, Phone, and Email	Tony Rubio, District Manager / Chief Plant Operator (415) 435-1501 ext. 106, trubio@sani5.org
Authorized Person to Sign and Submit Reports	Same as Facility Contact
Mailing Address	P.O. Box 227, Tiburon, CA 94920
Billing Address	Same as mailing address
Facility Type	Publicly-Owned Treatment Works (POTW)
Major or Minor Facility	Minor
Water Quality Threat	2
Complexity	A
Pretreatment Program	No
Reclamation Requirements	None
Mercury and PCBs Requirements	NPDES Permit CA0038849
Nutrients Requirements	NPDES Permit CA0038873
Facility Permitted Flow	0.98 million gallons per day (MGD) – average daily dry weather design flow
Facility Design Flow	2.3 MGD – peak wet weather secondary treatment capacity
Watershed	San Francisco Bay
Receiving Water	Raccoon Strait in Central San Francisco Bay
Receiving Water Type	Marine
Date of Last Inspection	September 9, 2020

1.1. The Sanitary District No. 5 of Marin County (Discharger) owns and operates the Sanitary District No. 5 Main Wastewater Treatment plant and its wastewater collection system (collectively, the Facility). The Facility provides secondary

treatment of wastewater collected from its service area and discharges to Raccoon Strait in Central San Francisco Bay.

For the purposes of this Order, references to the “discharger” or “permittee” in applicable federal and State laws, regulations, plans, and policies are held to be equivalent to references to the Discharger herein.

- 1.2. The Discharger is regulated pursuant to NPDES Permit CA0037753. The Discharger is authorized to discharge subject to the WDRs in this Order at the discharge location described in Table 1 of this Order.
- 1.3. The Discharger was previously subject to Order R2-2018-0038 (previous order) as amended by Orders R2-2021-0019 and R2-2021-0028.
 - Order R2-2021-0028 amended Order R2-2016-0008 and the previous order to provide updated monitoring requirements and require supplemental funding for the Regional Monitoring Program (RMP).
 - Order R2-2021-0019 amended the previous order to remove effluent limits and monitoring requirements for oil and grease.

Provisions of these orders have been incorporated into this Order as appropriate and applicable.

- 1.4. The Discharger filed a Report of Waste Discharge and submitted an application for reissuance of its Waste Discharge Requirements (WDRs) and NPDES permit on January 1, 2023.
- 1.5. Regulations in 40 C.F.R. section 122.46 limit the duration of NPDES permits to a fixed term not to exceed five years. Accordingly, this Order limits the effective period for the discharge authorization. Pursuant to 40 C.F.R. section 122.6(d) and California Code of Regulations, title 23, section 2235.4, the terms and conditions of an expired permit are automatically continued pending reissuance of the permit if the Discharger complies with all requirements for continuation of expired permits.
- 1.6. The Discharger is also regulated under NPDES Permits CA0038849 and CA0038873, which establish requirements on mercury and polychlorinated biphenyls (PCBs) and nutrients from wastewater discharges to San Francisco Bay. This Order does not affect those permits.
- 1.7. When applicable, State law requires dischargers to file a petition with the State Water Resources Control Board (State Water Board), Division of Water Rights, and receive approval for any change in the point of discharge, place of use, or purpose of use of treated wastewater that decreases the flow in any portion of a watercourse. The State Water Board retains separate jurisdictional authority to enforce such requirements under Water Code section 1211. This is not an NPDES permit requirement.

2. FACILITY DESCRIPTION

2.1. Wastewater Collection and Treatment

- 2.1.1. **Location and Service Area.** The wastewater treatment plant is located at 2001 Paradise Drive in Tiburon. It provides secondary treatment of domestic and commercial wastewater for the City of Belvedere, the Town of Tiburon, and unincorporated areas of the Tiburon Peninsula. The Facility serves a population of about 8,400.
- 2.1.2. **Collection System.** The collection system for the wastewater treatment plant is entirely under the Discharger's jurisdiction, totaling approximately 31 miles of collection system and 22 pump stations (13 in the City of Belvedere and 9 in the Town of Tiburon).
- 2.1.3. **Wastewater Treatment.** The plant can provide biological treatment for an average daily dry weather design flow of 0.98 million gallons per day (MGD). During the dry season (May 1 to October 31) from 2018 to 2022, the plant treated an average daily dry weather flow of 0.56 MGD. The treatment process consists of raw influent grinding, primary clarification, activated sludge aeration, secondary clarification, sodium hypochlorite disinfection, and sodium bisulfite dechlorination. The plant also has onsite storage consisting of an additional primary clarifier, an offline aeration basin, and a surge tank, totaling over 315,000 gallons.

The plant can provide biological treatment for up to 2.3 MGD during wet weather when influent flows to the plant are more diluted. During periods of heavy rain, when influent flow exceeds the plant's biological treatment capacity of 2.3 MGD and all onsite storage is used, the plant routes the portion of flows above 2.3 MGD from its primary clarifiers directly to its sodium hypochlorite disinfection tank (bypassing activated sludge aeration and secondary clarification) where it is blended with biologically treated effluent and dechlorinated prior to discharge. Any primary treated flows stored onsite are routed back to the headworks for full treatment. Such bypasses, or blending events, are necessary at times to prevent washout of microbial populations in the biological treatment units. Bypasses of biological treatment are subject to Discharge Prohibition 3.2, Attachment D section 1.7 (see Fact Sheet section 4.1.1.2), and Provision 6.3.5.1.

- 2.1.4. **Sludge and Biosolids Management.** The Discharger treats sludge with mesophilic anaerobic digesters (producing Class B biosolids), thickens the treated biosolids with a rotary drum, and dewateres the thickened sludge using a screw press. The Discharger hauls the dewatered, treated biosolids to a landfill for beneficial reuse.
- 2.1.5. **Stormwater Management.** All stormwater flows in contact with equipment or wastewater at the treatment plant are collected and directed to the plant

headworks for treatment. Therefore, no additional stormwater requirements are necessary.

2.1.6. **Recycled Water Activities.** The Discharger investigated the feasibility of recycling its wastewater, which was found infeasible based on the current demand. The Discharger will consider evaluating the feasibility of recycling its wastewater in the future.

2.2. **Discharge Point and Receiving Waters.** The Discharger shares an outfall with the Sewerage Agency of Southern Marin Wastewater Treatment Plant in Mill Valley (regulated under NPDES Permit CA0037711). Discharge of treated effluent to Raccoon Strait in Central San Francisco Bay is through a 36-inch outfall and a submerged, multi-port diffuser (Discharge Point 001) located about 840 feet offshore. The diffuser spans 195 feet and consists of 15 risers, each with four 3-inch diameter ports submerged approximately 84 feet below mean sea level. The average daily outfall capacity is 31.4 MGD. In August 2021, the Discharger inspected and cleaned the diffuser and concluded that it was in good working order. The outfall meets Basin Plan section 4.6.1 requirements for deepwater discharge.

2.3. **Previous Requirements and Monitoring Data.** The table below presents the previous order’s effluent limitations and representative monitoring data from the previous order term:

Table F-2. Previous Effluent Limitations and Monitoring Data

Parameter	Unit	Average Monthly Limit	Average Weekly Limit	Maximum Daily Limit	Other Limit	Long-Term Average ^[1]	Highest Daily Value ^[1]
Biochemical Oxygen Demand (5 day @ 20°C) (CBOD)	mg/L	30	45	-	-	9.8	47
Total Suspended Solids (TSS)	mg/L	30	45	-	-	6.0	53
BOD percent removal	%	85 (minimum)	-	-	-	95.1	85 ^[2]
TSS percent removal	%	85 (minimum)	-	-	-	97.2	93 ^[2]
Oil and Grease	mg/L	10	-	20	-	5.0	5.8
pH	s.u.	-	-	-	6.0 – 9.0 ^[3]	7.0	6.2 – 8.8 ^[4]
Chlorine, Total Residual	mg/L				0.0 ^[5]	<0.020	<0.070 ^[6]
Enterococcus Bacteria	MPN/100 mL	35		-	-	4.6	36.4
Total Coliform Bacteria	MPN/100 mL				240 ^[7]	57.4	1600 ^[8]
Total Coliform Bacteria	MPN/100 mL				10,000 ^[9]	57.4	1600

Parameter	Unit	Average Monthly Limit	Average Weekly Limit	Maximum Daily Limit	Other Limit	Long-Term Average ^[1]	Highest Daily Value ^[1]
Ammonia, Total	mg/L	100	-	190	-	16.6	44
Copper, Total Recoverable	µg/L	35	-	73	-	7.4	26
Cyanide, Total	µg/L	17	-	45	-	<3.1	27
Dioxin TEQ	µg/L	1.4 x 10 ⁻⁸	-	2.8 x 10 ⁻⁸	-	1.0 x 10 ⁻¹¹ DNQ ^[10]	6.8 x 10 ⁻⁶ DNQ ^[10]
Acute Toxicity	% Survival	-	-	-	Not less than 90% (11-sample median)	100	100 ^[11]
Acute Toxicity	% Survival	-	-	-	Not less than 70% (11-sample 90 th percentile)	100	100 ^[11]

Footnotes:

- ^[1] Based on monitoring data from October 2018 through March 2023.
- ^[2] This value is the lowest percent removal on a monthly basis.
- ^[3] The limit was expressed as an instantaneous minimum and instantaneous maximum.
- ^[4] The range is of the lowest and highest pH values.
- ^[5] The limit was expressed as an instantaneous maximum.
- ^[6] The value is the method detection limit.
- ^[7] The value is a monthly median, matching the effluent limitation of the previous order.
- ^[8] The value did not violate the monthly median limit because it is a maximum daily value.
- ^[9] The limit was expressed as a single-sample maximum.
- ^[10] Only 1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin was detected and it was not quantified (DNQ).
- ^[11] This value is the lowest percent survival.

2.4. Compliance Summary

2.4.1. **Treatment Plant.** The Discharger did not violate its effluent limitations during the period from October 1, 2018, through June 30, 2023.

2.4.2. **Collection System.** The table below summarizes the Discharger’s Category 1 sanitary sewer overflow (SSO) rates for the last five years. Category 1 SSOs are those that reach waters of the United States and thus may violate Prohibition 3.5 of this Order.

Table F-3. Collection System and Category 1 SSO Rates

(Values based on CIWQS data analysis completed in August 2023) ^[1]

	Length (miles) ^[2]	Average Pipe Age (years) ^[3]	2018	2019	2020	2021	2022
Discharger	31	48	0.97	6.5	0.0	19	6.5
San Francisco Bay Region	19,600	48	0.64	1.2	0.61	1.0	0.88
State of California	112,700	46	0.38	0.56	0.33	0.46	0.42

Footnotes:

- ^[1] The State Water Board's *Enrollee's Guide to the SSO Database* defines "Total number of SSOs per 100 miles of Sewer" as "...the number of SSOs, for which the reporting enrollee is responsible, for every 100 miles of pipe or sewer lines in an enrollee's sanitary sewer system. Due to the large variation in facility specific characteristics, this metric should only be viewed as a rough comparison of the operation and maintenance performance of enrollees and their sanitary sewer systems."
- ^[2] Lengths shown are based on 2021 data.
- ^[3] The average pipe age for the State of California is estimated based on the percentages of piping constructed during each decade as reported by enrollees under the statewide WDRs for sanitary sewer systems.

The above SSO rates are normalized relative to a distance of 100 miles. During the previous order term, the Discharger's Category 1 SSO rates were above the San Francisco Bay Region and statewide rates. The Discharger's SSO rates may appear high because of its relatively small collection system.

In 2014, the Discharger adopted a private sewer lateral ordinance, Ordinance 2014-02, to reduce collection system inflow and infiltration. The ordinance requires private sewer lateral inspections and upgrades upon changes in property ownership, remodels greater than \$50,000, and public contract work on residential streets. During the previous order term, the Discharger replaced the force main serving the City of Belvedere, rehabilitated 5,400 linear feet of gravity sewer mains and over 33,000 linear feet of private sewer laterals, upgraded pump stations, and installed flow meters to assist with monitoring inflow and infiltration as part of its annual sewer rehabilitation projects identified under its Capital Improvement Plan. The Discharger also continues to inspect and replace additional pipe segments pursuant to its Capital Improvement Plan. In 2021, the Discharger updated its Collection System Master Plan, which contains a new 15-year Capital Improvement Plan for future sewer rehabilitation projects, including further rehabilitation of 6.6 miles of the pipeline (22 percent of the sewer system), to reduce inflow and infiltration in the collection system.

2.4.3. Wet Weather Bypasses. The Discharger blended 13 times during the previous order term (October 1, 2018, to September 30, 2023), down from 18 times during the prior 2013-2018 order term. The Discharger complied with its effluent limitations during these blending events. The Discharger also implemented tasks to reduce blending as the previous order required, including rehabilitating 5,400 linear feet of private sewer laterals to reduce inflow and infiltration within its collection system and implementing other sewer rehabilitation projects identified in the Discharger's Capital Improvement Plan. The Discharger will continue to annually report the status of its wet weather improvement projects. The table below summarizes the Discharger's blending history during the previous order term:

Table F-4. Previous Wet Weather Bypasses

Date	Blended Volume (million gallons) ^[1]	Duration (hours) ^[1]	Precipitation During Blending Events (inches) ^[1]	Total Events
2018				
1/8 - 1/9 ^[2]	0.76	15	4.4	2

4/6 – 4/7 ^[2]	1.3	22	4.6	
2018 Total	2.1	37	9.0	
2019				
1/17	0.13	3.8	2.5	3
2/13 – 2/15	3.7	50	6.6	
3/6	0.060	3.2	1.6	
2019 Total	3.8	57	11	
2021				
1/24 – 1/25	1.8	33	7.7	3
12/13 – 12/14	1.5	29	3.3	
12/23	0.11	4.0	1.5	
2021 Total	3.4	66	13	
2022				
12/27	0.18	9.1	2.7	2
12/31/22 – 1/1/23	1.7	21	4.4	
2022 Total	1.9	30	7.1	
2023				
1/9	0.88	14	2.5	5
1/11	0.78	12	2.2	
1/14 – 1/15	0.50	19	1.2	
1/15 – 1/16	0.45	17	1.2	
3/10	0.38	14	2.8	
2023 Total	3.0	76	9.9	
Total	14	266	50	15

Footnote:

^[1] The values in this column are rounded to two significant digits.

^[2] This blending event occurred prior to the previous order term from October 1, 2018, to September 30, 2023.

2.5. Sea Level Rise. Based on the projections of the 2017 Marin Shoreline Sea Level Rise Vulnerability Assessment report, the Facility is not at risk of flooding from sea level rise. However, the Discharger has raised control panels and installed elevated generator pads at lower-lying pump stations. The Discharger’s 2021 Collection System Master Plan also addresses rehabilitation of sewer lines in areas at risk of flooding as a higher priority for repair and replacement.

2.6. Planned Changes. The Discharger is not planning significant changes for this Order term.

3. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in this Order are based on the requirements and authorities described in this section.

3.1. Legal Authorities. This Order serves as WDRs pursuant to California Water Code article 4, chapter 4, division 7 (commencing with § 13260). This Order is also issued pursuant to federal Clean Water Act (CWA) section 402 and implementing regulations adopted by the U.S. EPA, and Water Code chapter 5.5, division 7 (commencing with § 13370). It serves as an NPDES permit authorizing the Discharger to discharge into waters of the United States at the discharge location described in Table 1 subject to the WDRs in this Order.

3.2. California Environmental Quality Act (CEQA). Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (CEQA), Public Resources Code division 13, chapter 3 (commencing with § 21100).

3.3. State and Federal Laws, Regulations, Policies, and Plans

3.3.1. Water Quality Control Plan. The Regional Water Board adopted the *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Requirements in this Order implement the Basin Plan. In addition, this Order implements State Water Board Resolution 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Because of the marine influence on Central San Francisco Bay, total dissolved solids exceed 3,000 mg/L; therefore, Central San Francisco Bay meets an exception to State Water Board Resolution 88-63. Beneficial uses applicable to Raccoon Strait in Central San Francisco Bay are as follows:

Table F-5. Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses
001	Central San Francisco Bay	Industrial Service Supply (IND) Industrial Process Supply (PROC) Commercial and Sport Fishing (COMM) Shellfish Harvesting (SHELL) Estuarine Habitat (EST) Fish Migration (MIGR) Preservation of Rare and Endangered Species (RARE) Fish Spawning (SPWN) Wildlife Habitat (WILD) Water Contact Recreation (REC-1) Non-Contact Water Recreation (REC-2) Navigation (NAV)

3.3.2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** The NTR and CTR contain federal water quality criteria for priority pollutants. U.S. EPA adopted the NTR on December 22, 1992, and amended it on May 4, 1995, and November 9, 1999. About 40 NTR criteria apply in California. U.S. EPA adopted the CTR on May 18, 2000. The CTR promulgated new toxics criteria for California and incorporated the NTR criteria that applied in the State. U.S. EPA amended the CTR on February 13, 2001.

3.3.3. **State Implementation Policy.** The State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP) on March 2, 2000. The SIP establishes implementation provisions for priority pollutant criteria and objectives, and provisions for chronic toxicity control. The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria U.S. EPA promulgated for California through the NTR and the priority pollutant objectives the Regional Water Board established through the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria U.S. EPA promulgated through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. Requirements of this Order implement the SIP.

3.3.4. **Bacteria Objectives.** The State Water Board adopted the *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Part 3, Bacteria Provisions and a Water Quality Standards Variance Policy* on August 7, 2018, and it became effective on March 22, 2019. This plan establishes enterococcus bacteria water quality objectives and related implementation provisions for discharges to marine and estuarine waters that support the water contact recreation (REC1) beneficial use.

3.3.5. **Toxicity Provisions.** The State Water Board adopted the State Policy for Water Quality Control: Toxicity Provisions (Toxicity Provisions) on October 5,

2021. U.S. EPA approved the Toxicity Provisions on May 1, 2023. Toxicity Provisions sections II.C.1 and II.C.2 establish numeric chronic and acute toxicity objectives that apply to all inland surface waters, enclosed bays, and estuaries in the State with aquatic life beneficial uses. The Toxicity Provisions include related implementation provisions and require that compliance with the chronic toxicity water quality objectives be assessed using U.S. EPA's Test of Significant Toxicity (TST) (U.S. EPA, National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document [EPA/833-R-10-003], June 2010).

- 3.3.6. **Sediment Quality.** The State Water Board adopted the *Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1, Sediment Quality* on September 16, 2008, and it became effective on August 25, 2009. The State Water Board adopted amendments to the plan on June 5, 2018, that became effective on March 11, 2019. This plan establishes sediment quality objectives and related implementation provisions for specifically defined sediments in most bays and estuaries.
- 3.3.7. **Antidegradation Policy.** Federal regulations at 40 C.F.R. section 131.12 require that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy through State Water Board Resolution 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California*, which incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. Permitted discharges must be consistent with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16.
- 3.3.8. **Anti-Backsliding Requirements.** CWA sections 402(o) and 303(d)(4) and 40 C.F.R. section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.
- 3.3.9. **Endangered Species Act Requirements.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code §§ 2050 to 2097) or Federal Endangered Species Act (16 U.S.C.A. §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the State, including protecting rare, threatened, or endangered species. The Discharger is responsible for meeting all applicable Endangered Species Act requirements.

3.3.10. **Sewage Sludge and Biosolids.** U.S. EPA administers 40 C.F.R. part 503, Standards for the Use or Disposal of Sewage Sludge, which regulates the final use or disposal of sewage sludge generated during the treatment of domestic sewage in a municipal wastewater treatment facility. This Order does not authorize any act that violates those requirements. The Discharger is responsible for meeting applicable requirements of 40 C.F.R. part 503.

3.4. Impaired Water Bodies on CWA section 303(d) List. On May 11, 2022, U.S. EPA approved a revised list of impaired waters pursuant to CWA section 303(d), which requires identification of specific water bodies where it is expected that water quality standards will not be met after implementation of technology-based effluent limitations on point sources. Where it has not done so already, the Regional Water Board plans to adopt Total Maximum Daily Loads (TMDLs) for pollutants on the 303(d) list. TMDLs establish wasteload allocations for point sources and load allocations for nonpoint sources and are established to achieve water quality standards.

Central San Francisco Bay is listed as impaired by mercury, PCBs, dioxin-like PCBs, selenium, chlordane, DDT, dieldrin, invasive species, trash, dioxin compounds (including 2,3,7,8-TCDD), and furan compounds. On February 12, 2008, U.S. EPA approved a TMDL for mercury in San Francisco Bay. On March 29, 2010, U.S. EPA approved a TMDL for PCBs in San Francisco Bay. The mercury and PCBs TMDLs apply to this discharge and are implemented through NPDES Permit CA0038849. On August 23, 2016, U.S. EPA approved a TMDL for selenium in North San Francisco Bay, which includes Central San Francisco Bay. The selenium TMDL does not require effluent limits for municipal wastewater dischargers because these discharges have an insignificant effect on North Bay water quality.

As shown in Fact Sheet section 4.3.3, the discharge is not a significant source of chlordane, DDT, or dieldrin because these pollutants have not been detected in the discharge. The discharge is also not a source of invasive species because it is disinfected and is not a source of trash because it is screened and treated to secondary treatment standards. This discharge is also an insignificant source of dioxins and furan compounds; nonetheless, this Order includes dioxin-TEQ effluent limits to ensure that dioxins and furans in effluent are kept below water quality objectives.

4. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants discharged into waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations: 40 C.F.R. section 122.44(a) requires that permits include applicable technology-based limitations and standards, and 40 C.F.R. section 122.44(d)

requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of receiving waters.

4.1. Discharge Prohibitions

4.1.1. Prohibitions in this Order

4.1.1.1. **Discharge Prohibition 3.1 (No discharge other than as described):** This prohibition is based on 40 C.F.R. section 122.21(a) and Water Code section 13260, which require filing an application and Report of Waste Discharge before a discharge can occur. Discharges not described in the application and Report of Waste Discharge, and subsequently in this Order, are prohibited.

4.1.1.2. **Discharge Prohibition 3.2 (No bypass to waters of the United States):** This prohibition is based on 40 C.F.R. section 122.41(m) (see Attachment D section 1.7). Bypass is prohibited. When influent flow is greater than 2.3 MGD and all onsite storage is used, however, bypass is approved for the portion of the flow greater than 2.3 MGD. Under these conditions, excess flows may bypass biological treatment and be blended with flows that receive biological treatment prior to discharge. All flows must be disinfected prior to discharge and comply with all effluent and receiving water limitations contained in this Order.

The Discharger meets the criteria required for the Regional Water Board to approve these bypasses as set forth in 40 C.F.R. sections 122.41(m)(4)(i)(A)-(C):

4.1.1.2.1. **Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage.** Blending is unavoidable during periods of heavy rain to prevent damage to the biological treatment units and the effluent conveyance system. Blending is necessary to prevent backups and flooding that could cause severe property damage.

4.1.1.2.2. **There are no feasible alternatives to the bypass.** The Discharger evaluated all feasible alternatives in a utility analysis, *Utility Analysis for Wet Weather Bypass of Secondary Treatment* (January 1, 2023). The Discharger maintains substantial equalization and onsite storage, including an additional primary clarifier, an offline aeration basin, and a surge tank, totaling 315,000 gallons. Due to space constraints and existing development and topography, further improvements and expansion at the treatment plant are infeasible. Reducing wet weather flows through collection system improvements is the most practical approach to minimize or eliminate the need to blend. Provision 6.3.5.1 requires the Discharger to implement feasible tasks to reduce blending during this Order term, including about \$3,500,000 in collection system

improvements. (Fact Sheet section 2.4.2 and 2.4.3 describe actions the Discharger took during the previous order term.)

- 4.1.1.2.3. **The Discharger provided notice at least ten days before the date of the bypass.** The Discharger provided notice of blending-related bypasses to the Regional Water Board with its Report of Waste Discharge on January 1, 2023.
- 4.1.1.3. **Discharge Prohibition 3.3 (No discharge without minimum initial dilution of at least 63:1):** This prohibition ensures that this Order's effluent limitations remain protective of water quality. The water quality-based effluent limitations and reasonable potential analysis for chronic toxicity in this Order are based on the mixing zones and dilution credits explained in Fact Sheet section 4.3.4.2.
- 4.1.1.4. **Discharge Prohibition 3.4 (No average dry weather flow above 0.98 MGD):** This prohibition ensures that the average dry weather influent flow does not exceed the plant's designed average dry weather treatment capacity (i.e., the historic and tested reliability of the treatment plant) of 0.98 MGD. Exceeding this flow could result in lower treatment reliability and greater potential to violate effluent limitations.
- 4.1.1.5. **Discharge Prohibition 3.5 (No sanitary sewer overflows to waters of the United States):** This prohibition is based on Discharge Prohibition 15 of Basin Plan Table 4-1 and the CWA, which prohibit the discharge of wastewater to surface waters, except as authorized under an NPDES permit. Publicly-owned treatment works must achieve secondary treatment at a minimum and any more stringent limitations necessary to meet water quality standards. A sanitary sewer overflow that results in the discharge to waters of the United States of raw sewage or wastewater not meeting this Order's effluent limitations is therefore prohibited under the Basin Plan and CWA.

4.2. Technology-Based Effluent Limitations

4.2.1. Scope and Authority

CWA section 301(b) and 40 C.F.R. sections 122.44 and 125.3(a)(1) require that POTW permits include conditions meeting technology-based requirements, at a minimum, and any more stringent effluent limitations necessary to meet water quality standards. The discharges authorized by this Order must meet minimum federal technology-based requirements based on the Secondary Treatment

Standards at 40 C.F.R. section 133 as summarized below. Basin Plan Table 4-2 contains additional requirements for certain pollutants.

Table F-6. Secondary Treatment Standards

Parameter	Monthly Average	Weekly Average
Biochemical Oxygen Demand (BOD) ^{[1] [2]}	30 mg/L	45 mg/L
Carbonaceous Biochemical Oxygen Demand (CBOD) ^{[1] [2]}	25 mg/L	40 mg/L
Total Suspended Solids (TSS) ^[2]	30 mg/L	45 mg/L
pH	6.0 – 9.0 standard units	

Footnotes:

^[1] CBOD effluent limitations may be substituted for BOD limitations.

^[2] The monthly average percent removal, by concentration, is not to be less than 85 percent.

4.2.2. Technology-Based Effluent Limitations

4.2.2.1. **BOD and TSS.** The BOD and TSS effluent limitations, including the 85 percent removal requirements, are based on the secondary treatment standards and Basin Plan Table 4-2.

4.2.2.2. **pH.** The pH effluent limitations are based on the secondary treatment standards and Basin Plan Table 4-2.

4.2.2.3. **Total Residual Chlorine.** The total residual chlorine effluent limitation is based on Basin Plan Table 4-2. The Monitoring and Reporting Program (MRP, Attachment E) provides an allowance for determining false positives when using continuous devices based on the fact that continuous instruments occasionally have anomalous spikes, and it is chemically improbable to have free chlorine in the presence of sodium bisulfite. The allowance for using only on-the-hour measurements for mandatory minimum penalty assessment purposes under Water Code section 13385.1 is based on a 2004 strategy developed between the Regional Water Board and the Bay Area Clean Water Agencies.

4.3. Water Quality-Based Effluent Limitations

4.3.1. Scope and Authority

CWA section 301(b) and 40 C.F.R. section 122.44(d) require permits to include limitations more stringent than federal technology-based requirements where necessary to achieve water quality standards. According to 40 C.F.R. section 122.44(d)(1)(i), permits must include effluent limitations for all pollutants that are or may be discharged at levels that have a reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. According to 40 C.F.R. section 122.44(d)(1)(vi), where reasonable potential has been established for a pollutant, but there is no numeric water quality criterion for that specific

pollutant, water quality-based effluent limitations (WQBELs) must be established using (1) U.S. EPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting a narrative criterion, supplemented with relevant information. The process for determining reasonable potential and calculating WQBELs when necessary is intended to achieve applicable water quality objectives and criteria, and thereby protect designated beneficial uses of receiving waters.

4.3.2. Beneficial Uses and Water Quality Criteria and Objectives

Discharge Point 001 discharges to Raccoon Strait in Central San Francisco Bay. Fact Sheet section 3.3.1 identifies the beneficial uses of Central San Francisco Bay. Water quality criteria and objectives to protect these beneficial uses are described below.

4.3.2.1. **Basin Plan Objectives.** The Basin Plan specifies numerous water quality objectives, including numeric objectives for 10 priority pollutants and un-ionized ammonia, and narrative objectives for other pollutants, such as toxicity and bioaccumulation.

4.3.2.1.1. **Ammonia.** Basin Plan section 3.3.20 contains water quality objectives for un-ionized ammonia of 0.025 mg/L (as nitrogen) as an annual median and 0.16 mg/L (as nitrogen) as a maximum for Central San Francisco Bay and upstream waters. Effluent and receiving water data are available for total ammonia, but not un-ionized ammonia, because (1) sampling and laboratory methods are unavailable to analyze for un-ionized ammonia, and (2) the fraction of total ammonia that exists in the toxic un-ionized form depends on pH, salinity, and temperature of the receiving water.

To translate the un-ionized ammonia objectives into total ammonia criteria, pH, salinity, and temperature collected at the Davis Point sampling station (BD40) between 1993 and 2001 were used. The un-ionized fraction of the total ammonia was calculated using the following equations (*Ambient Water Quality Criteria for Ammonia (Saltwater)*—1989, EPA Publication 440/5-88-004, 1989):

$$\text{Fraction of un-ionized ammonia} = (1 + 10^{[pK - pH]})^{-1}$$

Where, for salinity less than 1 ppt:

$$pK = 0.09018 + 2729.92/T$$

T = temperature in Kelvin

Where, for salinity greater than 10 ppt:

$$pK = 9.245 + 0.116*(I) + 0.0324*(298-T) + 0.0415*(P)/T$$

I = molal ionic strength of saltwater = $19.9273*(S)/(1000-1.005109*S)$
S = salinity (parts per thousand)
T = temperature in Kelvin
P = pressure (one atmosphere)

The 90th percentile and median un-ionized ammonia fractions were then used to express the maximum and annual average un-ionized objectives as acute and chronic total ammonia criteria. This approach is consistent with U.S. EPA guidance on translating dissolved metal water quality objectives to total recoverable metal water quality criteria (U.S. EPA, 1996, *The Metals Translator: Guidance for Calculating a Total Recoverable Limit from a Dissolved Criterion*, EPA Publication 823-B96-007). The equivalent acute and chronic total ammonia criteria are 4.5 mg/L and 1.2 mg/L (as nitrogen).

4.3.2.1.2. **Bioaccumulation and Dioxin-TEQ.** The narrative bioaccumulation objective (Basin Plan § 3.3.2) states, “Many pollutants can accumulate on particulates, in sediments, or bioaccumulate in fish and other aquatic organisms. Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife, and human health will be considered.” Because it is the consensus of the scientific community that dioxins and furans associate with particulates, accumulate in sediments, and bioaccumulate in the fatty tissue of fish and other organisms, the Basin Plan’s narrative bioaccumulation water quality objective applies to these pollutants. Elevated levels of dioxins and furans in San Francisco Bay fish tissue demonstrate that the narrative bioaccumulation water quality objective is not being met. U.S. EPA has therefore placed Central San Francisco Bay on its 303(d) list of receiving waters where water quality objectives are not being met after imposition of applicable technology-based requirements.

When the CTR was promulgated, U.S. EPA stated its support for the regulation of dioxin and dioxin-like compounds through the use of toxicity equivalencies (TEQs). U.S. EPA stated, “For California waters, if the discharge of dioxin or dioxin-like compounds has reasonable potential to cause or contribute to a violation of a narrative criterion, numeric water quality-based effluent limits for dioxin or dioxin-like compounds should be included in NPDES permits and should be expressed using a TEQ scheme” (Fed. Reg. Vol. 65, No. 97, pages 31695-31696, May 18, 2000). This Order uses a TEQ scheme based on a set of toxicity equivalency factors (TEFs) the World Health Organization developed in 2005, and a set of bioaccumulation equivalency factors (BEFs) U.S. EPA developed for the Great Lakes region (40 C.F.R. § 132, Appendix F) to convert the concentration of any congener of dioxin or furan into an equivalent concentration of 2,3,7,8-tetrachlorinated dibenzo-p-dioxin (2,3,7,8-TCDD).

Although the 2005 World Health Organization scheme includes TEFs for dioxin-like PCBs, they are not included in this Order's TEQ scheme. The CTR has established a specific water quality criterion for PCBs, and dioxin-like PCBs are included in the analysis of total PCBs.

The CTR establishes a numeric water quality objective for 2,3,7,8-TCDD of 1.4×10^{-8} µg/L for the protection of human health when water and aquatic organisms are consumed. This CTR criterion is used as a criterion for dioxin-TEQ because dioxin-TEQ represents a toxicity-weighted concentration equivalent to 2,3,7,8 TCDD, thus translating the narrative bioaccumulation objective into a numeric criterion.

4.3.2.2. **CTR Criteria.** The CTR specifies numeric aquatic life and human health criteria for numerous priority pollutants. These criteria apply to inland surface waters and enclosed bays and estuaries. Some human health criteria are for consumption of "water and organisms" and others are for consumption of "organisms only." The criteria applicable to "organisms only" apply to Central San Francisco Bay because it is not a source of drinking water.

4.3.2.3. **NTR Criteria.** The NTR establishes numeric aquatic life and human health criteria for a number of toxic pollutants for San Francisco Bay waters upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta. The NTR criteria apply to Central San Francisco Bay.

4.3.2.4. **Bacteria Objectives.** The *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Part 3, Bacteria Provisions and a Water Quality Standards Variance Policy* establishes enterococcus bacteria water quality objectives to limit cases of gastrointestinal illness from water contact recreation. The enterococcus bacteria objectives apply to marine and estuarine waters.

4.3.2.5. **Toxicity Provisions.** The Toxicity Provisions establish numeric chronic and acute toxicity objectives that apply to all inland surface waters, enclosed bays, and estuaries in the State with aquatic life beneficial uses. The chronic toxicity water quality objective is as follows:

H₀:
mean response (ambient water) \leq 0.75 x mean response (control water)

H_a:
mean response (ambient water) $>$ 0.75 x mean response (control water)

Where:

H₀ = null hypothesis

H_a = alternative hypothesis,

0.75 = regulatory management decision criterion (i.e., 75 percent)

H₀ means the ambient water is toxic when the test organism response in a bioassay is less than or equal to 75 percent of the control response;
H_a means the ambient water is not toxic when the test organism response is greater than 75 percent of the control response. For example, if an average of 75 percent of bioassay test organisms or fewer survive when exposed to ambient water relative to the average number that survive when exposed to control water, the ambient water is toxic (i.e., the test result is “fail”). Conversely, if an average of more than 75 percent of bioassay test organisms survive relative to those exposed to control water, the ambient water is not toxic (i.e., the test result is “pass”).

4.3.2.6. **Sediment Quality Objectives.** The *Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1, Sediment Quality* contains the following narrative water quality objectives:

- 4.3.2.6.1. “Pollutants in sediments shall not be present in quantities that, alone or in combination, are toxic to benthic communities in bays and estuaries of California.” This objective is to be implemented by integrating three lines of evidence: sediment toxicity, benthic community condition, and sediment chemistry. The policy requires that if the Regional Water Board determines that a discharge has reasonable potential to cause or contribute to an exceedance of this objective, it is to impose the objective as a receiving water limit.
- 4.3.2.6.2. “Pollutants shall not be present in sediments at levels that will bioaccumulate in aquatic life to levels that are harmful to human health in bays and estuaries of California.” This objective is to be implemented by a three-tiered procedure based on pollutant concentrations in sediment and fish tissue.
- 4.3.2.6.3. “Pollutants shall not be present in sediment at levels that alone or in combination are toxic to wildlife and resident finfish by direct exposure or bioaccumulate in aquatic life at levels that are harmful to wildlife or resident finfish by indirect exposure in bays and estuaries of California.” This objective is to be implemented on a case-by-case basis, based upon an ecological risk assessment.
- 4.3.2.7. **Receiving Water Salinity.** Basin Plan section 4.6.2 (like the CTR and NTR) states that the salinity characteristics (i.e., freshwater vs. saltwater) of the receiving water are to be considered in determining the applicable water quality objectives. Freshwater criteria apply to discharges to waters with salinities equal to or less than one part per thousand (ppt) at least 95 percent of the time. Saltwater criteria apply to discharges to waters with salinities equal to or greater than 10 ppt at least 95 percent of the time in a normal water year. For discharges to water with salinities in between these two categories, or tidally-influenced freshwaters that support estuarine beneficial

uses, the water quality objectives are the lower of the salt or freshwater criteria (the latter calculated based on ambient hardness) for each substance.

Raccoon Strait in Central San Francisco Bay is a saltwater environment based on salinity data collected through the RMP at the Richardson Bay sampling station (BC30) between 1993 and 2001. During that period, the average salinity was 25 ppt, with a range from 13 to 31 ppt. Because the salinity was greater than 10 ppt in 100 percent of the samples, the reasonable potential analysis and effluent limitations in this Order are based on saltwater water quality objectives.

- 4.3.2.8. **Metals Translators.** Regulations at 40 C.F.R. section 122.45(c) require effluent limitations for metals to be expressed as total recoverable metal. Since the water quality objectives for metals are typically expressed as dissolved metal, translators must be used to convert metals concentrations from dissolved to total recoverable and vice versa. The CTR contains default translators; however, site-specific conditions, such as water temperature, pH, total suspended solids, and organic carbon may affect the form of metal (dissolved, non-filterable, or otherwise) present and therefore available to cause toxicity. In general, dissolved metals are more available and more toxic to aquatic life than other forms. Site-specific translators can account for site-specific conditions, thereby preventing overly stringent or under-protective water quality objectives.

For the discharge to Raccoon Strait in Central San Francisco Bay, CTR default translators were used for all metals other than copper and nickel. Basin Plan Table 7.2.1-2 sets forth site-specific copper translators. The Clean Estuary Partnership's *North of the Dumbarton Bridge Copper and Nickel Development and Selection of Final Translators* (March 2005) contains site-specific nickel translators. These site-specific translators are listed in the table below:

Table F-7. Site-Specific Translators

Parameter	Chronic Translator	Acute Translator
Copper	0.73	0.87
Nickel	0.65	0.85

4.3.3. Reasonable Potential Analysis

- 4.3.3.1. **Available Information.** The reasonable potential analysis for this Order is based on effluent data the Discharger collected from October 2018 through March 2023 and ambient background data summarized in the RMP's *San Francisco Bay California Toxics Rule Priority Pollutant Ambient Water Monitoring Report* (2017), which includes data collected through the RMP at the Yerba Buena RMP station (BC10) from 1993 through 2017,

supplemented by additional Bay Area Clean Water Agencies data from *San Francisco Bay Ambient Water Monitoring Interim Report (2003)* and *Ambient Water Monitoring: Final CTR Sampling Update (2004)*.

SIP section 1.4.3 requires that background water quality data be representative of the ambient receiving water that will mix with the discharge. For priority pollutants, the Yerba Buena RMP monitoring station (BC10), relative to other RMP stations best fits SIP guidance for establishing background conditions at Discharge Point 001. For ammonia, the nearby Richardson Bay RMP monitoring station (BC30), relative to other RMP locations, best fits SIP guidance for establishing background conditions because the ammonia WQBELs are based on actual dilution at the edge of the initial mixing zone and data from monitoring station BC30 best represents water quality at the edge of the initial mixing zone.

This Order does not contain WQBELs for constituents that do not demonstrate reasonable potential; however, the MRP still requires monitoring for those pollutants. If effluent concentrations are found to have increased significantly, Provision 6.3.2 of the Order requires the Discharger to investigate the sources of the increases and implement remedial measures if the increases pose a threat to receiving water quality.

4.3.3.2. **Priority Pollutants, Ammonia, and Dioxin-TEQ.** SIP section 1.3 sets forth the methodology used to assess whether a priority pollutant has reasonable potential to exceed a water quality objective. SIP section 1.3 applies to priority pollutants and is used here for ammonia and dioxin-TEQ as guidance. The analysis begins with identifying the maximum effluent concentration (MEC) observed for each pollutant based on available effluent concentration data and the ambient background concentrations (B). SIP section 1.4.3 states that ambient background concentrations are either the maximum ambient concentration observed or, for water quality objectives intended to protect human health, the arithmetic mean of observed concentrations. There are three triggers in determining reasonable potential:

- **Trigger 1** is activated if the maximum effluent concentration is greater than or equal to the lowest applicable water quality objective ($MEC \geq$ water quality objective).
- **Trigger 2** is activated if the ambient background concentration observed in the receiving water is greater than the lowest applicable water quality objective ($B >$ water quality objective) and the pollutant is detected in any effluent sample.
- **Trigger 3** is activated if a review of other information indicates that a WQBEL is needed to protect beneficial uses.

The maximum effluent concentrations, most stringent applicable water quality criteria and objectives, and ambient background concentrations used in the analysis are presented in the table below, along with the reasonable potential analysis results (yes, no, or unknown) for each pollutant. Based on this analysis, copper, cyanide, and total ammonia exhibit reasonable potential by Trigger 1. Additionally, Basin Plan sections 7.2.1.2 and 4.7.2.2 require copper and cyanide WQBELs for all individual NPDES permits for municipal wastewater treatment facilities. Dioxin-TEQ has reasonable potential because the receiving water is impaired for dioxin-TEQ and dioxin congeners have been detected in the discharge.

Table F-8. Reasonable Potential Analysis

CTR No.	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or minimum MDL (µg/L) ^{[1],[2]}	B or MDL (µg/L) ^{[1],[2]}	RPA Result ^[3]
1	Antimony	4,300	0.19 DNQ	1.8	No
2	Arsenic	36	0.98	2.5	No
3	Beryllium	No Criteria	<0.090	0.22	U
4	Cadmium	9.4	<0.050	0.13	No
5a	Chromium (III) ^[4]	No Criteria	0.84	4.4	U
5b	Chromium (VI) ^[4]	50	2.0 DNQ	4.4	No
6	Copper	8.2	26	2.5	Yes ^[5]
7	Lead	8.5	0.26 DNQ	0.80	No
8	Mercury ^[6]	-	-	-	-
9	Nickel	13	5.4	3.7	No
10	Selenium ^[6]	-	-	-	-
11	Silver	2.2	0.050	0.052	No
12	Thallium	6.3	<0.050	0.023	No
13	Zinc	86	75	5.1	No
14	Cyanide	2.9	27	0.52	Yes ^[5]
15	Asbestos (fibers/L) ^[7]	-	-	-	-
16	2,3,7,8-TCDD	1.4×10^{-8}	$<2.2 \times 10^{-7}$	2.7×10^{-8}	U
	Dioxin TEQ	1.4×10^{-8}	6.8×10^{-6} DNQ	4.1×10^{-8}	Yes ^[8]
17	Acrolein	780	<1.7	<0.50	No
18	Acrylonitrile	0.66	<1.8	0.030	No
19	Benzene	71	<0.18	<0.050	No
20	Bromoform	360	<0.15	<0.15	No
21	Carbon Tetrachloride	4.4	<0.16	0.060	No
22	Chlorobenzene	21000	<0.18	<0.18	No
23	Chlorodibromomethane	34	<0.17	<0.05	No
24	Chloroethane	No Criteria	<0.38	<0.38	U
25	2-Chloroethylvinyl ether	No Criteria	<0.28	<0.28	U
26	Chloroform	No Criteria	1.3	<0.19	U
27	Dichlorobromomethane	46	0.28	<0.050	No

CTR No.	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or minimum MDL (µg/L) ^{[1],[2]}	B or MDL (µg/L) ^{[1],[2]}	RPA Result ^[3]
28	1,1-Dichloroethane	No Criteria	<0.19	<0.050	U
29	1,2-Dichloroethane	99	<0.18	0.040	No
30	1,1-Dichloroethylene	3.2	<0.21	<0.21	No
31	1,2-Dichloropropane	39	<0.18	<0.050	No
32	1,3-Dichloropropylene	1,700	<0.16	<0.16	No
33	Ethylbenzene	29,000	<0.26	<0.26	No
34	Methyl Bromide	4,000	<0.30	<0.30	No
35	Methyl Chloride	No Criteria	<0.30	<0.30	U
36	Methylene Chloride	1,600	<0.40	22	No
37	1,1,2,2-Tetrachloroethane	11	<0.15	<0.050	No
38	Tetrachloroethylene	8.85	<0.19	<0.050	No
39	Toluene	200,000	0.37	<0.19	No
40	1,2-Trans-Dichloroethylene	140,000	<0.22	<0.22	No
41	1,1,1-Trichloroethane	No Criteria	<0.19	<0.19	U
42	1,1,2-Trichloroethane	42	<0.16	<0.050	No
43	Trichloroethylene	81	<0.20	<0.20	No
44	Vinyl Chloride	525	<0.25	<0.25	No
45	2-Chlorophenol	400	<0.40	<0.70	No
46	2,4-Dichlorophenol	790	<0.40	<0.90	No
47	2,4-Dimethylphenol	2,300	<0.40	<0.80	No
48	2-Methyl- 4,6-Dinitrophenol	765	<0.30	<0.60	No
49	2,4-Dinitrophenol	14,000	<0.20	<0.70	No
50	2-Nitrophenol	No Criteria	<0.40	<0.80	U
51	4-Nitrophenol	No Criteria	<0.50	<0.50	U
52	3-Methyl 4-Chlorophenol	No Criteria	<0.50	<0.80	U
53	Pentachlorophenol	7.9	<0.40	<0.60	No
54	Phenol	4,600,000	<0.30	<0.50	No
55	2,4,6-Trichlorophenol	6.5	<0.50	<0.97	No
56	Acenaphthene	2,700	<0.020	0.0020	No
57	Acenaphthylene	No Criteria	<0.020	0.0010	U
58	Anthracene	110,000	<0.010	0.0010	No
59	Benzidine	0.00054	<4.0	<0.00030	No
60	Benzo(a)Anthracene	0.049	<0.02	0.0050	No
61	Benzo(a)Pyrene	0.049	<0.02	0.0020	No
62	Benzo(b)Fluoranthene	0.049	<0.02	0.0050	No
63	Benzo(ghi)Perylene	No Criteria	<0.02	0.0030	U
64	Benzo(k)Fluoranthene	0.049	<0.02	0.0020	No
65	Bis(2-Chloroethoxy)Methane	No Criteria	<0.50	<0.30	U
66	Bis(2-Chloroethyl)Ether	1.4	<0.40	<0.30	No
67	Bis(2-Chloroisopropyl)Ether	170,000	<0.40	<0.60	No
68	Bis(2-Ethylhexyl)Phthalate	5.9	<0.50	<0.50	No

CTR No.	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or minimum MDL (µg/L) ^{[1],[2]}	B or MDL (µg/L) ^{[1],[2]}	RPA Result ^[3]
69	4-Bromophenyl Phenyl Ether	No Criteria	<0.50	<0.23	U
70	Butylbenzyl Phthalate	5,200	<0.50	<0.50	No
71	2-Chloronaphthalene	4,300	<0.40	<0.30	No
72	4-Chlorophenyl Phenyl Ether	No Criteria	<0.50	<0.30	U
73	Chrysene	0.049	<0.020	0.0020	No
74	Dibenzo(a,h)Anthracene	0.049	<0.020	0.0010	No
75	1,2-Dichlorobenzene	17,000	<0.27	<0.27	No
76	1,3-Dichlorobenzene	2,600	<0.18	<0.18	No
77	1,4-Dichlorobenzene	2,600	<0.18	<0.18	No
78	3,3 Dichlorobenzidine	0.077	<5.0	<0.00020	No
79	Diethyl Phthalate	120,000	<0.50	<0.20	No
80	Dimethyl Phthalate	2,900,000	<0.50	<0.20	No
81	Di-n-Butyl Phthalate	12,000	<0.40	<0.50	No
82	2,4-Dinitrotoluene	9.1	<0.40	<0.27	No
83	2,6-Dinitrotoluene	No Criteria	<0.40	<0.29	U
84	Di-n-Octyl Phthalate	No Criteria	<0.40	<0.38	U
85	1,2-Diphenylhydrazine	0.54	<0.50	0.0040	No
86	Fluoranthene	370	<0.020	0.011	No
87	Fluorene	14,000	<0.010	0.002	No
88	Hexachlorobenzene	0.00077	<0.40	0.000020	No
89	Hexachlorobutadiene	50	<0.40	<0.30	No
90	Hexachlorocyclopentadiene	17,000	<0.30	<0.30	No
91	Hexachloroethane	8.9	<0.40	<0.20	No
92	Indeno(1,2,3-cd)Pyrene	0.049	<0.020	0.0040	No
93	Isophorone	600	<0.50	<0.30	No
94	Naphthalene	No Criteria	<0.020	0.0090	U
95	Nitrobenzene	1,900	<0.50	<0.25	No
96	N-Nitrosodimethylamine	8.1	<0.30	<0.30	No
97	N-Nitrosodi-n-Propylamine	1.4	<0.50	<0.00020	No
98	N-Nitrosodiphenylamine	16	<0.30	<0.0010	No
99	Phenanthrene	No Criteria	<0.020	0.0060	U
100	Pyrene	11,000	<0.020	0.019	No
101	1,2,4-Trichlorobenzene	No Criteria	<0.40	<0.30	U
102	Aldrin	0.00014	<0.0020	<0.0000085	No
103	Alpha-BHC	0.013	<0.0030	0.00050	No
104	Beta-BHC	0.046	<0.0030	0.00040	No
105	Gamma-BHC	0.063	<0.0030	0.0010	No
106	Delta-BHC	No Criteria	<0.0020	0.00010	U
107	Chlordane	0.00059	<0.0030	0.00014	No
108	4,4'-DDT	0.00059	<0.0040	0.00020	No
109	4,4'-DDE	0.00059	<0.0040	<0.003	No

CTR No.	Pollutant	C or Governing Criterion or Objective (µg/L)	MEC or minimum MDL (µg/L) ^{[1],[2]}	B or MDL (µg/L) ^{[1],[2]}	RPA Result ^[3]
110	4,4'-DDD	0.00084	<0.0040	0.00030	No
111	Dieldrin	0.00014	<0.0040	<0.004	No
112	Alpha-Endosulfan	0.009	<0.0030	0.00010	No
113	beta-Endosulfan	0.009	<0.0030	0.00010	No
114	Endosulfan Sulfate	240	<0.0040	0.00010	No
115	Endrin	0.002	<0.0040	0.000040	No
116	Endrin Aldehyde	0.81	<0.0040	<0.0050	No
117	Heptachlor	0.00021	<0.0030	0.000020	No
118	Heptachlor Epoxide	0.00011	<0.0030	0.00010	No
119-125	PCBs sum ^[6]	-	-	-	-
126	Toxaphene	0.00020	<0.30	<0.00000082	No
	Total Ammonia (mg/L)	1.2	44	0.43	Yes

Footnotes:

- ^[1] The MEC and ambient background concentration are the actual detected concentrations unless preceded by a “<” sign, in which case the value shown is the minimum method detection limit (MDL).
- ^[2] The MEC or ambient background concentration is “Unavailable” when there are no monitoring data for the constituent.
- ^[3] RPA Results = Yes, if MEC ≥ WQC, B > WQC and MEC is detected, or Trigger 3
 = No, if MEC and B are < WQC or all effluent data are undetected
 = Unknown (U) if no criteria have been promulgated or data are insufficient.
- ^[4] The MEC and maximum ambient background concentrations are the total chromium concentration. The chromium (III) and chromium (VI) concentrations are unknown but less than these values.
- ^[5] Reasonable potential is based in whole or part on Basin Plan sections 7.2.1.2 and 4.7.2.2.
- ^[6] SIP section 1.3 excludes from its reasonable potential analysis procedure priority pollutants for which a TMDL has been developed. TMDLs have been developed for mercury and PCBs in San Francisco Bay. Mercury and PCBs from wastewater discharges are regulated by NPDES Permit CA0038849, which implements the San Francisco Bay Mercury and PCBs TMDLs. A TMDL has also been developed for selenium in North San Francisco Bay, which includes Central San Francisco Bay. Basin Plan section 7.2.4.5 finds that municipal wastewater dischargers have no reasonable potential to cause or contribute to the selenium impairment in San Francisco Bay segments and, therefore, are not required to have numeric effluent limitations.
- ^[7] Asbestos sampling is only required for discharges to waters with the municipal or domestic supply (MUN) beneficial use. Central San Francisco Bay does not have the MUN beneficial use.
- ^[8] Reasonable potential is based on Trigger 3 because San Francisco Bay is 303(d)-listed for dioxin-TEQ and elevated levels of dioxin-TEQ are found in San Francisco Bay fish tissue.

4.3.3.3. Enterococcus Bacteria. The *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Part 3, Bacteria Provisions and a Water Quality Standards Variance Policy* requires *enterococcus* bacteria effluent limitations for discharges to marine and estuarine receiving waters that support the water contact recreation (REC1) beneficial use.

4.3.3.4. Acute Toxicity. The Toxicity Provisions do not require acute toxicity monitoring and limitations. During the previous order term, the Discharger monitored its effluent monthly for acute toxicity at 100 percent effluent and did not detect toxicity violating its acute toxicity permit limits. Therefore, there

is no reasonable potential for the discharge to cause or contribute to acute toxicity in the receiving water.

- 4.3.3.5. **Chronic Toxicity.** Toxicity Provisions section III.C.3.a requires a chronic toxicity reasonable potential analysis for publicly owned treatment works permitted to discharge less than 5.0 MGD. The Discharger's facility is a publicly-owned treatment works and is permitted to discharge less than 5.0 MGD. Therefore, the Toxicity Provisions require a reasonable potential analysis.

Toxicity Provisions section III.C.3.c states that reasonable potential exists if any of at least four chronic toxicity tests at the instream waste concentration (IWC) within five years prior to permit reissuance (1) results in a "fail" or (2) has at least a 10 percent effect. If data from these tests were not analyzed using the TST, the data must be re-analyzed using the TST. If previous tests were not conducted at the IWC, then a concentration of effluent higher than the IWC may be used. Data from older tests may also be considered. If a minimum of four chronic toxicity tests is unavailable, the Regional Water Board must require the Discharger to conduct a minimum of four chronic toxicity tests at the IWC and analyze the data using the TST.

The Discharger's latest species sensitivity screening, dated March 2012, identified the mysid shrimp (*Americamysis bahia*) as the most sensitive. The Discharger conducted chronic toxicity tests once per year during the previous order term using the mysid shrimp and analyzed the data using the TST. Each of the four tests resulted in a "pass" and a percent effect of less than 10 percent at the IWC. (As explained in Fact Sheet section 4.3.4.2.4, the IWC is 1.1 percent effluent.) Therefore, there is no reasonable potential and this Order does not include WQBELs for chronic toxicity. MRP section 5.1.3.2 includes effluent targets consistent with Toxicity Provisions section III.C.4.c.

- 4.3.3.6. **Sediment Quality.** Pollutants in some receiving water sediments may be present in quantities that alone or in combination are toxic to benthic communities. The Sediment Quality Plan states that effluent limits to protect sediment quality are to be developed when: (1) a direct relationship between the discharge and degraded sediment has been established; (2) the pollutants causing degradation have been identified; and (3) the reductions in pollutant loading needed to restore sediment quality have been estimated.

However, to date there is no evidence directly linking compromised sediment conditions to the discharges subject to this Order; therefore, the Regional Water Board does not find reasonable potential for these discharges to cause or contribute to exceedances of the sediment quality objectives. Nevertheless, the Discharger continues to participate in the Regional Monitoring Program, which routinely monitors San Francisco Bay sediment and seeks to identify stressors responsible for degraded sediment quality.

4.3.4. Water Quality-Based Effluent Limitations

WQBELs were developed for the pollutants determined to have reasonable potential to cause or contribute to exceedances of water quality objectives. With the exception of those for enterococcus bacteria (discussed below), the WQBEL calculations are based on the procedures in SIP section 1.4.

- 4.3.4.1. **WQBEL Expression.** NPDES regulations at 40 C.F.R. section 122.45(d) require that permit limits for publicly-owned treatment works be expressed as average weekly and average monthly limits, unless impracticable. This Order contains daily limits instead of weekly limits because weekly limits are impracticable to protect against acute water quality effects (weekly limits could allow acute and chronic toxicity to occur over shorter periods). Daily limits are necessary to prevent fish kills or mortality to aquatic organisms.
- 4.3.4.2. **Mixing Zones and Dilution Credits.** SIP section 1.4.2 allows mixing zones and dilution credits under certain circumstances. The Discharger submitted an updated dilution study, *Technical Memorandum: Mixing Zone and Dilution Credit Study for the Sewerage Agency of Southern Marin and Sanitary District No. 5 of Marin County Combined Outfall Diffuser* (February 2, 2021), that presents findings regarding the initial dilution of the discharge at the outfall.

The dilution analyses were performed using the U.S. EPA-supported CORMIX modeling package. For receiving water conditions, the modeled scenarios used (1) the average tidal velocity 30 minutes after slack tide of 0.43 feet per second (ft/s), or 0.13 meters per second (m/s), to represent acute conditions; (2) the minimum 4-day average velocity of 0.85 ft/s (0.3 m/s) to represent the worst-case scenario for chronic conditions; and (3) the median flood and ebb tides velocities of 1.31 ft/s (0.4 m/s) to represent chronic conditions. The modeled dilution ratios for each scenario are shown in the table below. This Order reflects the updated dilution ratios when calculating WQBELs.

Table F-9. Minimum Initial Dilution

Flow Conditions ^[1]	Dilution
Peak Daily Flow (27 MGD)	63:1
Peak Four-Day Average Flow (16.28 MGD)	95:1
Permitted Dry-Weather Average Flow (4.58 MGD)	320:1

Footnote:

^[1] The modeled flow rates are the combined flows from the Facility and the Sewerage Agency of Southern Marin because these treatment plants share the deepwater outfall.

To confirm that the mixing zone would not be lethal to aquatic organisms, the study estimated a travel time of about 8 minutes for an organism adrift within the zone of initial dilution. U.S. EPA's *Technical Support Document for Water Quality-based Toxics Control* (March 1991, EPA/505/2-90-001) recommends a maximum travel time of 15 minutes for a passing organism.

- 4.3.4.2.1. **Bioaccumulative Pollutants.** For certain bioaccumulative pollutants, dilution credit is denied. Specifically, these pollutants include dioxin and furan compounds, which appear on the CWA section 303(d) list for Central San Francisco Bay because, based on available data on the concentrations of these pollutants in aquatic organisms, sediment, and the water column, they impair beneficial uses. The following factors suggest insufficient assimilative capacity in San Francisco Bay for these pollutants.

Tissue samples taken from San Francisco Bay fish show the presence of these pollutants at concentrations greater than screening levels (*Contaminant Concentrations in Fish from San Francisco Bay*, May 1997). The results of a 1994 San Francisco Bay pilot study, presented in *Contaminated Levels in Fish Tissue from San Francisco Bay* (Regional Water Board, 1994), also show elevated levels of chemical contaminants in fish tissues. The Office of Environmental Health and Hazard Assessment completed a preliminary review of the data in the 1994 report and in December 1994 issued an interim consumption advisory covering certain fish species in San Francisco Bay due to the levels of some of these pollutants. The Office of Environmental Health and Hazard Assessment updated this advisory in a May 2011 report, *Health Advisory and Safe Eating Guidelines for San Francisco Bay Fish and Shellfish*, which still suggests insufficient assimilative capacity in San Francisco Bay for dioxins and furans.

- 4.3.4.2.2. **Non-Bioaccumulative Pollutants (except ammonia and chronic toxicity).** For copper, cyanide, and enterococcus, mixing zones corresponding to a conservative dilution credit of 10:1 (D=9) have been established. The 10:1 dilution credit is based, in part, on Basin Plan Prohibition 1 (Table 4-1), which prohibits discharges with less than 10:1 dilution. SIP section 1.4.2 allows for limiting the dilution credit. The dilution credit is limited for the following reasons:

- 4.3.4.2.2.1. San Francisco Bay is a complex estuarine system with highly variable and seasonal upstream freshwater inflows and diurnal tidal saltwater inputs. SIP section 1.4.3 allows background conditions to be determined on a discharge-by-discharge or water body-by-water body basis. A water body-by-water body approach is taken here due to inherent uncertainties in characterizing ambient background conditions in a complex estuarine system on a discharge-by-discharge basis.

4.3.4.2.2. Because of the complex hydrology of San Francisco Bay, there are uncertainties in accurately determining an appropriate mixing zone. The models used to predict dilution do not consider the three-dimensional nature of San Francisco Bay currents resulting from the interaction of tidal flushes and seasonal freshwater outflows. Being heavier and colder than freshwater, ocean saltwater enters San Francisco Bay on a twice-daily tidal cycle, generally beneath the warmer fresh water that flows seaward. When these waters mix and interact, complex circulation patterns occur due to the varying densities of the fresh and ocean waters. The locations of this mixing and interaction change depending on the strength of each tide. Additionally, sediment loads from the Central Valley change on a long-term basis, affecting the depth of different parts of San Francisco Bay, resulting in alteration of flow patterns, mixing, and dilution at the outfall.

4.3.4.2.3. **Ammonia.** For ammonia, a mixing zone corresponding to a conservative estimate of actual initial dilution based on the peak daily flow (63:1 or D=62) was used to represent acute conditions. Additionally, a mixing zone corresponding to a conservative estimate of actual initial dilution based on the permitted dry-weather average flow (320:1 or D=319) was used to represent long-term chronic conditions. This is justified because ammonia is a non-persistent pollutant that quickly disperses and degrades to a non-toxic state. As such, cumulative toxicity associated with ammonia from other unrelated discharges is unlikely.

4.3.4.2.4. **Chronic Toxicity.** For chronic toxicity, a mixing zone corresponding to a conservative estimate of actual initial dilution based on the peak four-day average flow (95:1 or D=94) was used (see Fact Sheet section 4.3.4.2). This corresponds to an IWC of 1.1 percent assuming there is no ambient chronic toxicity.

4.3.4.3. **WQBEL Calculations.** The following table shows the WQBEL calculations for copper, cyanide, dioxin-TEQ, and total ammonia in accordance with SIP section 1.4.

Table F-10. WQBEL Calculations

Pollutant	Copper	Cyanide	Dioxin-TEQ	Total Ammonia (acute)	Total Ammonia (chronic)
Units	µg/L	µg/L	µg/L	mg/L N	mg/L N
Basis and Criteria type	Basin Plan Site-Specific Objective	Basin Plan Site-Specific Objective	Basin Plan Narrative Objective	Basin Plan Aquatic Life Objective	Basin Plan Aquatic Life Objective
Criteria -Acute	3.9	-	-	4.5	-
Criteria -Chronic	2.5	-	-	-	1.2

Pollutant	Copper	Cyanide	Dioxin-TEQ	Total Ammonia (acute)	Total Ammonia (chronic)
Site-Specific Objective Criteria - Acute	9.4	9.4	-	-	-
Site-Specific Objective Criteria - Chronic	6.0	2.9	-	-	-
Water Effects Ratio (WER)	1	1	1	1	1
Lowest WQO	6.0	2.9	1.4 x 10 ⁻⁸	4.5	1.2
Site Specific Translator - MDEL	0.87	-	-	-	-
Site Specific Translator - AMEL	0.73	-	-	-	-
Dilution Factor (D)	9	9	0	62	319
No. of samples per month	4	4	4	4	30
Aquatic life criteria analysis required? (Y/N)	Y	Y	N	Y	Y
HH criteria analysis required? (Y/N)	N	Y	N	N	N
Applicable Acute WQO	10.8	9.4	-	4.5	-
Applicable Chronic WQO	8.2	2.9	-	-	1.2
HH Criteria	-	220,000	1.4 x 10 ⁻⁸	-	-
Background (Maximum Conc. for Aquatic Life Calc.)	2.5	0.52	4.1 x 10 ⁻⁸	0.17	0.09
Background (Average Conc. for Human Health Calc.)	-	-	1.6 x 10 ⁻⁸	-	-
Is the pollutant on the 303d list and/or bioaccumulative (Y/N)?	N	N	Y	N	N
ECA Acute	85.5	89.3	-	272.7	-
ECA Chronic	59.7	24.3	-	-	366.4
ECA HH	-	220,000	1.4 x 10 ⁻⁸	-	-
No. of data points <10 or at least 80% of data reported non-detect? (Y/N)	N	N	Y	N	N
Avg of effluent data points	7.4	2.7	1.0 x 10 ⁻¹¹	16.6	16.6
Std Dev of effluent data points	4.1	3.6	1.4 x 10 ⁻¹¹	7.7	7.7
CV Calculated	0.55	1.35	N/A	0.47	0.47
CV (Selected) - Final	0.55	1.35	0.60	0.47	0.47
ECA Acute Mult99	0.34	0.16	-	0.39	-
ECA Chronic Mult99	0.55	0.29	-	-	0.95
LTA Acute	29.5	14.1	-	107.3	-
LTA Chronic	33.0	7.1	-	-	346.2
Minimum of LTAs	29.5	7.1	-	107.3	346.2
AMEL Mult95	1.5	2.3	1.6	1.4	1.1

Pollutant	Copper	Cyanide	Dioxin-TEQ	Total Ammonia (acute)	Total Ammonia (chronic)
MDEL Mult99	2.9	6.4	3.1	2.5	2.5
AMEL (Aquatic Life)	44	16	-	153	397
MDEL (Aquatic Life)	86	45	-	273	880
MDEL/AMEL Multiplier	1.9	2.8	2.0	1.8	2.2
AMEL (Human Health)	-	220,000	1.4 x 10 ⁻⁸	-	-
MDEL (Human Health)	-	620,000	2.8 x 10 ⁻⁸	-	-
Minimum of AMEL for Aq. Life vs HH	44	16	1.4 x 10 ⁻⁸	153	397
Minimum of MDEL for Aq. Life vs HH	86	45	2.8 x 10 ⁻⁸	273	880
Previous Order Limit - AMEL	35	16	1.4 x 10 ⁻⁸	100	100
Previous Order Limit - MDEL	73	45	2.8 x 10 ⁻⁸	190	190
Final Limit - AMEL	35	16	1.4 x 10⁻⁸	100	100
Final Limit - MDEL	73	45	2.8 x 10⁻⁸	190	190

4.3.4.4. **Enterococcus Bacteria.** The enterococcus effluent limitations are based on the *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Part 3, Bacteria Provisions and a Water Quality Standards Variance Policy*. As with other non-bioaccumulative pollutants (except ammonia and chronic toxicity), this Order establishes a mixing zone associated with an initial dilution of 10:1 (D=9) to calculate the enterococcus effluent limitation (see Fact Sheet section 4.3.4.2.2). To establish background conditions, the Discharger collected two enterococcus receiving water samples near its outfall. The maximum sample result was 1 CFU/100 mL.

The enterococcus effluent limitation was calculated, as specified in SIP section 1.4, using the following equation:

$$ECA = C + D*(C - B)$$

where:

- ECA = Effluent Concentration Allowance (effluent limitation)
- C = Water quality objective (30 CFU/100 mL, 110 CFU/100mL)
- D = Dilution factor (D=9)
- B = Background concentration (1 CFU/100 mL)

This calculation results in a six-week rolling geometric mean enterococcus effluent limitation of 290 MPN/100 mL and a limitation of no more than

10 percent of enterococcus samples in a calendar month exceeding 1,100 CFU/100mL.

4.4. Discharge Requirement Considerations

- 4.4.1. **Anti-Backsliding.** This Order complies with the anti-backsliding provisions of CWA sections 402(o) and 303(d)(4), and 40 C.F.R. section 122.44(l), which generally require effluent limitations in a reissued permit to be as stringent as those in the previous order. The requirements of this Order are at least as stringent as those in the previous order or otherwise fall under the anti-backsliding exception.

This Order contains new enterococcus bacteria effluent limitations based on the *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California – Part 3, Bacteria Provisions and a Water Quality Standards Variance Policy*. The new effluent limitations, based on a six-week rolling geometric mean concentration and monthly statistical threshold value, are not comparable to those in the previous permit, which were based on a 30-day geometric mean and single-sample maximum. The anti-backsliding rule does not apply to a limit that is not comparable to the prior limits (State Water Board Order WQ 2001-06). Assuming the limits are comparable and the new limits are less stringent, CWA section 402(o)(1) allows for WQBELs to be relaxed if it is consistent with the provisions of CWA section 303(d)(4) and does not result in a violation of water quality standards. CWA section 303(d)(4)(B) applies to this discharge because Central San Francisco Bay attains the water quality level needed for water contact recreation, making it an attainment water. Under CWA section 303(d)(4)(B), a limitation based on a water quality standard or any other permitting standard may only be relaxed where the action is consistent with an antidegradation policy. As explained in Fact Sheet section 4.4.2, there will be no degradation to water quality with respect to enterococcus bacteria, and the change in limits will not result in a violation of water quality standards.

This Order does not retain the previous order's total coliform limits because Basin Plan Table 4-2A no longer requires total or fecal coliform limits for deepwater discharges to protect shellfish harvesting. The previous order's total coliform effluent limits were water-quality based. CWA section 402(o)(1) allows for relaxation of WQBELs if it is consistent with the provisions of CWA section 303(d)(4). CWA section 303(d)(4)(B) applies to this discharge because Central San Francisco Bay attains the water quality level needed for shellfish harvesting, making it an attainment water. Under CWA section 303(d)(4)(B), a limitation based on a water quality standard or any other permitting standard may only be relaxed where the action is consistent with antidegradation policy. As explained in Fact Sheet section 4.4.2, there will be no degradation to water quality with respect to total coliform, and the relaxation will not result in a violation of water quality standards.

This Order eliminates the acute toxicity effluent limits from the previous order because, under the Toxicity Provisions, the discharge does not exhibit reasonable potential for acute toxicity. The previous order's acute toxicity effluent limits were water-quality based. In State Water Board Order WQ 2001-16, the State Water Board held that anti-backsliding does not necessarily dictate that a pollutant that was limited in a prior permit must have a limit in a later permit, even though there is no reasonable potential that the pollutant discharge will cause or contribute to a water quality standard exceedance. The State Water Board stated that where the anti-backsliding exception in CWA section 303(d)(4)(B) is met, the limit may be removed. The removal of the acute toxicity effluent limits here satisfies CWA section 303(d)(4)(B). As discussed in Fact Sheet section 4.4.2, removing these effluent limits will not result in degradation to water quality, and the relaxation will not result in a violation of water quality standards.

- 4.4.2. **Antidegradation.** This Order complies with the antidegradation provisions of 40 C.F.R. section 131.12 and State Water Board Resolution 68-16. Except for minor changes to toxicity and bacteria, as explained below, it does not authorize lowering water quality as compared to the level of discharge authorized in the previous order, which is the baseline by which to measure whether degradation will occur. This Order does not allow for an increased flow or a reduced level of treatment.

The removal of total coliform limits will not degrade water quality because the Discharger must still disinfect bacteria to meet the *Enterococcus* bacteria limits intended to protect water contact recreation. Although this Order modifies the enterococcus bacteria limits, the new limits serve a comparable purpose, reflect the most up-to-date water quality objectives, and will not lower water quality-related to bacteria in the receiving waters. Because *Enterococcus* and total coliform are both indicators for fecal waste, they are removed from wastewater in similar ways. Basin Plan Table 4-2A no longer requires total coliform limits for this deepwater discharge because it is positively buoyant in the receiving waters and thus cannot harm benthic organisms like shellfish. The new limits will ensure that water quality will not be degraded as it relates to bacteria.

This Order imposes new aquatic toxicity requirements. The previous order required acute and chronic toxicity monitoring, imposed acute toxicity effluent limits, and imposed TRE triggers for chronic toxicity. This Order instead requires chronic toxicity monitoring at the IWC and at a waste concentration of 10 percent effluent (surveillance monitoring), which is more than twice the IWC. It also imposes TRE triggers for chronic toxicity based on tests at the IWC and tests using 10 percent effluent. The surveillance monitoring and TRE triggers will ensure that a comparable level of treatment will be maintained; thus, these requirements will ensure that receiving water quality will not be degraded. As for the acute toxicity limits, the chronic toxicity requirements will protect against

acute toxicity, which is typically caused by higher levels of toxicants. For these reasons, water quality will not be degraded.

- 4.4.3. **Stringency of Requirements for Individual Pollutants.** This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based requirements implement minimum, applicable federal technology-based requirements. In addition, this Order contains more stringent effluent limitations as necessary to meet water quality standards. Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement CWA requirements.

This Order's WQBELs have been derived to implement water quality objectives that protect beneficial uses. The beneficial uses and water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to 40 C.F.R. section 131.38. The procedures for calculating these WQBELs are based on the CTR, as implemented in accordance with the SIP, which U.S. EPA approved on May 18, 2000. U.S. EPA approved most Basin Plan beneficial uses and water quality objectives prior to May 30, 2000. Beneficial uses and water quality objectives submitted to U.S. EPA prior to May 30, 2000, but not approved by U.S. EPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to 40 C.F.R. section 131.21(c)(1). U.S. EPA approved the remaining beneficial uses and water quality objectives, so they are also applicable water quality standards pursuant to 40 C.F.R. section 131.21(c)(2).

5. RATIONALE FOR RECEIVING WATER LIMITATIONS

The receiving water limitations in sections 5.1 and 5.2 of the Order are based on Basin Plan narrative and numeric water quality objectives. The receiving water limitation in section 5.3 of the Order requires compliance with federal and State water quality standards in accordance with the CWA and regulations adopted thereunder.

6. RATIONALE FOR PROVISIONS

6.1. Standard Provisions

Attachment D contains standard provisions that apply to all NPDES permits in accordance with 40 C.F.R. section 122.41 and additional conditions applicable to specific categories of permits in accordance with 40 C.F.R. section 122.42. The Discharger must comply with these provisions. The conditions set forth in 40 C.F.R. sections 122.41(a)(1) and (b) through (n) apply to all state-issued NPDES permits and must be incorporated into permits either expressly or by reference.

In accordance with 40 C.F.R. section 123.25(a)(12), states may omit or modify conditions to impose more stringent requirements. Attachment G contains standard provisions that supplement the provisions in Attachment D. This Order omits the federal conditions that address enforcement authority specified in 40 C.F.R. sections 122.41(j)(5) and (k)(2) because the State's enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates Water Code section 13387(e) by reference.

6.2. Monitoring and Reporting Provisions

CWA section 308 and 40 C.F.R. sections 122.41(h), 122.41(j)-(l), 122.44(i), and 122.48 require that NPDES permits specify monitoring and reporting requirements. Water Code section 13383 also authorize the Regional Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The MRP establishes monitoring, reporting, and recordkeeping requirements that implement federal and State requirements. For more information, see Fact Sheet section 7.

6.3. Special Provisions

6.3.1. Reopener Provisions

These provisions are based on 40 C.F.R. sections 122.62 and 122.63 and allow modification of this Order and its effluent limitations as necessary in response to updated water quality objectives, regulations, or other new and relevant information that may become available in the future, and other circumstances as allowed by law.

6.3.2. Effluent Characterization Study and Report

This Order does not include WQBELs for pollutants that do not demonstrate reasonable potential, but this provision requires the Discharger to evaluate monitoring data to verify that the reasonable potential analysis conclusions of this Order remain valid. This requirement is authorized pursuant to 40 C.F.R. section 122.41(h) and Water Code section 13383, and is necessary to inform the next permit reissuance and to ensure that the Discharger takes timely steps in response to any unanticipated change in effluent quality during the term of this Order.

6.3.3. Pollutant Minimization Program

This provision is based on Basin Plan section 4.13.2 and SIP section 2.4.5.

6.3.4. Special Provisions for Publicly-Owned Treatment Works

6.3.4.1. Sludge and Biosolids Management. This provision is based on Basin Plan section 4.17. "Sludge" refers to the solid, semisolid, and liquid residue

removed during primary, secondary, and advanced wastewater treatment processes. “Biosolids” refers to sludge that has been treated and may be beneficially reused.

6.3.4.2. **Collection System Management.** The Discharger’s collection system is part of the Facility regulated through this Order. This provision requires compliance with Attachments D and G and states that these requirements may be satisfied by separately complying with State Water Board Order WQ 2022-0103-DWQ, Statewide Waste Discharge Requirements General Order for Sanitary Sewer Systems and any subsequent order updating these requirements. These statewide WDRs require public agencies that own or operate sanitary sewer systems with one or more miles of sewer lines to enroll for coverage and comply with requirements to develop sanitary sewer management plans and report sanitary sewer overflows, among other provisions and prohibitions. The statewide WDRs contain requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows that are more extensive and, therefore, more stringent than the standard provisions in Attachments D and G. Compliance with the statewide WDRs will satisfy the corresponding requirements in Attachments D and G.

6.3.5. Other Special Provisions

6.3.5.1. **Specific Tasks to Reduce Wet Weather Bypasses.** Consistent with Attachment D section 1.7 and 40 C.F.R. section 122.41(m), the Discharger submitted a utility analysis with its permit reissuance application to determine whether any feasible alternatives are available to reduce wet weather bypasses (see Fact Sheet section 4.1.1.2.2). The Discharger continues to implement all feasible alternatives to avoid wet weather bypasses. The utility analysis indicated that it is infeasible to expand the treatment plant capacity. In 2014, the Discharger increased its wet weather storage capacity from around 117,000 gallons to over 315,000 gallons. Due to space constraints and the surrounding topography, further plant improvements are cost-prohibitive. Instead, the Discharger can minimize wet weather bypasses by focusing on collection system improvements to reduce inflow and infiltration.

This Order requires the Discharger to continue to implement and update, as necessary, its Wet Weather Improvement Plan. It also requires the Discharger to clean and assess the condition of its collection system, spend capital funds on sewer pipe rehabilitation, and report on the status of its collection system rehabilitation efforts and on the effectiveness of its private sewer lateral program. The utility analysis and reporting requirements are based in part on U.S. EPA’s proposed peak wet weather policy, *NPDES Requirements for Peak Wet Weather Discharges from POTW Treatment Plants Serving Separate Sanitary Sewer System Collection Systems* (December 2005), as guidance.

- 6.3.5.2. **Copper Action Plan.** This provision is based on Basin Plan section 7.2.1.2 and is necessary to ensure that use of copper site-specific objectives is consistent with antidegradation policies. This Order requires the Discharger to implement source control and pollution prevention for identified sources. Additional actions may be necessary depending on the three-year rolling mean copper concentration in Central San Francisco Bay. Data the San Francisco Estuary Institute compiled for 2015-2019 indicate no degradation of San Francisco Bay water quality with respect to copper (<https://www.sfei.org/pages/copper-site-specific-objective-3-year-rolling-averages-0>). ug/L.
- 6.3.5.3. **Cyanide Action Plan.** This provision is based on Basin Plan section 4.7.2.2 and is necessary to ensure that use of cyanide site-specific objectives is consistent with antidegradation policies. The threshold for considering influent cyanide concentrations to indicate a possible “significant cyanide discharge” in the Discharger’s service area is set at 10 µg/L. This trigger was calculated using 1.5 times the 95th percentile cyanide concentration of the Discharger’s effluent between October 2018 and March 2023. The Discharger’s maximum cyanide concentration was 27 µg/L, and the second largest concentration was 9.3 µg/L. Because the maximum concentration is significantly higher than the rest of the samples, concentrations greater than 1.5 times the 95th percentile could indicate a significant cyanide source.
- 6.3.5.4. **Anaerobically-Digestible Material.** Standard Operating Procedures are required for publicly-owned treatment works that accept hauled waste food, fats, oil, and grease for injection into anaerobic digesters. The development and implementation of Standard Operating Procedures for management of these materials is intended to allow the California Department of Resources Recycling and Recovery to exempt this activity from separate and redundant permitting programs. Some POTWs choose to accept organic material, such as waste food, fats, oils, and grease, into their anaerobic digesters to increase production of methane and other biogases for energy production and to prevent such materials from being discharged into the collection system and potentially causing sanitary sewer overflows. The California Department of Resources Recycling and Recovery has proposed to exempt publicly-owned treatment works from Process Facility/Transfer Station permit requirements when the same activity is regulated under WDRs or NPDES permits. The proposed exemption is restricted to anaerobically digestible materials that have been prescreened, slurried, processed, and conveyed in a closed system for codigestion with regular sewage sludge. The exemption requires that the publicly-owned treatment works develop Standard Operating Procedures for proper handling, processing, tracking, and management of anaerobically digestible material.
- 6.3.5.5. **Average Annual Selenium Load.** This provision is based on Basin Plan section 7.2.4.5. The information will be used to confirm that selenium loads

are consistent with wasteload allocations established in the North San Francisco Bay Selenium TMDL. The requirements regarding treatment of estimated and non-detect values are consistent with the load calculations performed for the TMDL.

7. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

The following provides the rationale for the monitoring and reporting requirements in the MRP.

7.1. Monitoring Requirements Rationale

- 7.1.1. **Influent Monitoring.** Influent flow monitoring is necessary to understand Facility operations and to evaluate compliance with Discharge Prohibition 3.4, which prohibits average dry weather influent flow greater than 0.98 MGD. Influent BOD₅ and TSS monitoring are necessary to evaluate compliance with this Order's 85 percent removal requirement. Basin Plan section 4.7.2.2 requires influent cyanide monitoring because this Order is based on site-specific cyanide water quality objectives.
- 7.1.2. **Effluent Monitoring.** Effluent monitoring is necessary to understand Facility operations, evaluate compliance with this Order's effluent limitations, and conduct future reasonable potential analyses.
- 7.1.3. **Toxicity Testing.** Toxicity tests are necessary to ensure the discharge does not cause or contribute to toxicity in the receiving waters, to evaluate whether the Toxicity Provisions' chronic toxicity water quality objectives are met, and to conduct future reasonable potential analyses. Chronic toxicity tests are also necessary to evaluate whether Toxicity Reduction Evaluations (TREs) are needed. This monitoring will allow timely identification and response to potential toxicants.

The Toxicity Provisions require routine monitoring and maximum daily effluent target (MDET) and median monthly effluent target (MMET) evaluations for chronic toxicity at the IWC to ensure that the discharge does not cause or contribute to toxicity in the receiving waters. This Order grants a mixing zone for chronic toxicity corresponding to a dilution ratio of at least 95:1 (D=94), equivalent to an IWC of 1.1 percent. The Discharger must evaluate the MDET and MMET based on the IWC. The MMET and MDET are not effluent limits and failing to meet them is not a permit violation; however, failing to meet the MMET or MDET requires accelerated monitoring and potentially a TRE in accordance with MRP section 5.3.3.

Because the discharger's IWC is less than 5 percent effluent, this Order requires surveillance monitoring at an effluent concentration of 10 percent. The Discharger is required to report results for surveillance monitoring at monitoring

location SUR-001 instead of EFF-001 to distinguish surveillance monitoring results from monitoring at the IWC.

Consistent with Toxicity Provisions section III.C.4.b.i(A), the Discharger is required to conduct routine monitoring at least twice per calendar year because this Order authorizes the Discharger to discharge at a rate of 0.98 MGD, which is less than or equal to 1.0 MGD.

Until the Discharger completes a new toxicity screening that satisfies the minimum screening requirements stated in Toxicity Provisions III.C.2.a, this Order retains the requirement to use mysid shrimp (*Americamysis bahia*) for chronic toxicity tests based on the Discharger's March 2012 chronic toxicity screening phase study and the previous order.

The MRP (Attachment E), Appendix E-1, section 2.1.1, requires a new toxicity screening that satisfies the minimum screening requirements stated in Toxicity Provisions III.C.2.a within 18 months of the effective date of this Order. The Toxicity Provisions require that data be analyzed using the TST, and the test species include one vertebrate, one invertebrate, and one aquatic plant/algae from Table 1 of Toxicity Provisions section III.B.2. The Toxicity Provisions species screening requirements are summarized in MRP Appendix E-2.

- 7.1.4. **Receiving Water Monitoring.** The Discharger is required to continue participating in the Regional Monitoring Program, which involves collecting data on pollutants and toxicity in San Francisco Bay water, sediment, and biota. This monitoring is necessary to characterize the receiving water and the effects of the discharge this Order authorizes.
- 7.1.5. **Recycled Water Monitoring.** The recycled water monitoring and reporting requirements incorporate the existing requirements of State Water Board Order WQ 2019-0037-EXEC (Amending Monitoring and Reporting Programs for Waste Discharge Requirements, National Pollutant Discharge Elimination System Permits, Water Reclamation Requirements, Master Recycling Permits, and General Waste Discharge Requirements), issued on July 24, 2019, pursuant to Water Code sections 13267 and 13383. The Notice of Applicability issued on April 8, 2020, for enrollment under State Water Board Order WQ 2016-0068-DDW (Water Reclamation Requirements for Recycled Water Use) contains additional recycled water monitoring and reporting requirements not imposed through this Order.
- 7.1.6 **Other Monitoring Requirements.** Pursuant to CWA section 308, U.S. EPA requires some dischargers to participate in a Discharge Monitoring Report-Quality Assurance (DMR-QA) Study Program that evaluates the analytical abilities of laboratories that perform or support NPDES permit-required monitoring. The program applies to discharger laboratories and contract laboratories and evaluates each laboratory's ability to analyze wastewater samples to produce quality data that ensure the integrity of the NPDES

program. There are two options to comply: (1) the Discharger may obtain and analyze DMR-QA samples, or (2) pursuant to a waiver U.S. EPA issued to the State Water Board, the Discharger may submit results from the most recent Water Pollution Performance Evaluation Study. MRP section 1.4 requires the Discharger to ensure that the results of the DMR-QA Study or most recent Water Pollution Performance Evaluation Study are submitted to the State Water Board, which forwards the results to U.S. EPA.

7.2. Monitoring Requirements Summary. The table below summarizes routine monitoring requirements. This table is for informational purposes only. The actual requirements are specified in the MRP and elsewhere in this Order. In addition to undertaking the monitoring below, the Discharger must conduct receiving water monitoring by continuing to participate in the Regional Monitoring Program.

Table F-11. Monitoring Requirements Summary

Parameter ^[1]	Influent INF-001 ^[2]	Effluent EFF-001 (or EFF-001D) ^[2]	Effluent EFF-001B ^[2]
Flow	Continuous/D	Continuous/D	Continuous/D
Volume of Partially-Treated Wastewater Discharged	-	-	1/Event
Duration of Blending Event	-	-	1/Event
BOD	1/Week	1/Week	1/Year
TSS	1/Week	1/Week	1/Day
pH	-	Continuous/D or 1/Day	Continuous/D
Chlorine, Total Residual	-	1/2 Hour or Continuous/2 Hour	1/2 Hour or Continuous/2 Hour
Enterococcus Bacteria	-	4/Year ^[3]	1/Day
Chronic Toxicity	-	1/Year	-
Ammonia, Total	-	1/Month	1/Year
Copper, Total Recoverable	-	1/Month	1/Year
Cyanide, Total	2/Year	1/Month	1/Year
Selenium	-	Once	
Dioxin-TEQ	-	Once	
Priority Pollutants	-	Once	

Footnotes:

- ^[1] The Discharger must also comply with the monitoring requirements in the Mercury and PCBs Watershed Permit (NPDES Permit CA0038849) and the Nutrients Watershed Permit (NPDES Permit CA0038873).
- ^[2] MRP Table E-1 defines these monitoring locations and sampling frequencies.
- ^[3] The four samples shall be collected in different calendar months during the higher recreational water contact season (June to October). If the enterococcus effluent limitation is exceeded, the Discharger shall conduct 5/Month accelerated sampling for at least three consecutive months. If full compliance is demonstrated after the three-month period, the Discharger may return to the 4/Year sampling frequency.

8. PUBLIC PARTICIPATION

The Regional Water Board considered the issuance of WDRs that will serve as an NPDES permit for the Facility. As a step in the WDR adoption process, Regional

Water Board staff developed tentative WDRs and encouraged public participation in the WDR adoption process.

- 8.1. Notification of Interested Parties.** The Regional Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge, and provided an opportunity to submit written comments and recommendations. The public had access to the agenda and any changes in dates and locations through the [Regional Water Board's website](https://waterboards.ca.gov/sanfranciscobay) (waterboards.ca.gov/sanfranciscobay).

Water Code sections 189.7 and 13149.2 require specific outreach and findings related to potential environmental justice, tribal impact, and racial equity considerations for reissued individual WDRs that include time schedules for achieving compliance with water quality objectives. This Order does not contain such a time schedule; therefore, the specified outreach and findings are not required.

- 8.2. Written Comments.** Interested persons were invited to submit written comments concerning the tentative WDRs as explained through the notification process. Comments were to be submitted either in person, by e-mail, or by mail to the Executive Officer at the Regional Water Board at 1515 Clay Street, Suite 1400, Oakland, California 94612, to the attention of Natlie Lee.

Written comments were due at the Regional Water Board office by 5:00 p.m. on **XXXXX, 2023**.

- 8.3. Public Hearing.** The Regional Water Board held a public hearing on the tentative Order during its meeting at the following date and time:

Date: October 11, 2023
Time: 9:00 a.m.

Contact: Natlie Lee, (510) 622-2325, Natlie.Lee@waterboards.ca.gov

Interested persons were provided notice of the hearing and information on how to participate. At the public hearing, the Regional Water Board heard testimony pertinent to the discharge and Order.

Dates and venues can change. The [Regional Water Board's website](https://waterboards.ca.gov/sanfranciscobay) is (waterboards.ca.gov/sanfranciscobay), where one can access the current agenda for changes.

- 8.4. Reconsideration of Waste Discharge Requirements.** Any person aggrieved by this Regional Water Board action may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050. The State Water Board must receive the

petition at the following address within 30 calendar days of the date of Regional Water Board action:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

A petition may also be filed by email at waterqualitypetitions@waterboards.ca.gov.

For instructions on how to file a water quality petition for review, see the [Water Board's petition instructions](#) (waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml).

- 8.5. Information and Copying.** Supporting documents and comments received are on file. To review these documents, please contact Melinda Wong, the Regional Water Board's custodian of records, by calling (510) 622-2300 or emailing Melinda.Wong@waterboards.ca.gov. Document copying may be arranged.
- 8.6. Register of Interested Persons.** Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference the Facility, and provide a name, address, and phone number.
- 8.7. Additional Information.** Requests for additional information or questions regarding this Order should be directed to Natlie Lee, (510) 622-2325, Natlie.Lee@waterboards.ca.gov.

**ATTACHMENT G – REGIONAL STANDARD PROVISIONS,
AND MONITORING AND REPORTING REQUIREMENTS
(SUPPLEMENT TO ATTACHMENT D)**

Contents

1. STANDARD PROVISIONS – PERMIT COMPLIANCE	G-2
1.1. DUTY TO COMPLY – NOT SUPPLEMENTED	G-2
1.2. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE – NOT SUPPLEMENTED	G-2
1.3. DUTY TO MITIGATE – SUPPLEMENT TO ATTACHMENT D, PROVISION 1.3.	G-2
1.4. PROPER OPERATION AND MAINTENANCE – SUPPLEMENT TO ATTACHMENT D, PROVISION 1.4.	G-3
1.5. PROPERTY RIGHTS – NOT SUPPLEMENTED	G-4
1.6. INSPECTION AND ENTRY – NOT SUPPLEMENTED	G-4
1.7. BYPASS – NOT SUPPLEMENTED	G-4
1.8. UPSET – NOT SUPPLEMENTED	G-4
1.9. OTHER – ADDITION TO ATTACHMENT D	G-4
2. STANDARD PROVISIONS – PERMIT ACTION – NOT SUPPLEMENTED	G-4
3. STANDARD PROVISIONS – MONITORING	G-4
3.1. SAMPLING AND ANALYSES – SUPPLEMENT TO ATTACHMENT D, PROVISIONS 3.1 AND 3.2	G-4
3.2. STANDARD OBSERVATIONS – ADDITION TO ATTACHMENT D	G-7
4. STANDARD PROVISIONS – RECORDS	G-8
4.1. RECORDS TO BE MAINTAINED – SUPPLEMENT TO ATTACHMENT D, PROVISION 4.1	G-8
4.2. RECORDS OF MONITORING – SUPPLEMENT TO ATTACHMENT D, PROVISION 4.2	G-8
4.3. CLAIMS OF CONFIDENTIALITY – NOT SUPPLEMENTED	G-10
5. STANDARD PROVISIONS – REPORTING	G-10
5.1. DUTY TO PROVIDE INFORMATION – NOT SUPPLEMENTED	G-10
5.2. SIGNATORY AND CERTIFICATION REQUIREMENTS – NOT SUPPLEMENTED	G-10
5.3. MONITORING REPORTS – SUPPLEMENT TO ATTACHMENT D, PROVISION 5.3	G-10
5.4. COMPLIANCE SCHEDULES – NOT SUPPLEMENTED	G-13
5.5. TWENTY-FOUR HOUR REPORTING – SUPPLEMENT TO ATTACHMENT D, PROVISION 5.5	G-14
5.6. PLANNED CHANGES – NOT SUPPLEMENTED	G-16
5.7. ANTICIPATED NONCOMPLIANCE – NOT SUPPLEMENTED	G-16
5.8. OTHER NONCOMPLIANCE – NOT SUPPLEMENTED	G-16
5.9. OTHER INFORMATION – NOT SUPPLEMENTED	G-16
6. STANDARD PROVISIONS – ENFORCEMENT – NOT SUPPLEMENTED	G-16
7. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS – NOT SUPPLEMENTED	G-16
8. DEFINITIONS – ADDITION TO ATTACHMENT D	G-16

**ATTACHMENT G – REGIONAL STANDARD PROVISIONS,
AND MONITORING AND REPORTING REQUIREMENTS
(SUPPLEMENT TO ATTACHMENT D)**

APPLICABILITY

This document supplements the requirements of Federal Standard Provisions (Attachment D). For clarity, these provisions are arranged using to the same headings as those used in Attachment D.

1. STANDARD PROVISIONS – PERMIT COMPLIANCE

1.1. Duty to Comply – Not Supplemented

1.2. Need to Halt or Reduce Activity Not a Defense – Not Supplemented

1.3. Duty to Mitigate – Supplement to Attachment D, Provision 1.3.

1.3.1. Contingency Plan. The Discharger shall maintain a Contingency Plan as prudent in accordance with current facility emergency planning. The Contingency Plan shall describe procedures to ensure that existing facilities remain in, or are rapidly returned to, operation in the event of a process failure or emergency incident, such as employee strike, strike by suppliers of chemicals or maintenance services, power outage, vandalism, earthquake, or fire. The Discharger may combine the Contingency Plan and Spill Prevention Plan (see Provision 1.3.2, below) into one document. In accordance with Regional Water Board Resolution No. 74-10, discharge in violation of the permit where the Discharger has failed to develop and implement a Contingency Plan as described below may be the basis for considering the discharge a willful and negligent violation of the permit pursuant to California Water Code section 13387. The Contingency Plan shall, at a minimum, provide for the following:

1.3.1.1. Sufficient personnel for continued facility operation and maintenance during employee strikes or strikes against contractors providing services;

1.3.1.2. Maintenance of adequate chemicals or other supplies, and spare parts necessary for continued facility operations;

1.3.1.3. Emergency standby power;

1.3.1.4. Protection against vandalism;

1.3.1.5. Expeditious action to repair failures of, or damage to, equipment, including any sewer lines;

- 1.3.1.6. Reporting of spills and discharges of untreated or inadequately treated wastes, including measures taken to clean up the effects of such discharges; and
- 1.3.1.7. Maintenance, replacement, and surveillance of physical condition of equipment and facilities, including any sewer lines.
- 1.3.2. **Spill Prevention Plan.** The Discharger shall maintain a Spill Prevention Plan to prevent accidental discharges and to minimize the effects of any such discharges. The Spill Prevention Plan shall do the following:
 - 1.3.2.1. Identify the possible sources of accidental discharge, untreated or partially-treated waste bypass, and polluted drainage;
 - 1.3.2.2. State when current facilities and procedures became operational and evaluate their effectiveness; and
 - 1.3.2.3. Predict the effectiveness of any proposed facilities and procedures and provide an implementation schedule with interim and final dates when the proposed facilities and procedures will be constructed, implemented, or operational.
- 1.4. **Proper Operation and Maintenance** – Supplement to Attachment D, Provision 1.4
 - 1.4.1. **Operation and Maintenance Manual.** The Discharger shall maintain an Operation and Maintenance Manual to provide the plant and regulatory personnel with a source of information describing all equipment, recommended operational strategies, process control monitoring, and maintenance activities. To remain a useful and relevant document, the Operation and Maintenance Manual shall be kept updated to reflect significant changes in treatment facility equipment and operational practices. The Operation and Maintenance Manual shall be maintained in usable condition and be available for reference and use by all relevant personnel and Regional Water Board staff.
 - 1.4.2. **Wastewater Facilities Status Report.** The Discharger shall maintain a Wastewater Facilities Status Report and regularly review, revise, or update it, as necessary. This report shall document how the Discharger operates and maintains its wastewater collection, treatment, and disposal facilities to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary to provide adequate and reliable transport, treatment, and disposal of all wastewater from both existing and planned future wastewater sources under the Discharger's service responsibilities.
 - 1.4.3. **Proper Supervision and Operation of Publicly-Owned Treatment Works (POTWs).** POTWs shall be supervised and operated by persons possessing

certificates of appropriate grade pursuant to Title 23, section 3680, of the California Code of Regulations.

1.5. Property Rights – Not Supplemented

1.6. Inspection and Entry – Not Supplemented

1.7. Bypass – Not Supplemented

1.8. Upset – Not Supplemented

1.9. Other – Addition to Attachment D

- 1.9.1. Neither the treatment nor the discharge of pollutants shall create pollution, contamination, or nuisance as defined by California Water Code section 13050.
- 1.9.2. Collection, treatment, storage, and disposal systems shall be operated in a manner that precludes public contact with wastewater. If public contact with wastewater could reasonably occur on public property, warning signs shall be posted.
- 1.9.3. If the Discharger submits a timely and complete Report of Waste Discharge for permit reissuance, this permit shall continue in force and effect until the permit is reissued or the Regional Water Board rescinds the permit.

2. STANDARD PROVISIONS – PERMIT ACTION – NOT SUPPLEMENTED

3. STANDARD PROVISIONS – MONITORING

3.1. Sampling and Analyses – Supplement to Attachment D, Provisions 3.1 and 3.2

- 3.1.1. **Certified Laboratories.** Water and waste analyses shall be performed by a laboratory certified for these analyses in accordance with California Water Code section 13176.
- 3.1.2. **Minimum Levels.** For the 126 priority pollutants, the Discharger should use the analytical methods listed in Table B unless the Monitoring and Reporting Program (MRP, Attachment E) requires a particular method or minimum level (ML). All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.
- 3.1.3. **Monitoring Frequency.** The MRP specifies the minimum sampling and analysis schedule.
 - 3.1.3.1. **Sample Collection Timing**
 - 3.1.3.1.1. The Discharger shall collect influent samples on varying days selected at random and shall not include any plant recirculation or other sidestream

wastes, unless otherwise stipulated in the MRP. The Executive Officer may approve an alternative influent sampling plan if it is representative of plant influent and complies with all other permit requirements.

- 3.1.3.1.2. The Discharger shall collect effluent samples on days coincident with influent sampling, unless otherwise stipulated by the MRP. If influent sampling is not required, the Discharger shall collect effluent samples on varying days selected at random, unless otherwise stipulated in the MRP. The Executive Officer may approve an alternative effluent sampling plan if it is representative of plant discharge and in compliance with all other permit requirements.
- 3.1.3.1.3. The Discharger shall collect effluent grab samples during periods of daytime maximum peak flows (or peak flows through secondary treatment units for facilities that recycle effluent).
- 3.1.3.1.4. Effluent sampling for conventional pollutants shall occur on at least one day of any multiple-day bioassay the MRP requires. During the course of the bioassay, on at least one day, the Discharger shall collect and retain samples of the discharge. In the event that a bioassay result does not comply with effluent limitations, the Discharger shall analyze the retained samples for pollutants that could be toxic to aquatic life and for which it has effluent limitations.
 - 3.1.3.1.4.1. The Discharger shall perform bioassays on final effluent samples; when chlorine is used for disinfection, bioassays shall be performed on effluent after chlorination and dechlorination; and
 - 3.1.3.1.4.2. The Discharger shall analyze for total ammonia nitrogen and calculate the amount of un-ionized ammonia whenever test results fail to meet effluent limitations.

3.1.3.2. **Conditions Triggering Accelerated Monitoring**

- 3.1.3.2.1. **Average Monthly Effluent Limitation Exceedance.** If the results from two consecutive samples of a constituent monitored in a particular month exceed the average monthly effluent limitation for any parameter (or if the required sampling frequency is once per month or less and the monthly sample exceeds the average monthly effluent limitation), the Discharger shall, within 24 hours after the results are received, increase its sampling frequency to daily until the results from the additional sampling show that the parameter complies with the average monthly effluent limitation.
- 3.1.3.2.2. **Maximum Daily Effluent Limitation Exceedance.** If a sample result exceeds a maximum daily effluent limitation, the Discharger shall, within 24 hours after the result is received, increase its sampling frequency to

daily until the results from two samples collected on consecutive days show compliance with the maximum daily effluent limitation.

- 3.1.3.2.3. **Acute Toxicity.** If final or intermediate results of an acute bioassay indicate a violation or threatened violation (e.g., the percentage of surviving test organisms of any single acute bioassay is less than 70 percent), the Discharger shall initiate a new test as soon as practical or as described in applicable State Water Board plan provisions that become effective after adoption of these Regional Standard Provisions. The Discharger shall investigate the cause of the mortalities and report its findings in the next self-monitoring report.
- 3.1.3.2.4. **Chlorine.** The Discharger shall calibrate chlorine residual analyzers against grab samples as frequently as necessary to maintain accurate control and reliable operation. If an effluent violation is detected, the Discharger shall collect grab samples at least every 30 minutes until compliance with the limitation is achieved, unless the Discharger monitors chlorine residual continuously. In such cases, the Discharger shall continue to conduct continuous monitoring.
- 3.1.3.2.5. **Bypass.** Except as indicated below, if a Discharger bypasses any portion of its treatment facility, it shall monitor flows and collect samples at affected discharge points and analyze samples for all constituents with effluent limitations on a daily basis for the duration of the bypass. The Discharger need not accelerate chronic toxicity monitoring. The Discharger also need not collect and analyze samples for mercury, dioxin-TEQ, and PCBs after the first day of the bypass. The Discharger may satisfy the accelerated acute toxicity monitoring requirement by conducting a flow-through test or static renewal test that captures the duration of the bypass (regardless of the method specified in the MRP). If bypassing disinfection units only, the Discharger shall only monitor bacteria indicators daily.
- 3.1.3.2.5.1. **Bypass for Essential Maintenance.** If a Discharger bypasses a treatment unit for essential maintenance pursuant to Attachment D section 1.7.2, the Executive Officer may reduce the accelerated monitoring requirements above if the Discharger (i) monitors effluent at affected discharge points on the first day of the bypass for all constituents with effluent limitations, except chronic toxicity; and (ii) identifies and implements measures to ensure that the bypass will continue to comply with effluent limitations.
- 3.1.3.2.5.2. **Approved Wet Weather Bypasses.** If a Discharger bypasses a treatment unit or permitted outfall during wet weather with Executive Officer approval pursuant to Attachment D section 1.7.4, the Discharger shall monitor flows and collect and retain samples for affected

discharge points on a daily basis for the duration of the bypass. The Discharger shall analyze daily for TSS using 24 hour composites (or more frequent increments) and for bacteria indicators with effluent limitations using grab samples. If TSS exceeds 45 mg/L in any composite sample, the Discharger shall also analyze daily the retained samples for all other constituents with effluent limitations, except oil and grease, mercury, PCBs, dioxin-TEQ, and acute and chronic toxicity. Additionally, at least once each year, the Discharger shall analyze the retained samples for one approved bypass for all other constituents with effluent limitations, except oil and grease, mercury, PCBs, dioxin-TEQ, and acute and chronic toxicity. This monitoring shall be in addition to the minimum monitoring specified in the MRP.

3.2. Standard Observations – Addition to Attachment D

- 3.2.1. **Receiving Water Observations.** The following requirements only apply when the MRP requires standard observations of receiving waters. Standard observations shall include the following:
- 3.2.1.1. **Floating and Suspended Materials (e.g., oil, grease, algae, and other macroscopic particulate matter)** — presence or absence, source, and size of affected area.
 - 3.2.1.2. **Discoloration and Turbidity** — color, source, and size of affected area.
 - 3.2.1.3. **Odor** — presence or absence, characterization, source, and distance of travel.
 - 3.2.1.4. **Beneficial Water Use** — estimated number of water-associated waterfowl or wildlife, fisherpeople, and other recreational activities.
 - 3.2.1.5. **Hydrographic Condition** — time and height of high and low tides (corrected to nearest National Oceanic and Atmospheric Administration location for the sampling date and time).
 - 3.2.1.6. **Weather Conditions** — wind direction, air temperature, and total precipitation during five days prior to observation.
- 3.2.2. **Wastewater Effluent Observations.** The following requirements only apply when the MRP requires standard observations of wastewater effluent. Standard observations shall include the following:
- 3.2.2.1. **Floating and Suspended Material of Wastewater Origin** (e.g., oil, grease, algae, and other macroscopic particulate matter) — presence or absence.
 - 3.2.2.2. **Odor** — presence or absence, characterization, source, distance of travel, and wind direction.

3.2.3. **Beach and Shoreline Observations.** The following requirements only apply when the MRP requires standard observations of beaches or shorelines. Standard observations shall include the following:

3.2.3.1. **Material of Wastewater Origin** — presence or absence, description of material, estimated size of affected area, and source.

3.2.3.2. **Beneficial Use** — estimate of number of people participating in recreational water contact, non-water contact, and fishing activities.

3.2.4. **Waste Treatment and/or Disposal Facility Periphery Observations.** The following requirements only apply when the MRP requires standard observations of the periphery of waste treatment or disposal facilities. Standard observations shall include the following:

3.2.4.1. **Odor** — presence or absence, characterization, source, and distance of travel.

3.2.4.2. **Weather Conditions** — wind direction and estimated velocity.

4. STANDARD PROVISIONS – RECORDS

4.1. Records to be Maintained – Supplement to Attachment D, Provision 4.1

The Discharger shall maintain records in a manner and at a location (e.g., the wastewater treatment plant or the Discharger's offices) such that the records are accessible to Regional Water Board staff. The minimum retention period specified in Attachment D, Provision IV, shall be extended during the course of any unresolved litigation regarding permit-related discharges, or when requested by Regional Water Board or U.S. EPA, Region IX, staff.

A copy of the permit shall be maintained at the discharge facility and be available at all times to operating personnel.

4.2. Records of Monitoring – Supplement to Attachment D, Provision 4.2

Monitoring records shall include the following:

4.2.1. **Analytical Information.** Records shall include analytical method detection limits, minimum levels, reporting levels, and related quantification parameters.

4.2.2. **Disinfection Process.** For the disinfection process, records shall include the following:

4.2.2.1. For bacteriological analyses:

4.2.2.1.1. Wastewater flow rate at the time of sample collection; and

- 4.2.2.1.2. Required statistical parameters for cumulative bacterial values (e.g., moving median or geometric mean for the number of samples or sampling period identified in the MRP).
- 4.2.2.2. For the chlorination process (when chlorine is used for disinfection), at least daily average values for the following:
 - 4.2.2.2.1. Chlorine residual of treated wastewater as it enters the chlorine contact basin (mg/L);
 - 4.2.2.2.2. Chlorine dosage (kg/day); and
 - 4.2.2.2.3. Dechlorination chemical dosage (kg/day).
- 4.2.3. **Wastewater Treatment Process Solids.** For each treatment unit process that involves solids removal from the wastewater stream, records shall include the following:
 - 4.2.3.1. Total volume or mass of solids removed from each collection unit (e.g., grit, skimmings, undigested biosolids, or combination) for each calendar month or other time period as appropriate, but not to exceed annually; and
 - 4.2.3.2. Final disposition of such solids (e.g., landfill, other subsequent treatment unit).
- 4.2.4. **Treatment Process Bypasses.** For all treatment process bypasses, including wet weather blending, records shall include the following:
 - 4.2.4.1. Chronological log of treatment process bypasses;
 - 4.2.4.2. Identification of treatment processes bypassed;
 - 4.2.4.3. Beginning and ending dates and times of bypasses;
 - 4.2.4.4. Bypass durations;
 - 4.2.4.5. Estimated bypass volumes; and
 - 4.2.4.6. Description of, or reference to other reports describing, the bypasses, their cause, the corrective actions taken (except for wet weather blending explicitly approved within the permit and in compliance with any related permit conditions), and any additional monitoring conducted.
- 4.2.5. **Treatment Plant Overflows.** The Discharger shall retain a chronological log of overflows at the treatment plant, including the headworks and all units and appurtenances downstream, and records supporting the information provided in accordance with Provision 5.5.2, below.

4.3. Claims of Confidentiality – Not Supplemented

5. STANDARD PROVISIONS – REPORTING

5.1. Duty to Provide Information – Not Supplemented

5.2. Signatory and Certification Requirements – Not Supplemented

5.3. Monitoring Reports – Supplement to Attachment D, Provision 5.3

5.3.1. **Self-Monitoring Reports.** For each reporting period established in the MRP, the Discharger shall submit a self-monitoring report to the Regional Water Board in accordance with the requirements listed in the MRP and below:

5.3.1.1. **Transmittal Letter.** Each self-monitoring report shall be submitted with a transmittal letter that includes the following:

- 5.3.1.1.1. Identification of all violations of effluent limitations or other waste discharge requirements found during the reporting period;
- 5.3.1.1.2. Details regarding the violations, such as parameters, magnitude, test results, frequency, and dates;
- 5.3.1.1.3. Causes of the violations;
- 5.3.1.1.4. Corrective actions taken or planned to resolve violations and prevent recurrences, and dates or time schedules for implementation (the Discharger may refer to previously submitted reports that address the corrective actions);
- 5.3.1.1.5. Explanation for any data invalidation. Data should not be submitted in a self-monitoring report if it does not meet quality assurance/quality control standards. However, if the Discharger wishes to invalidate a measurement after submitting it in a self-monitoring report, the Discharger shall identify the measurement suspected to be invalid and state the Discharger's intent to submit, within 60 days, a formal request to invalidate the measurement. The formal request shall include the original measurement in question, the reason for invalidating the measurement, all relevant documentation that supports invalidation (e.g., laboratory sheet, log entry, test results), and a discussion of the corrective actions taken or planned (with a time schedule for completion) to prevent recurrence of the sampling or measurement problem;
- 5.3.1.1.6. Description of blending, if any. If the Discharger blends, it shall describe the duration of blending events and certify whether the blending complied with all conditions for blending;

- 5.3.1.1.7. Description of other bypasses, if any. If the Discharger bypasses any treatment units (other than blending), it shall describe the duration of the bypasses and effluent quality during those times; and
- 5.3.1.1.8. Signature. The transmittal letter shall be signed in accordance with Attachment D, Provision 5.2.
- 5.3.1.2. **Compliance Evaluation Summary.** Each self-monitoring report shall include a compliance evaluation summary that addresses each parameter for which the permit specifies effluent limitations, the number of samples taken during the monitoring period, and the number of samples that exceed the effluent limitations.
- 5.3.1.3. **More Frequent Monitoring.** If the Discharger monitors any pollutant more frequently than required by the MRP, the Discharger shall include the results of such monitoring in the calculation and reporting of the data submitted in the self-monitoring report.
- 5.3.1.4. **Analysis Results**
- 5.3.1.4.1. **Tabulation.** Each self-monitoring report shall include tabulations of all required analyses and observations, including parameters, dates, times, sample stations, types of samples, test results, method detection limits, method minimum levels, and method reporting levels (if applicable), signed by the laboratory director or other responsible official.
- 5.3.1.4.2. **Multiple Samples.** Unless the MRP specifies otherwise, when determining compliance with effluent limitations (other than instantaneous effluent limitations) and more than one sample result is available, the Discharger shall compute the arithmetic mean. If the data set contains one or more results that are “Detected, but Not Quantified (DNQ) or “Not Detected” (ND), the Discharger shall instead compute the median in accordance with the following procedure:
- 5.3.1.4.2.1. The data set shall be ranked from low to high, reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
- 5.3.1.4.2.2. The median of the data set shall be determined. If the data set has an odd number of data points, the median is the middle value. If the data set has an even number of data points, the median is the average of the two values around the middle, unless one or both of these values is ND or DNQ, in which case the median shall be the lower of the two results (where DNQ is lower than a quantified value and ND is lower than DNQ).

5.3.1.4.3. **Duplicate Samples.** The Discharger shall report the average of duplicate sample analyses when reporting for a single sample result (or the median if one or more of the duplicates is DNQ or ND [see Provision 5.3.1.4.2, above]). For bacteria indicators, the Discharger shall report the geometric mean of the duplicate analyses.

5.3.1.4.4. **Dioxin-TEQ.** The Discharger shall report for each dioxin and furan congener the analytical results of effluent monitoring, including the reporting level, the method detection limit, and the measured concentration. The Discharger shall report all measured values of individual congeners, including data qualifiers. When calculating dioxin-TEQ, the Discharger shall set congener concentrations below the minimum levels (MLs) to zero. The Discharger shall calculate and report dioxin-TEQ using the following formula, where the MLs, toxicity equivalency factors (TEFs), and bioaccumulation equivalency factors (BEFs) are as provided in Table A:

$$\text{Dioxin-TEQ} = \sum (C_x \times \text{TEF}_x \times \text{BEF}_x)$$

where: C_x = measured or estimated concentration of congener x
 TEF_x = toxicity equivalency factor for congener x
 BEF_x = bioaccumulation equivalency factor for congener x

Table A
Minimum Levels, Toxicity Equivalency Factors,
and Bioaccumulation Equivalency Factors

Dioxin or Furan Congener	Minimum Level (pg/L)	2005 Toxicity Equivalency Factor (TEF)	Bioaccumulation Equivalency Factor (BEF)
2,3,7,8-TCDD	10	1.0	1.0
1,2,3,7,8-PeCDD	50	1.0	0.9
1,2,3,4,7,8-HxCDD	50	0.1	0.3
1,2,3,6,7,8-HxCDD	50	0.1	0.1
1,2,3,7,8,9-HxCDD	50	0.1	0.1
1,2,3,4,6,7,8-HpCDD	50	0.01	0.05
OCDD	100	0.0003	0.01
2,3,7,8-TCDF	10	0.1	0.8
1,2,3,7,8-PeCDF	50	0.03	0.2
2,3,4,7,8-PeCDF	50	0.3	1.6
1,2,3,4,7,8-HxCDF	50	0.1	0.08
1,2,3,6,7,8-HxCDF	50	0.1	0.2
1,2,3,7,8,9-HxCDF	50	0.1	0.6
2,3,4,6,7,8-HxCDF	50	0.1	0.7
1,2,3,4,6,7,8-HpCDF	50	0.01	0.01
1,2,3,4,7,8,9-HpCDF	50	0.01	0.4
OCDF	100	0.0003	0.02

- 5.3.1.5. **Results Not Yet Available.** The Discharger shall make all reasonable efforts to obtain analytical data for required parameter sampling in a timely manner. Certain analyses may require additional time to complete analytical processes and report results. In these cases, the Discharger shall describe the circumstances in the self-monitoring report and include the data for these parameters and relevant discussions of any violations in the next self-monitoring report due after the results are available.
- 5.3.1.6. **Annual Self-Monitoring Reports.** By the date specified in the MRP, the Discharger shall submit an annual self-monitoring report covering the previous calendar year. The report shall contain the following:
- 5.3.1.6.1. Comprehensive discussion of treatment plant performance, including documentation of any blending or other bypass events, and compliance with the permit. This discussion shall include any corrective actions taken or planned, such as changes to facility equipment or operation practices that may be needed to achieve compliance, and any other actions taken or planned that are intended to improve the performance and reliability of wastewater collection, treatment, or disposal practices;
 - 5.3.1.6.2. List of approved analyses, including the following:
 - 5.3.1.6.2.1. List of analyses for which the Discharger is certified;
 - 5.3.1.6.2.2. List of analyses performed for the Discharger by a separate certified laboratory (copies of reports signed by the laboratory director of that laboratory need not be submitted but shall be retained onsite); and
 - 5.3.1.6.2.3. List of “waived” analyses, as approved;
 - 5.3.1.6.3. Plan view drawing or map showing the Discharger’s facility, flow routing, and sampling and observation station locations; and
 - 5.3.1.6.4. Results of facility report reviews. The Discharger shall regularly review, revise, and update, as necessary, the Operation and Maintenance Manual, Contingency Plan, Spill Prevention Plan, and Wastewater Facilities Status Report so these documents remain useful and relevant to current practices. At a minimum, reviews shall be conducted annually. The Discharger shall describe or summarize its review and evaluation procedures, recommended or planned actions, and estimated time schedule for implementing these actions. The Discharger shall complete changes to these documents to ensure that they remain up-to-date.

5.4. Compliance Schedules – Not supplemented

5.5. Twenty-Four Hour Reporting – Supplement to Attachment D, Provision 5.5

5.5.1. Oil or Other Hazardous Material Spills

- 5.5.1.1. Within 24 hours of becoming aware of a spill of oil or other hazardous material not contained onsite and completely cleaned up, the Discharger shall report as follows:
 - 5.5.1.1.1. If the spill exceeds reportable quantities for hazardous materials listed in 40 C.F.R. part 302. The Discharger shall call the California Office of Emergency Services (800 852-7550).
 - 5.5.1.1.2. If the spill does not exceed reportable quantities for hazardous materials listed in 40 C.F.R., part 302, the Discharger shall call the Regional Water Board (510-622-2369).
- 5.5.1.2. The Discharger shall submit a written report to the Regional Water Board within five working days following either of the above telephone notifications unless directed otherwise by Regional Water Board staff. A report submitted electronically is acceptable. The written report shall include the following:
 - 5.5.1.2.1. Date and time of spill, and duration if known;
 - 5.5.1.2.2. Location of spill (street address or description of location);
 - 5.5.1.2.3. Nature of material spilled;
 - 5.5.1.2.4. Quantity of material spilled;
 - 5.5.1.2.5. Receiving water body affected, if any;
 - 5.5.1.2.6. Cause of spill;
 - 5.5.1.2.7. Estimated size of affected area;
 - 5.5.1.2.8. Observed impacts to receiving waters (e.g., oil sheen, fish kill, water discoloration);
 - 5.5.1.2.9. Corrective actions taken to contain, minimize, or clean up the spill;
 - 5.5.1.2.10. Future corrective actions planned to prevent recurrence, and implementation schedule; and
 - 5.5.1.2.11. Persons or agencies notified.

5.5.2. **Unauthorized Municipal Wastewater Treatment Plant Discharges**¹

5.5.2.1. **Two-Hour Notification.** For any unauthorized discharge that enters a drainage channel or surface water, the Discharger shall, as soon as possible, but not later than two hours after becoming aware of the discharge, notify the California Office of Emergency Services (800-852-7550) and the local health officer or director of environmental health with jurisdiction over the affected water body. Notification shall include the following:

- 5.5.2.1.1. Incident description and cause;
- 5.5.2.1.2. Location of threatened or involved waterways or storm drains;
- 5.5.2.1.3. Date and time that the unauthorized discharge started;
- 5.5.2.1.4. Estimated quantity and duration of the unauthorized discharge (to the extent known), and estimated amount recovered;
- 5.5.2.1.5. Level of treatment prior to discharge (e.g., raw wastewater, primary-treated wastewater, or undisinfected secondary-treated wastewater); and
- 5.5.2.1.6. Identity of person reporting the unauthorized discharge.

5.5.2.2. **Five-Day Written Report.** Within five business days following the two-hour notification, the Discharger shall submit a written report that includes, in addition to the information listed in Provision 5.5.2.1, above, the following:

- 5.5.2.2.1. Methods used to delineate the geographical extent of the unauthorized discharge within receiving waters;
- 5.5.2.2.2. Efforts implemented to minimize public exposure to the unauthorized discharge;
- 5.5.2.2.3. Visual observations of the impacts (if any) noted in the receiving waters (e.g., fish kill, discoloration of receiving water) and extent of sampling if conducted;
- 5.5.2.2.4. Corrective measures taken to minimize the impact of the unauthorized discharge;

¹ California Code of Regulations, Title 23, section 2250(b), defines an unauthorized discharge to be a discharge, not regulated by waste discharge requirements, of treated, partially-treated, or untreated wastewater resulting from the intentional or unintentional diversion of wastewater from a collection, treatment, or disposal system.

- 5.5.2.2.5. Measures to be taken to minimize the potential for a similar unauthorized discharge in the future;
- 5.5.2.2.6. Summary of Spill Prevention Plan or Operation and Maintenance Manual modifications to be made, if necessary, to minimize the potential for future unauthorized discharges; and
- 5.5.2.2.7. Quantity and duration of the unauthorized discharge, and the amount recovered.

5.6. Planned Changes – Not supplemented

5.7. Anticipated Noncompliance – Not supplemented

5.8. Other Noncompliance – Not supplemented

5.9. Other Information – Not supplemented

6. STANDARD PROVISIONS – ENFORCEMENT – NOT SUPPLEMENTED

7. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS – NOT SUPPLEMENTED

8. DEFINITIONS – ADDITION TO ATTACHMENT D

More definitions can be found in Attachment A of this NPDES Permit.

8.1. Arithmetic Calculations

- 8.1.1. **Geometric Mean.** The antilog of the log mean or the back-transformed mean of the logarithmically transformed variables, which is equivalent to the multiplication of the antilogarithms. The geometric mean can be calculated with either of the following equations:

$$\text{Geometric Mean} = \text{Anti log} (1/N \sum \text{Log } C_i)$$

or

$$\text{Geometric Mean} = (C_1 \times C_2 \times \dots \times C_N)^{1/N}$$

Where “N” is the number of data points for the period analyzed and “C” is the concentration for each of the “N” data points.

- 8.1.2. **Mass Emission Rate.** The rate of discharge expressed in mass. The mass emission rate is obtained from the following calculation for any calendar day:

$$\text{Mass emission rate (lb/day)} = \frac{8.345}{N} \sum_{i=1}^N Q_i C_i$$

$$\text{Mass emission rate (kg/day)} = \frac{3.785}{N} \sum_{i=1}^N Q_i C_i$$

In which “N” is the number of samples analyzed in any calendar day and “Q_i” and “C_i” are the flow rate (MGD) and the constituent concentration (mg/L) associated with each of the “N” grab samples that may be taken in any calendar day. If a composite sample is taken, “C_i” is the concentration measured in the composite sample and “Q_i” is the average flow rate occurring during the period over which the samples are composited. The daily concentration of a constituent measured over any calendar day shall be determined from the flow weighted average of the same constituent in the combined waste streams as follows:

$$C_d = \text{Average daily concentration} = \frac{1}{Q_t} \sum_{i=1}^N Q_i C_i$$

In which “N” is the number of component waste streams and “Q” and “C” are the flow rate (MGD) and the constituent concentration (mg/L) associated with each of the “N” waste streams. “Q_t” is the total flow rate of the combined waste streams.

- 8.1.3. **Removal Efficiency.** The ratio of pollutants removed by the treatment facilities to pollutants entering the treatment facilities (expressed as a percentage). The Discharger shall determine removal efficiencies using monthly averages (by calendar month unless otherwise specified) of pollutant concentration of influent and effluent samples collected at about the same time and using the following equation (or its equivalent):

$$\text{Removal Efficiency (\%)} = 100 \times [1 - (\text{Effluent Concentration} / \text{Influent Concentration})]$$

- 8.2. **Blending** – the practice of bypassing biological treatment units and recombining the bypass wastewater with biologically-treated wastewater.
- 8.3. **Composite Sample** – a sample composed of individual grab samples collected manually or by an automatic sampling device on the basis of time or flow as specified in the MRP. For flow-based composites, the proportion of each grab sample included in the composite sample shall be within plus or minus five percent (+/-5%) of the representative flow of the waste stream being measured at the time of grab sample collection. Alternatively, equal volume grab samples may be individually analyzed with the flow-weighted average calculated by averaging flow-weighted ratios of each grab sample analytical result. Grab samples comprising time-based composite samples shall be collected at intervals not greater than those specified in the MRP. The quantity of each grab sample comprising a time-

based composite sample shall be a set of flow proportional volumes as specified in the MRP. If a particular time-based or flow-based composite sampling protocol is not specified in the MRP, the Discharger shall determine and implement the most representative protocol.

- 8.4. Duplicate Sample** – a second sample taken from the same source and at the same time as an initial sample (such samples are typically analyzed identically to measure analytical variability).
- 8.5. Grab Sample** – an individual sample collected during a short period not exceeding 15 minutes. Grab samples represent only the condition that exists at the time the sample is collected.
- 8.6. Overflow** – the intentional or unintentional spilling or forcing out of untreated or partially-treated waste from a transport system (e.g., through manholes, at pump stations, or at collection points) upstream of the treatment plant headworks or from any part of a treatment plant.
- 8.7. Priority Pollutants** – those constituents referred to in 40 C.F.R. part 122 as promulgated in the Federal Register, Vol. 65, No. 97, Thursday, May 18, 2000, also known as the California Toxics Rule.
- 8.8. Untreated waste** – raw wastewater.

Table B
List of Monitoring Parameters, Analytical Methods, and Minimum Levels (µg/L)^[1]

CTR No.	Pollutant / Parameter	Analytical Method ^[2]	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVAA	DCP
1	Antimony	204.2	-	-	-	-	10	5	50	0.5	5	0.5	-	1000
2	Arsenic	206.3	-	-	-	20	-	2	10	2	2	1	-	1000
3	Beryllium	-	-	-	-	-	20	0.5	2	0.5	1	-	-	1000
4	Cadmium	200 or 213	-	-	-	-	10	0.5	10	0.25	0.5	-	-	1000
5a	Chromium (III)	SM 3500	-	-	-	-	-	-	-	-	-	-	-	-
5b	Chromium (VI)	SM 3500	-	-	-	10	5	-	-	-	-	-	-	1000
	Chromium (total) ^[3]	SM 3500	-	-	-	-	50	2	10	0.5	1	-	-	1000
6	Copper	200.9	-	-	-	-	25	5	10	0.5	2	-	-	1000
7	Lead	200.9	-	-	-	-	20	5	5	0.5	2	-	-	10,000
8	Mercury	1631 ^[4]	-	-	-	-	-	-	-	-	-	-	-	-
9	Nickel	249.2	-	-	-	-	50	5	20	1	5	-	-	1000
10	Selenium	200.8 or SM 3114B or C	-	-	-	-	-	5	10	2	5	1	-	1000
11	Silver	272.2	-	-	-	-	10	1	10	0.25	2	-	-	1000
12	Thallium	279.2	-	-	-	-	10	2	10	1	5	-	-	1000
13	Zinc	200 or 289	-	-	-	-	20	-	20	1	10	-	-	-
14	Cyanide	SM 4500 CN- C or I	-	-	-	5	-	-	-	-	-	-	-	-
15	Asbestos (only required for dischargers to MUN waters) ^[5]	100.2 ^[6]	-	-	-	-	-	-	-	-	-	-	-	-
16	2,3,7,8-TCDD and 17 congeners (Dioxin)	1613	-	-	-	-	-	-	-	-	-	-	-	-
17	Acrolein	603	2.0	5	-	-	-	-	-	-	-	-	-	-
18	Acrylonitrile	603	2.0	2	-	-	-	-	-	-	-	-	-	-
19	Benzene	602	0.5	2	-	-	-	-	-	-	-	-	-	-
33	Ethylbenzene	602	0.5	2	-	-	-	-	-	-	-	-	-	-
39	Toluene	602	0.5	2	-	-	-	-	-	-	-	-	-	-
20	Bromoform	601	0.5	2	-	-	-	-	-	-	-	-	-	-

CTR No.	Pollutant / Parameter	Analytical Method ^[2]	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVAA	DCP
21	Carbon Tetrachloride	601	0.5	2	-	-	-	-	-	-	-	-	-	-
22	Chlorobenzene	601	0.5	2	-	-	-	-	-	-	-	-	-	-
23	Chlorodibromomethane	601	0.5	2	-	-	-	-	-	-	-	-	-	-
24	Chloroethane	601	0.5	2	-	-	-	-	-	-	-	-	-	-
25	2-Chloroethylvinyl Ether	601	1	1	-	-	-	-	-	-	-	-	-	-
26	Chloroform	601	0.5	2	-	-	-	-	-	-	-	-	-	-
75	1,2-Dichlorobenzene	601	0.5	2	-	-	-	-	-	-	-	-	-	-
76	1,3-Dichlorobenzene	601	0.5	2	-	-	-	-	-	-	-	-	-	-
77	1,4-Dichlorobenzene	601	0.5	2	-	-	-	-	-	-	-	-	-	-
27	Dichlorobromomethane	601	0.5	2	-	-	-	-	-	-	-	-	-	-
28	1,1-Dichloroethane	601	0.5	1	-	-	-	-	-	-	-	-	-	-
29	1,2-Dichloroethane	601	0.5	2	-	-	-	-	-	-	-	-	-	-
30	1,1-Dichloroethylene or 1,1-Dichloroethene	601	0.5	2	-	-	-	-	-	-	-	-	-	-
31	1,2-Dichloropropane	601	0.5	1	-	-	-	-	-	-	-	-	-	-
32	1,3-Dichloropropylene or 1,3-Dichloropropene	601	0.5	2	-	-	-	-	-	-	-	-	-	-
34	Methyl Bromide or Bromomethane	601	1.0	2	-	-	-	-	-	-	-	-	-	-
35	Methyl Chloride or Chloromethane	601	0.5	2	-	-	-	-	-	-	-	-	-	-
36	Methylene Chloride or Dichloromethane	601	0.5	2	-	-	-	-	-	-	-	-	-	-
37	1,1,2,2-Tetrachloroethane	601	0.5	1	-	-	-	-	-	-	-	-	-	-
38	Tetrachloroethylene	601	0.5	2	-	-	-	-	-	-	-	-	-	-
40	1,2-Trans-Dichloroethylene	601	0.5	1	-	-	-	-	-	-	-	-	-	-
41	1,1,1-Trichloroethane	601	0.5	2	-	-	-	-	-	-	-	-	-	-
42	1,1,2-Trichloroethane	601	0.5	2	-	-	-	-	-	-	-	-	-	-
43	Trichloroethene	601	0.5	2	-	-	-	-	-	-	-	-	-	-
44	Vinyl Chloride	601	0.5	2	-	-	-	-	-	-	-	-	-	-
45	2-Chlorophenol	604	2	5	-	-	-	-	-	-	-	-	-	-

CTR No.	Pollutant / Parameter	Analytical Method ^[2]	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVAA	DCP
46	2,4-Dichlorophenol	604	1	5	-	-	-	-	-	-	-	-	-	-
47	2,4-Dimethylphenol	604	1	2	-	-	-	-	-	-	-	-	-	-
48	2-Methyl-4,6-Dinitrophenol or Dinitro-2-methylphenol	604	10	5	-	-	-	-	-	-	-	-	-	-
49	2,4-Dinitrophenol	604	5	5	-	-	-	-	-	-	-	-	-	-
50	2-Nitrophenol	604	-	10	-	-	-	-	-	-	-	-	-	-
51	4-Nitrophenol	604	5	10	-	-	-	-	-	-	-	-	-	-
52	3-Methyl-4-Chlorophenol	604	5	1	-	-	-	-	-	-	-	-	-	-
53	Pentachlorophenol	604	1	5	-	-	-	-	-	-	-	-	-	-
54	Phenol	604	1	1	-	50	-	-	-	-	-	-	-	-
55	2,4,6-Trichlorophenol	604	10	10	-	-	-	-	-	-	-	-	-	-
56	Acenaphthene	610 HPLC	1	1	0.5	-	-	-	-	-	-	-	-	-
57	Acenaphthylene	610 HPLC	-	10	0.2	-	-	-	-	-	-	-	-	-
58	Anthracene	610 HPLC	-	10	2	-	-	-	-	-	-	-	-	-
60	Benzo(a)Anthracene or 1,2 Benzanthracene	610 HPLC	10	5	-	-	-	-	-	-	-	-	-	-
61	Benzo(a)Pyrene	610 HPLC	-	10	2	-	-	-	-	-	-	-	-	-
62	Benzo(b) Fluoranthene or 3,4 Benzofluoranthene	610 HPLC	-	10	10	-	-	-	-	-	-	-	-	-
63	Benzo(ghi)Perylene	610 HPLC	-	5	0.1	-	-	-	-	-	-	-	-	-
64	Benzo(k)Fluoranthene	610 HPLC	-	10	2	-	-	-	-	-	-	-	-	-
74	Dibenzo(a,h)Anthracene	610 HPLC	-	10	0.1	-	-	-	-	-	-	-	-	-
86	Fluoranthene	610 HPLC	10	1	0.05	-	-	-	-	-	-	-	-	-
87	Fluorene	610 HPLC	-	10	0.1	-	-	-	-	-	-	-	-	-
92	Indeno(1,2,3-cd)Pyrene	610 HPLC	-	10	0.05	-	-	-	-	-	-	-	-	-
100	Pyrene	610 HPLC	-	10	0.05	-	-	-	-	-	-	-	-	-
68	Bis(2-Ethylhexyl)Phthalate	606 or 625	10	5	-	-	-	-	-	-	-	-	-	-
70	Butylbenzyl Phthalate	606 or 625	10	10	-	-	-	-	-	-	-	-	-	-
79	Diethyl Phthalate	606 or 625	10	2	-	-	-	-	-	-	-	-	-	-
80	Dimethyl Phthalate	606 or 625	10	2	-	-	-	-	-	-	-	-	-	-
81	Di-n-Butyl Phthalate	606 or 625	-	10	-	-	-	-	-	-	-	-	-	-

CTR No.	Pollutant / Parameter	Analytical Method ^[2]	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVAA	DCP
84	Di-n-Octyl Phthalate	606 or 625	-	10	-	-	-	-	-	-	-	-	-	-
59	Benzidine	625	-	5	-	-	-	-	-	-	-	-	-	-
65	Bis(2-Chloroethoxy)Methane	625	-	5	-	-	-	-	-	-	-	-	-	-
66	Bis(2-Chloroethyl)Ether	625	10	1	-	-	-	-	-	-	-	-	-	-
67	Bis(2-Chloroisopropyl) Ether	625	10	2	-	-	-	-	-	-	-	-	-	-
69	4-Bromophenyl Phenyl Ether	625	10	5	-	-	-	-	-	-	-	-	-	-
71	2-Chloronaphthalene	625	-	10	-	-	-	-	-	-	-	-	-	-
72	4-Chlorophenyl Phenyl Ether	625	-	5	-	-	-	-	-	-	-	-	-	-
73	Chrysene	625	-	10	5	-	-	-	-	-	-	-	-	-
78	3,3'-Dichlorobenzidine	625	-	5	-	-	-	-	-	-	-	-	-	-
82	2,4-Dinitrotoluene	625	10	5	-	-	-	-	-	-	-	-	-	-
83	2,6-Dinitrotoluene	625	-	5	-	-	-	-	-	-	-	-	-	-
85	1,2-Diphenylhydrazine ^[7]	625	-	1	-	-	-	-	-	-	-	-	-	-
88	Hexachlorobenzene	625	5	1	-	-	-	-	-	-	-	-	-	-
89	Hexachlorobutadiene	625	5	1	-	-	-	-	-	-	-	-	-	-
90	Hexachlorocyclopentadiene	625	5	5	-	-	-	-	-	-	-	-	-	-
91	Hexachloroethane	625	5	1	-	-	-	-	-	-	-	-	-	-
93	Isophorone	625	10	1	-	-	-	-	-	-	-	-	-	-
94	Naphthalene	625	10	1	0.2	-	-	-	-	-	-	-	-	-
95	Nitrobenzene	625	10	1	-	-	-	-	-	-	-	-	-	-
96	N-Nitrosodimethylamine	625	10	5	-	-	-	-	-	-	-	-	-	-
97	N-Nitrosodi-n-Propylamine	625	10	5	-	-	-	-	-	-	-	-	-	-
98	N-Nitrosodiphenylamine	625	10	1	-	-	-	-	-	-	-	-	-	-
99	Phenanthrene	625	-	5	0.05	-	-	-	-	-	-	-	-	-
101	1,2,4-Trichlorobenzene	625	1	5	-	-	-	-	-	-	-	-	-	-
102	Aldrin	608	0.005	-	-	-	-	-	-	-	-	-	-	-
103	α-BHC	608	0.01	-	-	-	-	-	-	-	-	-	-	-
104	β-BHC	608	0.005	-	-	-	-	-	-	-	-	-	-	-
105	γ-BHC (Lindane)	608	0.02	-	-	-	-	-	-	-	-	-	-	-
106	δ-BHC	608	0.005	-	-	-	-	-	-	-	-	-	-	-

CTR No.	Pollutant / Parameter	Analytical Method ^[2]	GC	GC MS	LC	Color	FAA	GFAA	ICP	ICP MS	SPGF AA	HYD RIDE	CVAA	DCP
107	Chlordane	608	0.1	-	-	-	-	-	-	-	-	-	-	-
108	4,4'-DDT	608	0.01	-	-	-	-	-	-	-	-	-	-	-
109	4,4'-DDE	608	0.05	-	-	-	-	-	-	-	-	-	-	-
110	4,4'-DDD	608	0.05	-	-	-	-	-	-	-	-	-	-	-
111	Dieldrin	608	0.01	-	-	-	-	-	-	-	-	-	-	-
112	Endosulfan (alpha)	608	0.02	-	-	-	-	-	-	-	-	-	-	-
113	Endosulfan (beta)	608	0.01	-	-	-	-	-	-	-	-	-	-	-
114	Endosulfan Sulfate	608	0.05	-	-	-	-	-	-	-	-	-	-	-
115	Endrin	608	0.01	-	-	-	-	-	-	-	-	-	-	-
116	Endrin Aldehyde	608	0.01	-	-	-	-	-	-	-	-	-	-	-
117	Heptachlor	608	0.01	-	-	-	-	-	-	-	-	-	-	-
118	Heptachlor Epoxide	608	0.01	-	-	-	-	-	-	-	-	-	-	-
119-125	PCBs: Aroclors 1016, 1221, 1232, 1242, 1248, 1254, 1260	608	0.5	-	-	-	-	-	-	-	-	-	-	-
126	Toxaphene	608	0.5	-	-	-	-	-	-	-	-	-	-	-

Footnotes:

- ^[1] Minimum levels are from the *State Implementation Policy*. They are the concentration of the lowest calibration standard for that technique based on a survey of contract laboratories. Laboratory techniques are defined as follows: GC = Gas Chromatography; GCMS = Gas Chromatography/Mass Spectrometry; LC = High Pressure Liquid Chromatography; Color = Colorimetric; FAA = Flame Atomic Absorption; GFAA = Graphite Furnace Atomic Absorption; ICP = Inductively Coupled Plasma; ICPMS = Inductively Coupled Plasma/Mass Spectrometry; SPGFAA = Stabilized Platform Graphite Furnace Atomic Absorption (i.e., U.S. EPA 200.9); Hydride = Gaseous Hydride Atomic Absorption; CVAA = Cold Vapor Atomic Absorption; DCP = Direct Current Plasma.
- ^[2] The suggested method is the U.S. EPA Method unless otherwise specified (SM = Standard Methods). The Discharger may use another U.S. EPA-approved or recognized method if that method has a level of quantification below the applicable water quality objective. Where no method is suggested, the Discharger has the discretion to use any standard method.
- ^[3] Analysis for total chromium may be substituted for analysis of chromium (III) and chromium (VI) if the concentration measured is below the lowest hexavalent chromium criterion (11 ug/l).
- ^[4] The Discharger shall use ultra-clean sampling (U.S. EPA Method 1669) and ultra-clean analytical methods (U.S. EPA Method 1631) for mercury monitoring. The minimum level for mercury is 2 ng/l (or 0.002 ug/l).
- ^[5] MUN = Municipal and Domestic Supply. This designation, if applicable, is in the Findings of the permit.
- ^[6] Determination of Asbestos Structures over 10 [micrometers] in Length in Drinking Water Using MCE Filters, U.S. EPA 600/R-94-134, June 1994.
- ^[7] Detected as azobenzene.

STATE WATER RESOURCES CONTROL BOARD
1001 I Street, Sacramento, California 95814
ORDER WQ 2022-0103-DWQ
STATEWIDE WASTE DISCHARGE REQUIREMENTS
GENERAL ORDER FOR SANITARY SEWER SYSTEMS

This Order was adopted by the State Water Resources Control Board on December 6, 2022.
This Order shall become effective **180 days after the Adoption Date of this General Order**, on June 5, 2023.
The Enrollee shall comply with the requirements of this Order upon the Effective Date of this General Order.

This General Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, protect the Enrollee from liability under federal, state, or local laws, nor create a vested right for the Enrollee to continue the discharge of waste.

CERTIFICATION

I, Jeanine Townsend, Clerk to the Board, do hereby certify that this Order with all attachments is a full, true, and correct copy of the Order adopted by the State Water Board on December 6, 2022.

AYE: Chair E. Joaquin Esquivel
Vice Chair Dorene D'Adamo
Board Member Sean Maguire
Board Member Laurel Firestone
Board Member Nichole Morgan

NAY: None

ABSENT: None

ABSTAIN: None

Courtney Tyler for
Jeanine Townsend
Clerk to the Board

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

Table of Contents

- 1. Introduction 4
- 2. Regulatory Coverage and Application Requirements 5
 - 2.1. Requirements for Continuation of Existing Regulatory Coverage 5
 - 2.2. Requirements for New Regulatory Coverage..... 5
 - 2.3. Regulatory Coverage Transfer 7
- 3. Findings 7
 - 3.1. Legal Authorities 7
 - 3.2. General 11
 - 3.3. Water Quality Control Plans, Policies and Resolutions 14
 - 3.4. California Environmental Quality Act..... 16
 - 3.5. State Water Board Funding Assistance for Compliance with Water Board Water Quality Orders 16
 - 3.6. Notification to Interested Parties 17
- 4. Prohibitions 17
 - 4.1 Discharge of Sewage from a Sanitary Sewer System..... 17
 - 4.2. Discharge of Sewage to Waters of the State..... 17
 - 4.3. Discharge of Sewage Creating a Nuisance..... 18
- 5. Specifications..... 18
 - 5.1. Designation of a Legally Responsible Official 18
 - 5.2. Sewer System Management Plan Development and Implementation..... 18
 - 5.3. Certification of Sewer System Management Plan and Plan Updates..... 19
 - 5.4. Sewer System Management Plan Audits 19
 - 5.5. Six-Year Sewer System Management Plan Update..... 21
 - 5.6. System Resilience..... 22
 - 5.7. Allocation of Resources 22
 - 5.8. Designation of Data Submitters..... 22
 - 5.9. Reporting Certification..... 22
 - 5.10. System Capacity 23
 - 5.11. System Performance Analysis 23
 - 5.12. Spill Emergency Response Plan and Remedial Actions 23
 - 5.13. Notification, Monitoring, Reporting and Recordkeeping Requirements 24
 - 5.14. Electronic Sanitary Sewer System Service Area Boundary Map..... 26
 - 5.15. Voluntary Reporting of Spills from Privately-Owned Sewer Laterals and/or Private Sanitary Sewer Systems 26
 - 5.16. Voluntary Notification of Spills from Privately-Owned Laterals and/or Systems to the California Office of Emergency Services 27
 - 5.17. Unintended Failure to Report 27

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

5.18. Duty to Report to Water Boards 27
5.19. Operation and Maintenance 27
6. Provisions 27
6.1. Enforcement Provisions 27
6.2. Other Regional Water Board Orders 30
6.3. Sewer System Management Plan Availability 31
6.4. Entry and Inspection 31

Table of Attachments

Attachment A – DefinitionsA-1
Attachment B – Application for EnrollmentB-1
Attachment C - Notice of Termination.....C-1
Attachment D – Sewer System Management Plan – Required ElementsD-1
Attachment E1 – Notification, Monitoring, Reporting and Recordkeeping RequirementsE1-1
Attachment E2 – Summary of Notification, Monitoring and Reporting Requirements.....E2-1
Attachment F – Regional Water Quality Control Board Contact Information F-1

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

1. INTRODUCTION

This General Order regulates sanitary sewer systems designed to convey sewage. For the purpose of this Order, a sanitary sewer system includes, but is not limited to, pipes, valves, pump stations, manholes, siphons, wet wells, diversion structures and/or other pertinent infrastructure, upstream of a wastewater treatment plant headworks. A sanitary sewer system includes:

- Laterals owned and/or operated by the Enrollee;
- Satellite sewer systems; and/or
- Temporary conveyance and storage facilities, including but not limited to temporary piping, vaults, construction trenches, wet wells, impoundments, tanks and diversion structures.

Sewage is untreated or partially treated domestic, municipal, commercial and/or industrial waste (including sewage sludge), and any mixture of these wastes with inflow or infiltration of stormwater or groundwater, conveyed in a sanitary sewer system. Sewage contains high levels of suspended solids, non-digested organic waste, pathogenic bacteria, viruses, toxic pollutants, nutrients, oxygen-demanding organic compounds, oils, grease, pharmaceuticals, and other harmful pollutants.

For the purpose of this General Order, a spill is a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure. Sewage and its associated wastewater spilled from a sanitary sewer system may threaten public health, beneficial uses of waters of the State, and the environment.

This General Order serves as statewide waste discharge requirements and supersedes the previous State Water Resources Control Board (State Water Board) Order 2006-0003-DWQ and amendments thereafter. All sections and attachments of this General Order are enforceable by the State Water Board and Regional Water Quality Control Boards (Regional Water Boards). Through this General Order, the State Water Board requires an Enrollee to:

- Comply with federal and state prohibitions of discharge of sewage to waters of the State, including federal waters of the United States;
- Comply with specifications, and notification, monitoring, reporting and recordkeeping requirements in this General Order that implement the federal Clean Water Act, the California Water Code (Water Code), water quality control plans (including Regional Water Board Basin Plans) and policies;
- Proactively operate and maintain resilient sanitary sewer systems to prevent spills;
- Eliminate discharges of sewage to waters of the State through effective implementation of a Sewer System Management Plan;
- Monitor, track, and analyze spills for ongoing system-specific performance improvements; and
- Report noncompliance with this General Order per reporting requirements.

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

An Enrollee is a public, private, or other non-governmental entity that has obtained approval for regulatory coverage under this General Order, including:

- A state agency, municipality, special district, or other public entity that owns and/or operates one or more sanitary sewer systems:
 - greater than one (1) mile in length (each individual sanitary sewer system);
 - one (1) mile or less in length where the State Water Board or a Regional Water Board requires regulatory coverage under this Order; or
- A federal agency, private company, or other non-governmental entity that owns and/or operates a sanitary sewer system of any size where the State Water Board or a Regional Water Board requires regulatory coverage under this Order in response to a history of spills, proximity to surface water, or other factors supporting regulatory coverage.

For the purpose of this Order, a sanitary sewer system includes only systems owned and/or operated by the Enrollee.

2. REGULATORY COVERAGE AND APPLICATION REQUIREMENTS

2.1. Requirements for Continuation of Existing Regulatory Coverage

To continue regulatory coverage from previous Order 2006-0003-DWQ under this General Order, **within the 60-days-prior-to the Effective Date of this General Order**, the Legally Responsible Official of an existing Enrollee shall electronically certify the Continuation of Existing Regulatory Coverage form in the online California Integrated Water Quality System (CIWQS) Sanitary Sewer System Database. The Legally Responsible Official will receive an automated CIWQS-issued Notice of Applicability email, confirming continuation of regulatory coverage under this General Order. All regulatory coverage under previous Order 2006-0003-DWQ will cease on the Effective Date of this Order.

An Enrollee continuing existing regulatory coverage is not required to submit a new application package or pay an application fee for enrollment under this General Order. The annual fee due date for continued regulatory coverage from previous Order 2006-0003-DWQ to this General Order remains unchanged.

A previous Enrollee of Order 2006-0003-DWQ that fails to certify the Continuation of Existing Regulatory Coverage form in the online CIWQS database by the Effective Date of this Order is considered a New Applicant, and will not have regulatory coverage for its sanitary sewer system(s) until:

- A new application package for system(s) enrollment is submitted per section 2.2 (Requirements for New Regulatory Coverage) below; and
- The new application package is approved per section 2.2.2 (Approval of Application Package (For New Applicants Only)).

2.2. Requirements for New Regulatory Coverage

No later than 60 days prior to commencing and/or assuming operation and maintenance responsibilities of a sanitary sewer system, a duly authorized representative that

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

maintains legal authority over the public or private sanitary sewer system is required to enroll under this General Order by submitting a complete application package as specified below and as provided in Attachment B (Application for Enrollment Form) of this General Order.

Unless required by a Regional Water Board, a public agency that owns a combined sewer system subject to the Combined Sewer Overflow Control Policy (33 U.S. Code § 1342(q)), is not required to enroll, under this Order, the portions of its sanitary sewer system(s) that collects combined sanitary wastewater and stormwater.

2.2.1. Application Package Requirements

The Application for Enrollment package for new applicants must include the following items:

- **Application for Enrollment Form.** The form in Attachment B of this General Order must be completed, signed, and certified by a Legally Responsible Official, in accordance with section 5.1 (Designation of a Legally Responsible Official) of this General Order. If an electronic Application for Enrollment form is available at the time of application, a new applicant shall submit its application form electronically; and
- **Application Fee.** A fee payable to the “State Water Resources Control Board” in accordance with the Fee Schedule in the California Code of Regulations, Title 23, section 2200, or subsequent fee regulations updates.

The application fee for this General Order is based on the sanitary sewer system’s threat to water quality and complexity designations of category 2C or 3C, which is assigned based on the population served by the system. The current Fee Schedule for sanitary sewer systems is listed under subdivision (a)(2) at the following website: [Fee Schedule](https://www.waterboards.ca.gov/resources/fees/water_quality/) (https://www.waterboards.ca.gov/resources/fees/water_quality/).

2.2.2. Approval of Application Package (For New Applicants Only)

The Deputy Director of the State Water Board, Division of Water Quality (Deputy Director) will consider approval of each complete Application for Enrollment package. The Deputy Director will issue a Notice of Applicability letter which serves as approved regulatory coverage for the new Enrollee.

If the submitted application package is not complete in accordance with section 2.2.1 (Application Package Requirements) of this General Order, the Deputy Director will send a response letter to the applicant outlining the application deficiencies. The applicant will have 60 days from the date of the response letter to correct the application deficiencies and submit the identified items necessary to complete the application package to the State Water Board.

2.2.3. Electronic Reporting Account for New Enrollee

Within 30 days after the date of the Approval of Complete Application Package for System Enrollment, a duly authorized representative for the Enrollee shall obtain a CIWQS Sanitary Sewer System Database user account by clicking the “User Registration” button and following the directions on the [CIWQS Login Page](#)

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

(<https://ciwqs.waterboards.ca.gov>). If additional assistance is needed to establish an online CIWQS user account, contact State Water Board staff by email at CIWQS@waterboards.ca.gov. The online user account will provide the Enrollee secure access to the online CIWQS database for electronic reporting.

2.3. Regulatory Coverage Transfer

Regulatory coverage under this General Order is not transferable to any person or party except after an existing Enrollee submits a written request for a regulatory coverage transfer to the Deputy Director, at least 60 days in advance of any proposed system ownership transfer. The written request must include a written agreement between the existing Enrollee and the new Enrollee containing:

- Acknowledgement that the transfer of ownership is solely of an existing system with an existing waste discharge identification (WDID) number;
- The specific ownership transfer date in which the responsibility and regulatory coverage transfer between the existing Enrollee and the new Enrollee becomes effective; and
- Acknowledgement that the existing Enrollee is liable for violations occurring up to the ownership transfer date and that the new Enrollee is liable for violations occurring on and after the ownership transfer date.

The Deputy Director will consider approval of the written request. If approved, the Deputy Director will issue a Notice of Applicability letter which serves as an approved transfer of regulatory coverage to the new Enrollee.

3. FINDINGS

3.1. Legal Authorities

3.1.1. Federal and State Regulatory Authority

The objective of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of the waters of the United States (33 U.S.C. 1251). The Water Code authorizes the State Water Board to implement the Clean Water Act in the State and to protect the quality of all waters of the State (Water Code sections 13000 and 13160).

3.1.2. Discharge of Sewage

A discharge of untreated or partially treated sewage is a discharge of waste as defined in Water Code section 13050(d) that could affect the quality of waters of the State and is subject to regulation by waste discharge requirements issued pursuant to Water Code section 13263 and Chapter 9, Division 3, Title 23 of the California Code of Regulations. A discharge of sewage may pollute and alter the quality of the waters of the State to a degree that unreasonably affects the beneficial uses of the receiving water body or facilities that serve those beneficial uses (Water Code section 13050(l)(1)).

3.1.3 Water Boards Authority to Require Technical Reports, Monitoring, and Reporting

Water Code sections 13267 and 13383 authorize the Regional Water Boards and the State Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. Water Code section 13267(b), authorizes the Regional Water Boards to “require any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region... or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of water within its region shall furnish, under penalty of perjury, technical or monitoring reports which the regional board requires...In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports.” Water Code section 13267(f) authorizes the State Water Board to require this information if it consults with the Regional Water Boards and determines that it will not duplicate the efforts of the Regional Water Boards. The State Water Board has consulted with the Regional Water Boards and made this determination.

The technical and monitoring reports required by this General Order and Attachment E (Notification, Monitoring, Reporting and Recordkeeping Requirements) are necessary to evaluate and ensure compliance with this General Order. The effort to develop required technical reports will vary depending on the system size and complexity and the needs of the specific technical report. The burden and cost of these reports are reasonable and consistent with the interest of the state in protecting water quality, which is the primary purpose of requiring the reports.

Water Code section 13383(a) authorizes the Water Boards to “establish monitoring, inspection, entry, reporting, and recordkeeping requirements... for any person who discharges, or proposes to discharge, to navigable waters, any person who introduces pollutants into a publicly owned treatment works, any person who owns or operates, or proposes to own or operate, a publicly owned treatment works or other treatment works treating domestic sewage, or any person who uses or disposes, or proposes to use or dispose, of sewage sludge.” Section 13383(b) continues, “the state board or the regional boards may require any person subject to this section to establish and maintain monitoring equipment or methods, including, where appropriate, biological monitoring methods, sample effluent as prescribed, and provide other information as may be reasonably required.”

Reporting of spills from privately owned sewer laterals and systems pursuant to section 5.15 (Voluntary Reporting of Spills from Privately-Owned Sewer Laterals and/or Private Sanitary Sewer Systems) of this General Order is authorized by Water Code section 13225(c) and encouraged by the State Water Board, wherein a local agency may investigate and report on any technical factors involved in water quality control provided the burden including costs of such reports bears a reasonable relationship to the need for the report and the benefits to be obtained therefrom. The burden of reporting private spills under section 5.15 (Voluntary Reporting of Spills from Privately-Owned Sewer Laterals and/or Private Sanitary Sewer Systems) is minimal and is outweighed by the benefit of providing Regional Water Boards an opportunity to respond to these spills

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

when an Enrollee, which in many cases has a contractual relationship with the owner of the private system, has knowledge of the spills.

3.1.4. Water Board Authority to Prescribe General Waste Discharge Requirements

Water Code section 13263(i) provides that the State Water Board may prescribe general waste discharge requirements for a category of discharges if the State Water Board finds or determines that:

- The discharges are produced by the same or similar operations;
- The discharges involve the same or similar types of waste;
- The discharges require the same or similar treatment standards; and
- The discharges are more appropriately regulated under general waste discharge requirements than individual waste discharge requirements.

Since 2006, the State Water Board has been regulating over 1,100 publicly owned sanitary sewer systems (See section 3.1.5 (Previous Statewide General Waste Discharge Requirements) of this General Order). California also has a large unknown number of unregulated privately owned sanitary sewer systems. All waste conveyed in publicly owned and privately owned sanitary sewer systems (as defined in this General Order) is comprised of untreated or partially treated domestic waste and/or industrial waste. Generally, sanitary sewer systems are designed and operated to convey waste by gravity or under pressure; system-specific design elements and system-specific operations do not change the common nature of the waste, the common threat to public health, or the common impacts on water quality. Spills of waste from a sanitary sewer system prior to reaching the ultimate downstream treatment facility are unauthorized and enforceable by the State Water Board and/or a Regional Water Board. Therefore, spills from sanitary sewer systems are more appropriately regulated under general waste discharge requirements.

As specified in Water Code sections 13263(a) and 13241, the implementation of requirements set forth in this Order is for the reasonable protection of past, present, and probable future beneficial uses of water and the prevention of nuisance. The requirements implement the water quality control plans (Basin Plans) for each Regional Water Board and take into account the environmental characteristics of sewer service areas and hydrographic units within the state. Additionally, the State Water Board has considered water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality, costs associated with compliance with these requirements, the need for developing housing within California, and the need to protect sources of drinking water and other water supplies.

3.1.5. Previous Statewide General Waste Discharge Requirements

On May 2, 2006, the State Water Board adopted Order 2006-0003-DWQ serving as Waste Discharge Requirements pursuant to Article 4, Chapter 4, Division 7 of the Water Code (commencing with section 13260) for inadvertent discharges to waters of the State. Order 2006-0003-DWQ prohibited discharges of untreated or partially treated sewage. Order 2006-0003-DWQ also required system-specific management, operation, and maintenance of publicly owned sewer systems greater than one mile in length.

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

To decrease the impacts on human health and the environment caused by sewage spills, the previous Order required enrollees to develop a rehabilitation and replacement plan that identifies system deficiencies and prioritizes short-term and long-term rehabilitation actions. The previous Order also required enrollees to:

1. Maintain information that can be used to establish and prioritize appropriate Sewer System Management Plan activities; and
2. Implement a proactive approach to reduce spills.

The previous Order required Sewer System Management Plan elements for “the proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management.”

On July 30, 2013, the State Water Board amended General Order 2006-0003-DWQ with Order WQ 2013-0058-EXEC, Amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

Many enrollees of Order 2006-0003-DWQ have already implemented proactive measures to reduce sewage spills. Other enrollees, however, still need technical assistance and funding to improve sanitary sewer system operation and maintenance for the reduction of sewage spills.

3.1.6. Existing Memorandum of Agreement with California Water Environment Association

The California Water Environment Association is a nonprofit organization dedicated to providing water industry certifications, training, and networking opportunities. The Association’s Technical Certification Program provides accredited sanitary sewer system operator certification for collection system operators and maintenance workers.

On February 10, 2016, the State Water Board entered into a collaborative agreement with the Association titled *Memorandum of Agreement Between the California State Water Resources Control Board and the California Water Environment Association - Training Regarding Requirements Set Forth in Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*. The Memorandum sets forth collaborative training necessary for regulated sanitary sewer system personnel to operate and maintain a well operating system and ensure full compliance with statewide sewer system regulations.

On March 15, 2018, the State Water Board and the California Water Environment Association amended the existing Memorandum of Agreement to include collaborative outreach and expand training needs associated with further updates to Water Board regulations for sanitary sewer systems. The State Water Board encourages further Agreement updates as necessary to support improved sewer system operations and the professionalism of collection system operators.

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

3.2. General

3.2.1. Waters of the State

Waters of the State include any surface water or groundwater, including saline waters, within the boundaries of the state as defined in Water Code section 13050(e), and are inclusive of waters of the United States.

3.2.2. Sanitary Sewer System Spill Threats to Public Health and Beneficial Uses

Sewage contains high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease and other pollutants. Sewage spills may cause a public nuisance, particularly when sewage is discharged to areas with high public exposure such as streets and surface waters used for drinking, irrigation, fishing, recreation, or other public consumption or contact uses.

More specifically, sanitary sewer spills may:

- Adversely affect aquatic life and/or threaten water quality when reaching receiving waters;
- Inadvertently release trash, including plastics;
- Impair the recreational use and aesthetic enjoyment of surface waters by polluting surface water or groundwater;
- Threaten public health through direct public exposure to bacteria, viruses, intestinal parasites, and other microorganisms that can cause serious illness such as gastroenteritis, hepatitis, cryptosporidiosis, and giardiasis;
- Negatively impact ecological receptors and biota within surface waters; and
- Cause nuisance including odors, closure of beaches and recreational areas, and property damage.

Sanitary sewer system spills may pollute receiving waters and threaten beneficial uses of surface water and groundwater. Potentially threatened beneficial uses include, but are not limited to the following (with associated acronym representations as included in statewide water quality control plans and Regional Water Boards' Basin Plans):

- Municipal and Domestic Supply (MUN)
- Water Contact Recreation (REC-1) and Non-Contact Water Recreation (REC-2)
- Cold Freshwater Habitat (COLD)
- Warm Freshwater Habitat (WARM)
- Native American Culture (CUL)
- Wildlife Habitat (WILD)
- Rare, Threatened, or Endangered Species (RARE)
- Spawning, Reproduction, and/or Early Development (SPWN)
- Wetland Habitat (WET)
- Agricultural Supply (AGR)
- Estuarine Habitat (EST)

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

- Commercial and Sport Fishing (COMM)
- Subsistence Fishing (SUB)
- Tribal Tradition and Culture (CUL)
- Tribal Subsistence Fishing (T-SUB)
- Aquaculture (AQUA)
- Marine Habitat (MAR)
- Preservation of Biological Habitats of Special Significance (BIOL)
- Migration of Aquatic Organisms (MIGR)
- Shellfish Harvesting (SHELL)
- Industrial Process Supply (PROC)
- Industrial Service Supply (IND)
- Hydropower Generation (POW)
- Navigation (NAV)
- Flood Peak Attenuation/Flood Water Storage (FLD)
- Water Quality Enhancement (WQE)
- Fresh Water Replenishment (FRSH)
- Groundwater Recharge (GWR)
- Inland Saline Water Habitat (SAL)

3.2.3. Proactive Sanitary Sewer System Management to Eliminate Spill Causes

Finding 3 of the previous Order, 2006-0003-DWQ, states: “Sanitary sewer systems experience periodic failures resulting in discharges that may affect waters of the state. There are many factors (including factors related to geology, design, construction methods and materials, age of the system, population growth, and system operation and maintenance), which affect the likelihood of an SSO [sanitary sewer overflow]. A proactive approach that requires Enrollees to ensure a system-wide operation, maintenance, and management plan is in place will reduce the number and frequency of SSOs within the state. This approach will in turn decrease the risk to human health and the environment caused by SSOs.”

Many spills are preventable through proactive attention on sanitary sewer system management using the best practices and technologies available to address major causes of spills, including but not limited to:

- Blockages from sources including but not limited to:
 - Fats, oils and grease;
 - Tree roots;
 - Rags, wipes and other paper, cloth and plastic products; and
 - Sediment and debris.
- Sewer system damage and exceedance of sewer system hydraulic capacity from identified system-specific environmental, and climate-change impacts, including but not limited to:

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

- Sea level rise impacts including flooding, coastal erosion, seawater intrusion, tidal inundation and submerged lands;
- Increased surface water flows due to higher intensity rain events;
- Flooding;
- Wildfires and wildfire induced impacts;
- Earthquake induced damage;
- Landslides; and
- Subsidence.
- Infrastructure deficiencies and failures, including but not limited to:
 - Pump station mechanical failures;
 - System age;
 - Construction material failures;
 - Manhole cover failures;
 - Structural failures; and
 - Lack of proper operation and maintenance.
- Insufficient system capacity (temporary or sustained), due to factors including but not limited to:
 - Excessive and/or increased storm or groundwater inflow/infiltration;
 - Insufficient capacity due to population increase and/or new connections from industrial, commercial and other system users; and
 - Stormwater capture projects utilizing a sanitary sewer system to convey stormwater to treatment facilities for reuse.
- Community impacts, including but not limited to:
 - Power outages;
 - Vandalism; and
 - Contractor-caused or other third party-caused damages.

3.2.4. Underground Sanitary Sewer System Leakage

Portions of some sanitary sewer systems may leak, causing underground exfiltration (exiting) of sewage from the system. Exfiltrated sewage that remains in the underground infrastructure trench and/or the soil matrix, and that does not discharge into waters of the State (surface water or groundwater) may not threaten beneficial uses.

Underground exfiltrated sewage may threaten beneficial uses if discharged to waters of the State. Exfiltrated sewage that discharges to groundwater may impact beneficial uses of groundwater and pollute groundwater supply. Additionally, if in close proximity, exfiltrated sewage may enter into a compromised underground drainage conveyance system that discharges into a water of the United States, or into groundwater that is hydrologically connected to (feeds into) a water of the United States, thus potentially causing: (1) a Clean Water Act violation, (2) threat and impact to beneficial uses, and/or (3) surface water pollution.

3.2.5. Proactive Sanitary Sewer System Management to Reduce Inflow and Infiltration

Excessive inflow (stormwater entering) and infiltration (groundwater seepage entering) to sanitary sewer systems is preventable through proactive sewer system management using the best practices and technologies available. The efficiency of the downstream wastewater treatment processes is dependent on the performance of the sanitary sewer system. When the structural integrity of a sanitary sewer system deteriorates, high volumes of inflow and infiltration can enter the sewer system. High levels of inflow and infiltration increase the hydraulic load on the downstream treatment plant, which can reduce treatment efficiency, lead to bypassing a portion of the treatment process, cause illegal discharge of partially treated effluent, or in extreme situations make biological treatment facilities inoperable (e.g., wash out the biological organisms that treat the waste).

3.3. Water Quality Control Plans, Policies and Resolutions

The nine Regional Water Boards have adopted region-specific water quality control plans (commonly referred to as Basin Plans) that designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve those objectives. The State Water Board has adopted statewide water quality control plans, policies and resolutions establishing statewide water quality objectives, implementation programs and initiatives.

3.3.1. State Water Board Antidegradation Policy

On October 28, 1968, the State Water Board adopted Resolution 68-16, titled Statement of Policy with Respect to Maintaining High Quality of Waters in California, which incorporates the federal antidegradation policy. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings.

The continued prohibition of sewage discharges from sanitary sewer systems into waters of the State aligns with Resolution 68-16. A sewage discharge from sanitary sewers to waters of the State is prohibited by this Order. Therefore, this Order does not allow degradation of waters of the State. In addition, this Order: (1) further expands the existing prohibition of sewage discharges to include waters of the State, in addition to waters of the United States as provided in previous Order 2006-0003-DWQ, and (2) enhances the ability for Water Board enforcement of violations of the established prohibitions.

3.3.2. State Water Board Sources of Drinking Water Policy

On May 19, 1988, the State Water Board adopted Resolution 88-63 (amended on February 1, 2006), titled Sources of Drinking Water, establishing state policy that all waters of the State, with certain exceptions, are suitable or potentially suitable for municipal or domestic supply.

3.3.3. State Water Board Cost of Compliance Resolution

On September 24, 2013, the State Water Board adopted Resolution 2013-0029, titled Directing Actions in Response to Efforts by Stakeholders on Reducing Costs of

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

Compliance While Maintaining Water Quality Protection. Through this resolution, the State Water Board committed to continued stakeholder engagement in identifying and implementing measures to reduce costs of compliance with regulatory orders while maintaining water quality protection and improving regulatory program outcomes.

3.3.4. State Water Board Human Right to Water Resolution

On February 16, 2016, the State Water Board adopted Resolution 2016-0010, titled Adopting the Human Right to Water as a Core Value and Directing its Implementation in Water Board Programs and Activities, addressing the human right to water as a core value and directing Water Board programs to implement requirements to support safe drinking water for all Californians.

On November 16, 2021, the State Water Board adopted Resolution 2021-0050 titled Condemning Racism, Xenophobia, Bigotry, and Racial Injustice, and Strengthening Commitment to Racial Equity, Diversity, Inclusion, Access, and Anti-racism. Among other actions, through Resolution 2021-0050, the State Water Board, in summary as corresponding to this General Order, reaffirms its commitment to its Human Right to Water resolution, upholding that every human being in California deserves safe, clean, affordable, and accessible water for human consumption, cooking, and sanitation purposes. Resolution 2021-0050 provides the State Water Board commitment to:

- Protect public health and beneficial uses of waterbodies in all communities, including communities disproportionately burdened by wastes discharge of waste to land and surface water;
- Restore impaired surface waterbodies and degraded aquifers; and
- Promote multi-benefit water quality projects.

Through Resolution 2021-0050, the State Water Board also commits to expanding implementation of its Climate Change Resolution to address the disproportionate effects of extreme hydrologic conditions and sea-level rise on Black, Indigenous, and people of color communities, prioritizing:

- The right to safe, clean, affordable, and accessible drinking water and sanitation;
- Sustainable management and protection of local groundwater resources;
- Healthy watersheds; and
- Access to surface waterbodies that support subsistence fishing.

On June 7, 2022, the State Water Board adopted a Resolution, titled Authorizing the Executive Director or Designee to Enter into One or More Multi-Year Contracts Up to a Combined Sum of \$4,000,000 for a Statewide Wastewater Needs Assessment, supporting the equitable access to sanitation for all Californians and implementation of Resolutions 2016-0010 and 2021-0050.

This General Order supports the State Water Board priority in collecting a comprehensive set of data for California's wastewater systems, including sanitary sewer systems. Data reported per the requirements of this Order will be used with data from other Water Boards' programs, to further develop criteria and create a statewide risk

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

framework to prioritize critical funding and infrastructure investments for California's most vulnerable populations, including disadvantaged or severely disadvantaged communities with inadequate or failing sanitation systems and threatened access to healthy drinking water supplies.

3.3.5. State Water Board Open Data Resolution

On July 10, 2018, the State Water Board adopted Resolution 2018-0032, titled Adopting Principles of Open Data as a Core Value and Directing Programs and Activities to Implement Strategic Actions to Improve Data Accessibility and Associated Innovation, directing regulatory programs to assure all monitoring and reporting requirements support the State Water Boards' Open Data Initiative.

3.3.6. State Water Board Response to Climate Change

On March 7, 2017, the State Water Board adopted Resolution 2017-0012, titled Comprehensive Response to Climate Change, requiring a proactive response to climate change in all California Water Board actions, with the intent to embed climate change consideration into all programs and activities.

3.4. California Environmental Quality Act

The adoption of this Order is an action to reissue general waste discharge requirements that is exempt from the California Environmental Quality Act (Public Resources Code section 21000 et seq.) because it is an action taken by a regulatory agency to assure the protection of the environment and the regulatory process involves procedures for protection of the environment (Cal. Code Regs., Title 14, section 15308). In addition, the action to adopt this Order is exempt from CEQA pursuant to Cal. Code Regs., Title 14, section 15301, to the extent that it applies to existing sanitary sewer collection systems that constitute "existing facilities" as that term is used in sections 15301 and 15302, to the extent that it results in the repair or replacement of existing systems involving negligible or no expansion of capacity.

3.5. State Water Board Funding Assistance for Compliance with Water Board Water Quality Orders

The State Water Board, Division of Financial Assistance administers the implementation of the State Water Board financial assistance programs, per Board-adopted funding policies. Among other funding areas, the Division administers loan and grant funding for the planning and construction of wastewater and water recycling facilities per funding program-specific policies and guidelines. Applicants may apply for Clean Water State Revolving Fund low-interest loan, Small Community Wastewater grant funding assistance, and other funding available at the time of application, for some of the costs associated with complying with this General Order.

Funding applicants may obtain further information regarding current funding opportunities, and Division of Financial Assistance staff contact information at the following website: [Financial Assistance Funding - Grants and Loans | California State Water Resources Control Board](https://www.waterboards.ca.gov/water_issues/programs/grants_loans/).

(https://www.waterboards.ca.gov/water_issues/programs/grants_loans/)

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

Section 13477.6 of the Water Code authorizes the Small Community Grant Fund. The Small Community Grant Fund allows the State Water Board to provide grant funding assistance to small, disadvantaged communities and small severely disadvantaged communities that may not otherwise be able to afford a loan or similar financing for projects to comply with requirements of this General Order. The State Water Board also considers loan forgiveness on a disadvantaged community-specific basis.

For disadvantaged communities' wastewater needs, the State Water Board places priority on the funding of projects that address:

- Public health;
- Violations of waste discharge requirements and National Pollutant Discharge Elimination System (NPDES) permits;
- Providing sewer system service to existing septic tank owners; and
- High priority public health and water quality concerns identified by a Regional Water Board.

3.6. Notification to Interested Parties

On January 31, 2022, the State Water Board notified interested parties and persons of its intent to reissue Sanitary Sewer Systems General Order 2006-0003-DWQ by issuing a draft General Order for a 60-day public comment period. State Water Board staff conducted extensive stakeholder outreach and encouraged public participation in the adoption process for this General Order. On March 15, 2022, the State Water Board held a public meeting to hear and consider oral public comments. The State Water Board considered all public comments prior to adopting this General Order.

THEREFORE, IT IS HEREBY ORDERED, that pursuant to Water Code sections 13263, 13267, and 13383 this General Order supersedes Order 2006-0003-DWQ, Order WQ 2013-0058-EXEC, and any amendments made to these Orders thereafter, except for enforcement purposes and to meet the provisions contained in Division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, the Enrollee shall comply with the requirements in this Order.

4. PROHIBITIONS

4.1 Discharge of Sewage from a Sanitary Sewer System

Any discharge from a sanitary sewer system that has the potential to discharge to surface waters of the State is prohibited unless it is promptly cleaned up and reported as required in this General Order.

4.2 Discharge of Sewage to Waters of the State

Any discharge from a sanitary sewer system, discharged directly or indirectly through a drainage conveyance system or other route, to waters of the State is prohibited.

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

4.3. Discharge of Sewage Creating a Nuisance

Any discharge from a sanitary sewer system that creates a nuisance or condition of pollution as defined in Water Code section 13050(m) is prohibited.

5. SPECIFICATIONS

5.1. Designation of a Legally Responsible Official

The Enrollee shall designate a Legally Responsible Official that has authority to ensure the enrolled sanitary sewer system(s) complies with this Order, and is authorized to serve as a duly authorized representative. The Legally Responsible Official must have responsibility over management of the Enrollee's entire sanitary sewer system, and must be authorized to make managerial decisions that govern the operation of the sanitary sewer system, including having the explicit or implicit duty of making major capital improvement recommendations to ensure long-term environmental compliance. The Legally Responsible Official must have or have direct authority over individuals that:

- Possess a recognized degree or certificate related to operations and maintenance of sanitary sewer systems, and/or
- Have professional training and experience related to the management of sanitary sewer systems, demonstrated through extensive knowledge, training and experience.

For example, a sewer system superintendent or manager, an operations manager, a public utilities manager or director, or a district engineer may be designated as a Legally Responsible Official.

The Legally Responsible Official shall complete the electronic [CIWQS "User Registration" form](https://ciwqs.waterboards.ca.gov/ciwqs/newUser.jsp) (<https://ciwqs.waterboards.ca.gov/ciwqs/newUser.jsp>). A Legally Responsible Official that represents multiple enrolled systems shall complete the electronic CIWQS "User Registration" form for each system.

The Enrollee shall submit any change to its Legally Responsible Official, and/or change in contact information, to the State Water Board within 30 calendar days of the change by emailing ciwqs@waterboards.ca.gov and copying the appropriate Regional Water Board as provided in Attachment F (Regional Water Quality Control Board Contact Information) of this General Order.

5.2. Sewer System Management Plan Development and Implementation

To facilitate adequate local funding and management of its sanitary sewer system(s), the Enrollee shall develop and implement an updated Sewer System Management Plan. The scale and complexity of the Sewer System Management Plan, and specific elements of the Plan, must match the size, scale and complexity of the Enrollee's sanitary sewer system(s). The Sewer System Management Plan must address, at minimum, the required Plan elements in Attachment D (Sewer System Management Plan – Required Elements) of this General Order. To be effective, the Sewer System Management Plan must include procedures for the management, operation, and maintenance of the sanitary sewer system(s). The procedures must: (1) incorporate the

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

prioritization of system repairs and maintenance to proactively prevent spills, and (2) address the implementation of current standard industry practices through available equipment, technologies, and strategies.

For an existing Enrollee under Order 2006-0003-DWQ that has certified its Continuation of Existing Regulatory Coverage, per section 2.1 (Requirements for Continuation of Existing Regulatory Coverage) of this General Order:

Within six (6) months of the Adoption Date of this General Order:

- The Legally Responsible Official shall upload the Enrollee's existing Sewer System Management Plan to the online CIWQS Sanitary Sewer System Database.

For a new Enrollee:

Within twelve (12) months of the Application for Enrollment approval date:

- The governing entity of the new Enrollee shall approve its Sewer System Management Plan; and
- The Legally Responsible Official shall certify and upload its Sewer System Management Plan to the online CIWQS Sanitary Sewer System Database.

5.3. Certification of Sewer System Management Plan and Plan Updates

The Legally Responsible Official shall certify and upload its Sewer System Management Plan and all subsequent updates to the online CIWQS Sanitary Sewer System Database.

5.4. Sewer System Management Plan Audits

The Enrollee shall conduct an internal audit of its Sewer System Management Plan, and implementation of its Plan, at a minimum frequency of once every three years. The audit must be conducted for the period after the end of the Enrollee's last required audit period. **Within six months after the end of the required 3-year audit period**, the Legally Responsible Official shall submit an audit report into the online CIWQS Sanitary Sewer System Database per the requirements in section 3.10 (Sewer System Management Plan Audit Reporting Requirements) of Attachment E1 of this General Order.

Audit reports submitted to the CIWQS Sanitary Sewer System Database will be viewable only to Water Boards staff.

The internal audit shall be appropriately scaled to the size of the system(s) and the number of spills. The Enrollee's sewer system operators must be involved in completing the audit. At minimum, the audit must:

- Evaluate the implementation and effectiveness of the Enrollee's Sewer System Management Plan in preventing spills;
- Evaluate the Enrollee's compliance with this General Order;
- Identify Sewer System Management Plan deficiencies in addressing ongoing spills and discharges to waters of the State; and

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

- Identify necessary modifications to the Sewer System Management Plan to correct deficiencies.

The Enrollee shall submit a complete audit report that includes:

- Audit findings and recommended corrective actions;
- A statement that sewer system operators’ input on the audit findings has been considered; and
- A proposed schedule for the Enrollee to address the identified deficiencies.

A new Enrollee of this General Order (that did not have a sanitary sewer system enrolled in the previous State Water Board Order 2006-0003-DWQ) shall conduct its first internal Sewer System Management Plan audit for the time period between the date of submittal of its certified Sewer System Management Plan and the third subsequent December 31st date. The audit report must be submitted into the online CIWQS Sanitary Sewer System Database **by July 1 of the following calendar year.**

See the following tables for clarification:

Initial Audit Period and Audit Due Date for New Enrollees

	Audit Period	Audit Due Date
New Enrollee	Certified Sewer System Management Plan Submittal Date through the third subsequent December 31 st date	July 1 st date after audit period
<i>Example</i>	<i>Certified Sewer System Management Plan Submittal Date of August 2, 2025 Audit Period of August 2, 2025 through December 31, 2027</i>	<i>July 1, 2028</i>

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

Initial Audit Period for Transition from 2-Year Audit Required in Previous Order 2006-0003-DWQ to 3-Year Audit Required in this General Order

	Audit Period	Audit Due Date
An Enrollee previously regulated by Order 2006-003-DWQ	A 3-year period starting from the end of last required 2-year Audit Period	Within six months after end of 3-year Audit Period
<i>Example</i>	<i>Last required Audit Period start date of August 2, 2021; Audit Period of August 2, 2021 through August 1, 2024</i>	<i>February 1, 2025</i>

Three-Year Ongoing Audit Period

	Audit Period	Audit Due Date
Each Enrollee	A 3-year period starting from the end of last required Audit Period	Within six months after end of 3-year Audit Period

5.5. Six-Year Sewer System Management Plan Update

At a minimum, the Enrollee shall update its Sewer System Management Plan every six (6) years after the date of its last Plan Update due date. (For an Enrollee previously regulated by Order 2006-0003-DWQ, the six-year period shall commence on the due date identified in section 3.11 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this Order. The Updated Sewer System Management Plan must include:

- Elements required in Attachment D (Sewer System Management Plan – Required Elements) of this Order;
- Summary of revisions included in the Plan update based on internal audit findings; and
- Other sewer system management-related changes.

The Enrollee’s governing entity shall approve the updated Plan. The Legally Responsible Official shall upload and certify the approved updated Plan in the online CIWQS Sanitary Sewer System Database in accordance with section 3.11 (Sewer System Management Plan Reporting Requirements) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order. During the time period in between Plan updates, the Enrollee shall continuously document changes to its Sewer System Management Plan in a change log attached to the Plan.

5.6. System Resilience

The Enrollee shall include and implement system-specific procedures in its Sewer System Management Plan to proactively prioritize: (1) operation and maintenance, (2) condition assessments, and (3) repair and rehabilitation, to address ongoing system resilience, as specified in Attachment D (Sewer System Management Plan – Required Elements) of this General Order.

5.7. Allocation of Resources

The Enrollee shall:

- Establish and maintain a means to manage all necessary revenues and expenditures related to the sanitary sewer system; and
- Allocate the necessary resources to its sewer system management program for:
 - Compliance with this General Order,
 - Full implementation of its updated Sewer System Management Plan,
 - System operation, maintenance, and repair, and
 - Spill responses.

5.8. Designation of Data Submitters

The Legally Responsible Official may designate one or more individuals as a Data Submitter for reporting of spill data. The Legally Responsible Official shall authorize the designation of Data Submitter(s) through the online [CIWQS database](https://ciwqs.waterboards.ca.gov) (<https://ciwqs.waterboards.ca.gov>) prior to the individuals establishing a [CIWQS user account](https://ciwqs.waterboards.ca.gov/ciwqs/newUser.jsp) (<https://ciwqs.waterboards.ca.gov/ciwqs/newUser.jsp>) and entering spill data into the online CIWQS Sanitary Sewer System Database.

The Legally Responsible Official shall submit any change to its Data Submitter(s), and/or change in Data Submitter contact information, to the State Water Board within 30 calendar days of the change, by emailing ciwqs@waterboards.ca.gov and copying the appropriate Regional Water Board as provided in Attachment F (Regional Water Quality Control Board Contact Information) of this General Order.

5.9. Reporting Certification

The Legally Responsible Official shall electronically certify, on the Enrollee's behalf, all applications, reports, the Sewer System Management Plan(s) and corresponding updates, and other information submitted electronically into the online CIWQS Sanitary Sewer System Database, as follows:

"I certify under penalty of perjury under the laws of the State of California that the electronically submitted information was prepared under my direction or supervision. Based on my inquiry of the person(s) directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete, and complies with the Statewide Sanitary Sewer Systems General Order. I am aware that there are significant penalties for submitting false information."

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

Hardcopy submittals to the State Water Board must be accompanied by the above certification statement.

5.10. System Capacity

The Enrollee shall maintain the system capacity necessary to convey: (1) base flows during dry weather conditions, and (2) wet weather peak flows consistent with designated local historic storms. Design storms must take into account system-specific stormwater contributions via inflow and infiltration, and location-specific depth of groundwater and storm frequencies. The Enrollee shall implement capital improvements to provide adequate hydraulic capacity to:

- Meet or exceed the design criteria as defined in the Enrollee's System Evaluation and Capacity Assurance element of its Sewer System Management Plan; and
- Prevent system capacity-related spills, and adverse impacts to the treatment efficiency of downstream wastewater treatment facilities.

5.11. System Performance Analysis

The Enrollee shall include a running 10-year system performance analysis in its Annual Report. The analysis must include two CIWQS-generated graphs presenting the following information:

Graph 1 – Total Spill Volume per Year:

X axis: A 10-year period which includes the current calendar year and the nine previous calendar years;

Y axis: The total spill volume, per Spill Category, for each calendar year.

Graph 2 – Total Number of Spills per Year:

X axis: A 10-year period which includes the current calendar year and the nine previous calendar years;

Y axis: The total number of spills, per Spill Category, for each calendar year.

The current calendar year is the calendar year covered in the Annual Report.

The Enrollee shall generate the graphs in CIWQS, using the existing data in the online CIWQS Sanitary Sewer System Database at the following graph generation link: (https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?reportAction=criteria&reportId=sso_operation_report).

5.12. Spill Emergency Response Plan and Remedial Actions

For Existing Enrollees (with regulatory coverage under Order 2006-0003-DWQ):

Within six (6) months of the Adoption Date of this General Order, the Enrollee shall update and implement its Spill Emergency Response Plan, per Attachment D, section 6 (Spill Emergency Response Plan) of this General Order.

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

For New Enrollees:

Within six (6) months of the Application for Enrollment approval date, the Enrollee shall develop and implement a Spill Emergency Response Plan, per Attachment D, section 6 (Spill Emergency Response Plan) of this General Order.

The Enrollee shall certify, in its Annual Report, that its Spill Emergency Response Plan is up to date.

The Spill Emergency Response Plan shall include measures to protect public health and the environment. The Enrollee shall respond to spills from its system(s) in a timely manner that minimizes water quality impacts and nuisance by:

- Immediately stopping the spill and preventing/minimizing a discharge to waters of the State;
- Intercepting sewage flows to prevent/minimize spill volume discharged into waters of the State;
- Thoroughly recovering, cleaning up and disposing of sewage and wash down water; and
- Cleaning publicly accessible areas while preventing toxic discharges to waters of the State.

5.13. Notification, Monitoring, Reporting and Recordkeeping Requirements

The Enrollee shall comply with notification, monitoring, reporting, and recordkeeping requirements in Attachment E1 of this General Order.

5.13.1. Spill Categories

Individual spill notification, monitoring and reporting must be in accordance with the following spill categories:

- **Category 1 Spill**

A Category 1 spill is a spill of any volume of sewage from or caused by a sanitary sewer system regulated under this General Order that results in a discharge to:

- A surface water, including a surface water body that contains no flow or volume of water; or
- A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed of properly.

Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility.

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

A spill from an Enrollee-owned and/or operated lateral that discharges to a surface water is a Category 1 spill; the Enrollee shall report all Category 1 spills per section 3.1 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

- **Category 2 Spill**

A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.

- **Category 3 Spill**

A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.

- **Category 4 Spill**

A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under this General Order that does not discharge to a surface water.

A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

5.13.2. Annual Report

The Enrollee shall submit an Annual Report (previously termed as Collection System Questionnaire in Order 2006-0003-DWQ) as specified in section 3.9 (Annual Report) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

For new Enrollees: Within 30 days of obtaining a CIWQS account, a new Enrollee shall submit its initial Annual Report, as specified in section 3.9 (Annual Report) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

5.14. Electronic Sanitary Sewer System Service Area Boundary Map

For continuing enrollees, starting on July 1, 2025, and no later than December 31, 2025:

For new enrollees – no earlier than July 1, 2025, or within 12 months of the Application for Enrollment approval date, whichever date is later:

The Legally Responsible Official shall submit, to the State Water Board, geospatial data detailing the locations of the Enrollee’s sanitary sewer system service area boundary, per the required content and specifications in section 3.8 (Electronic Sanitary Sewer System Service Area Boundary Map) of Attachment E1 of this General Order, for each system identified by a WDID number.

An Enrollee of a disadvantaged community that may need assistance developing an electronic map to comply with this requirement, may contact State Water Board staff for assistance at SanitarySewer@waterboards.ca.gov.

5.15. Voluntary Reporting of Spills from Privately-Owned Sewer Laterals and/or Private Sanitary Sewer Systems

Within 24 hours of becoming aware of a spill (as described below) from a private sewer lateral or private sanitary sewer system that is not owned/operated by the Enrollee, the Enrollee is encouraged to report the following observations to the online CIWQS Sanitary Sewer System Database at the following link:

<https://ciwqs.waterboards.ca.gov>:

- A spill equal or greater than 1,000 gallons that discharges (or has a potential to discharge) to a water of the State, or a drainage conveyance system that discharges to waters of the State; **or**
- Any volume of sewage that discharges (or has a potential to discharge) to surface waters.

In the CIWQS module, the Enrollee is encouraged to identify:

- Time of observation;
- Description of general spill location (for example, street name and cross street names);
- Estimated volume of spill;
- If known, general description of spill destination (for example, flowing into drainage channel, flowing directly into a creek, etc.); and
- If known, name of private system owner/operator.

The CIWQS database will make the name and contact information of the entity voluntarily reporting a private spill, accessible to State and Regional Water Board staff only. The CIWQS database will only make information regarding the actual spill, accessible to the public.

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

5.16. Voluntary Notification of Spills from Privately-Owned Laterals and/or Systems to the California Office of Emergency Services

Upon observing or acquiring knowledge of any of the following from a private sewer lateral or private sanitary sewer system that is not owned/operated by the Enrollee, the Enrollee is encouraged to notify the California Office of Emergency Services (as provided by Health and Safety Code section 5410 et. seq. and Water Code section 13271), or inform the responsible party that State law requires such notification to the Office of Emergency Services by any person that causes or allows a sewage discharge to waters of the State:

- A spill equal to 1,000 gallons or more that discharges (or has a potential to discharge) to waters of the State, or a drainage conveyance system that discharges to waters of the State; or
- A spill of any volume to surface waters.

5.17. Unintended Failure to Report

If an Enrollee becomes aware that they unintentionally failed to submit relevant facts in any report required in this General Order, the Enrollee shall promptly notify Regional Water Board and State Water Board staff. Regional Water Board contact information is included in Attachment F of this Order. State Water Board staff shall be contacted by email at SanitarySewer@waterboards.ca.gov for assistance in formally amending the corresponding report(s) in the online CIWQS Sanitary Sewer System Database.

5.18. Duty to Report to Water Boards

In accordance with Water Code section 13267 and/or section 13383, upon request by the State Water Board Executive Director (or designee) or a Regional Water Board Executive Officer (or designee), the Enrollee shall provide the requested information which the State or Regional Water Board deems necessary to determine compliance with this General Order.

5.19. Operation and Maintenance

To prevent discharges to the environment, the Enrollee shall maintain in good working order, and operate as designed, any facility or treatment and control system designed to contain sewage and convey it to a treatment plant.

6. PROVISIONS

6.1. Enforcement Provisions

The following enforcement provisions are based on existing federal and state regulations, laws and policies, including the federal Clean Water Act, the state Water Code and the State Water Board Enforcement Policy.

6.1.1. Enforceability of Clean Water Act and Water Code Violations

Noncompliance with requirements of this General Order or discharging sewage without enrolling in this General Order constitutes a violation of the Water Code and a potential

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

violation of the Clean Water Act and is grounds for an enforcement action by the State Water Board or the applicable Regional Water Board. Failure to comply with the notification, monitoring, inspection, entry, reporting, and recordkeeping requirements may subject the Enrollee to administrative civil liabilities of up to \$10,000 a day per violation pursuant to Water Code section 13385; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. Discharging waste not in compliance with the requirements of this General Order or the Clean Water Act may subject the Enrollee to administrative civil liabilities up to \$10,000 a day per violation and additional liability up to \$10 per gallon of discharge not cleaned up after the first 1,000 gallons of discharge; up to \$5,000 a day per violation pursuant to Water Code section 13350 or up to \$20 per gallon of waste discharged; or referral to the Attorney General for judicial civil enforcement.

6.1.2. Monetary Penalties

The Water Code provides the State and Regional Water Boards the authority to pursue formal enforcement actions, including imposing administrative liability and civil monetary penalties, for non-compliance with the requirements of this General Order and violations of the Clean Water Act.

6.1.3. Falsifying or Failure to Report

The Water Code provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this General Order, or falsifying any information provided in the technical or monitoring reports is subject to administrative liability and civil monetary penalties. Any person who knowingly fails or refuses to furnish technical or monitoring program reports or falsifies any information provided in reports required by this General Order is subject to criminal penalties.

6.1.4. Severability of General Order

The provisions of this General Order are severable; if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this Order shall not be affected thereby.

6.1.5. Indirect Discharges

In the event that a spill enters into a drainage conveyance system, the Enrollee shall take all feasible steps to prevent discharge of sewage into waters of the State by blocking or redirecting the flow in the drainage conveyance system, removing the sewage from the drainage conveyance system, and cleaning the system in a manner that does not inadvertently impact beneficial uses of the receiving water body.

6.1.6. Water Boards' Considerations for Discretionary Enforcement

Consistent with the State Water Board Enforcement Policy, when considering Water Code section 13327 factors, the State Water Board or a Regional Water Board may consider the Enrollee's efforts to contain, control, clean up, and mitigate spills. In assessing the factors, the State Water Board or the applicable Regional Water Board will consider:

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

- The Enrollee's compliance with this General Order with a focus on compliance with reporting requirements;
- The Enrollee's provision of adequate funding to implement the requirements of this General Order;
- The Enrollee's compliance with providing a complete and updated Sewer System Management Plan;
- The Enrollee's compliance with implementing its Sewer System Management Plan;
- The overall effectiveness of the Enrollee's Sewer System Management Plan with respect to:
 - System management, operation, and maintenance,
 - Adequate treatment facilities, sanitary sewer system facilities, and/or components with an appropriate design capacity, to reasonably prevent spills (e.g. adequately enlarging treatment or collection facilities to accommodate growth, infiltration and inflow, etc.),
 - Preventive maintenance (including cleaning, root grinding, and fats, oils, and grease control) and source control measures,
 - Implementation of backup equipment,
 - Inflow and infiltration prevention and control,
 - Appropriate sanitary sewer system capacity to prevent spills, and
 - The Enrollee's responsiveness to stop and mitigate the impact of the discharge;
- The Enrollee's compliance with identifying the cause of the spill;
- The Enrollee's use of available information and observations to accurately estimate the spill volume and identify the affected or potentially affected receiving waters;
- The Enrollee's thoroughness of cleaning up sewage in drainage conveyance systems after the spill(s);
- The Enrollee's use of water quality and biological monitoring and assessment to determine the short-term and long-term impacts to beneficial uses and the environment;
- The Enrollee's follow up actions to improve system performance;
- The Enrollee's implementation of feasible alternatives to prevent spills, such as:
 - Use of temporary storage or waste retention,
 - Reduction of system inflow and infiltration,
 - Collection and hauling of waste to a treatment facility,
 - Prevention of and/ or containment of spills due to a design storm event identified in the Enrollee's Sewer System Management Plan,

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

- Implementation of available equipment, technologies, strategies, and recommended industry practices for maintaining and managing sewer systems to prevent spills, and contain and eliminate discharges to waters of the State; and
- The spill duration and factors beyond the reasonable control of the Enrollee causing the event.

6.1.7. Enforcement Discretion Based on Reporting Compliance

Consistent with the State Water Board Enforcement Policy, the State Water Board or a Regional Water Board may consider the Enrollee's efforts to comply with spill reporting requirements when determining compliance with Water Code section 13267 and section 13383. When assessing Water Code section 13227 factors, the State Water Board or the applicable Regional Water Board will consider:

- The Enrollee's diligence to comply with all reporting requirements in this General Order;
- The use of best available information for the Enrollee's reporting of spill start date and start time in which the release of sewage from the sanitary sewer system initiated;
- The Enrollee's reporting of spill end date, and end time to be the date and time in which the release of sewage from the sanitary sewer system was stopped;
- The Enrollee's diligence to accurately estimate and report spill volumes;
- The Enrollee's subsequent verification and/or updates to initial Draft Spill Reports in accordance with this General Order; and
- The Enrollee's timely certification of required spill reports.

Consistent with Water Code section 13267 and section 13383, the State Water Board or a Regional Water Board may require an Enrollee to report the results of a condition assessment of a specified portion of the Enrollee's sanitary sewer system.

6.2. Other Regional Water Board Orders

It is the intent of the State Water Board that sanitary sewer systems be regulated in a manner consistent with federal and state regulations. This Order will not be interpreted or applied:

- In a manner inconsistent with the federal Clean Water Act;
- To authorize a spill or discharge that is illegal under either the Clean Water Act, the Water Code, and/or an applicable Basin Plan prohibition or water quality standard;
- To prohibit a Regional Water Board from issuing an individual National Pollutant Discharge Elimination System (NPDES) permit or individual waste discharge requirements superseding an Enrollee's regulatory coverage under this General Order for a sanitary sewer system authorized under the Clean Water Act or Water Code;

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER

- To supersede any more specific or more stringent waste discharge requirements or enforcement orders issued by a Regional Water Board; or
- To supersede any more specific or more stringent state or federal requirements in existing regulation, an administrative/judicial order, or Consent Decree.

6.3. Sewer System Management Plan Availability

The Enrollee's updated Sewer System Management Plan must be maintained for public inspection at the Enrollee's offices and facilities and must be available to the public through CIWQS and/or on the Enrollee's website, in accordance with section 3.8 (Sewer System Management Plan Reporting Requirements) of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

6.4. Entry and Inspection

6.4.1. Entry and Availability of Information

The Enrollee shall allow State and Regional Water Board staff, upon presentation of credentials and other documents as may be required by law, to:

- Enter upon the Enrollee's premises where a regulated facility or activity is located or conducted, or where records are kept under the requirements of this General Order;
- Have access to and reproduce any records required to be maintained by this General Order;
- Inspect any facility and/or equipment (including monitoring and control equipment), practices, or operations required in this General Order; and
- Sample or monitor substances or parameters for assuring compliance with this General Order, or as otherwise authorized by the Water Code.

6.4.2. Pre-Inspection Questionnaire

The Enrollee shall provide pre-inspection information to State and Regional Water Board staff through the completion of a Pre-Inspection Questionnaire provided by Water Board staff.

ATTACHMENT A - DEFINITIONS

Annual Report

An Annual Report (previously termed as Collection System Questionnaire in Order 2006-0003-DWQ) is a mandatory report in which the Enrollee provides a calendar-year update of its efforts to prevent spills.

Basin Plan

A Basin Plan is a water quality control plan specific to a Regional Water Quality Control Board (Regional Water Board), that serves as regulations to: (1) define and designate beneficial uses of surface and groundwaters, (2) establish water quality objectives for protection of beneficial uses, and (3) provide implementation measures.

Beneficial Uses

The term “Beneficial Uses” is a Water Code term, defined as the uses of the waters of the State that may be protected against water quality degradation. Examples of beneficial uses include but are not limited to, municipal, domestic, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

California Integrated Water Quality System (CIWQS)

CIWQS is the statewide database that provides for mandatory electronic reporting as required in State and Regional Water Board-issued waste discharge requirements.

Data Submitter

A Data Submitter is an individual designated and authorized by the Enrollee’s Legally Responsible Official to enter spill data into the online CIWQS Sanitary Sewer System Database. A Data Submitter does not have the authority of a Legally Responsible Official to certify reporting entered into the online CIWQS Sanitary Sewer System Database.

Disadvantaged Community

A disadvantaged community is a community with a median household income of less than eighty percent (80%) of the statewide annual median household income.

For the purpose of this General Order, there is no differentiation between a small and large disadvantaged community.

Drainage Conveyance System

A drainage conveyance system is a publicly- or privately-owned separate storm sewer system, including but not limited to drainage canals, channels, pipelines, pump stations, detention basins, infiltration basins/facilities, or other facilities constructed to transport stormwater and non-stormwater flows.

Enrollee

An Enrollee is a public, private, or other non-governmental entity that has obtained approval for regulatory coverage under this General Order, including:

- A state agency, municipality, special district, or other public entity that owns and/or operates one or more sanitary sewer systems:
 - greater than one (1) mile in length (each individual sanitary sewer system);
 - one mile or less in length where the State Water Resources Control Board or a Regional Water Quality Control Board requires regulatory coverage under this Order, or
- A federal agency, private company, or other non-governmental entity that owns and/or operates a sanitary sewer system of any size where the State Water Resources Control Board or a Regional Water Quality Control Board requires regulatory coverage under this Order in response to a history of spills, proximity to surface water, or other factors supporting regulatory coverage.

Environmentally Sensitive Area

An environmentally sensitive area is a designated agricultural and/or wildlife area identified to need special natural landscape protection due to its wildlife or historical value.

Exfiltration

Exfiltration is the underground exiting of sewage from a sanitary sewer system through cracks, offset or separated joints, or failed infrastructure due to corrosion or other factors.

Flood Control Channel

A flood control channel is a channel used to convey stormwater and non-stormwater flows through and from areas for flood management purposes.

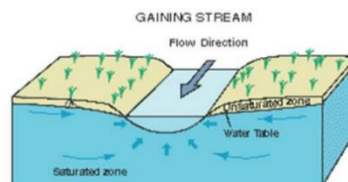
Governing Entity

A governing entity includes but is not limited to the following:

- A publicly elected governing board, council, or commission of a municipal agency;
- A Department or Division director of a federal or state agency that is not governed by a board;
- A governing board or commission of an organization or association; and
- A private system owner/manager that is not governed by a board.

Hydrologically Connected

Two waterbodies are hydrologically connected when one waterbody flows, or has the potential to flow, into the other waterbody. For the purpose of this General Order, groundwater is hydrologically connected to a surface water when the groundwater feeds into the surface water. (The surface waterbody in this example is termed a gaining stream as it gains flow from surrounding groundwater.)



Lateral (including Lower and Upper Lateral)

A lateral is an underground segment of smaller diameter pipe that transports sewage from a customer's building or property (residential, commercial, or industrial) to the Enrollee's main sewer line in a street or easement. Upper and lower lateral boundary definitions are subject to local jurisdictional codes and ordinances, or private system ownership.

A lower lateral is the portion of the lateral located between the sanitary sewer system main, and either the property line, sewer clean out, curb line, established utility easement boundary, or other jurisdictional locations.

An upper lateral is the portion of the lateral from the property line, sewer clean out, curb line, established utility easement boundary, or other jurisdictional locations, to the building or property.

Legally Responsible Official

A Legally Responsible Official is an official representative, designated by the Enrollee, with authority to sign and certify submitted information and documents required by this General Order.

Nuisance

For the purpose of this General Order, a nuisance, as defined in Water Code section 13050(m), is anything that meets all of the following requirements:

- Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property;
- Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal; and
- Occurs during, or as a result of, the treatment or disposal of wastes.

Private Sewer Lateral

A private sewer lateral is the privately-owned lateral that transports sewage from private property(ies) into a sanitary sewer system.

Private Sanitary Sewer System

A private sanitary sewer system is a sanitary sewer system of any size that is owned and/or operated by a private individual, company, corporation, or organization. A private sanitary sewer system may or may not connect into a publicly owned sanitary sewer system.

Potential to Discharge, Potential Discharge

Potential to Discharge, or Potential Discharge, means any exiting of sewage from a sanitary sewer system which can reasonably be expected to discharge into a water of the State based on the size of the sewage spill, proximity to a drainage conveyance system, and the nature of the surrounding environment.

Receiving Water

A receiving water is a water of the State that receives a discharge of waste.

Resilience

Resilience is the ability to recover from or adjust to adversity or change, and grow from disruptions. Resilience can be built through planning, preparing for, mitigating, and adapting to changing conditions.

Sanitary Sewer System

A sanitary sewer system is a system that is designed to convey sewage, including but not limited to, pipes, manholes, pump stations, siphons, wet wells, diversion structures and/or other pertinent infrastructure, upstream of a wastewater treatment plant headworks, including:

- Laterals owned and/or operated by the Enrollee;
- Satellite sewer systems; and/or
- Temporary conveyance and storage facilities, including but not limited to temporary piping, vaults, construction trenches, wet wells, impoundments, tanks and diversion structures.

For purpose of this Order, sanitary sewer systems include only systems owned and/or operated by the Enrollee.

Satellite Sewer System

A satellite sewer system is a portion of a sanitary sewer system owned or operated by a different owner than the owner of the downstream wastewater treatment facility ultimately treating the sewage.

Sewer System Management Plan

A sewer system management plan is a living document an Enrollee develops and implements to effectively manage its sanitary sewer system(s) in accordance with this General Order.

Sewage

Sewage, and its associated wastewater, is untreated or partially treated domestic, municipal, commercial and/or industrial waste (including sewage sludge), and any mixture of these wastes with inflow or infiltration of stormwater or groundwater, conveyed in a sanitary sewer system.

Spill

A spill is a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure. Exfiltration of sewage is not considered to be a spill under this General Order if the exfiltrated sewage remains in the subsurface and does not reach a surface water of the State.

Training

Training is in-house or external education and guidance needed that provides the knowledge, skills, and abilities to comply with this General Order.

Wash Down Water

Wash down water is water used to clean a spill area.

Waste

Waste, as defined in Water Code section 13050(d), includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

Waste Discharge Identification Number (WDID)

A waste discharge identification number (WDID) identifies each individual sanitary sewer system enrolled under this General Order. A WDID number is assigned to each enrolled system upon an Enrollee’s approved regulatory coverage.

Waters of the State

Waters of the State are surface waters or groundwater within boundaries of the state as defined in Water Code section 13050(e), in which the State and Regional Water Boards have authority to protect beneficial uses. Waters of the State include, but are not limited to, groundwater aquifers, surface waters, saline waters, natural washes and pools, wetlands, sloughs, and estuaries, regardless of flow or whether water exists during dry conditions. Waters of the State include waters of the United States.

Waters of the United States

Waters of the United States are surface waters or waterbodies that are subject to federal jurisdiction in accordance with the Clean Water Act.

Water Quality Objective

A water quality objective is the limit or maximum amount of pollutant, waste constituent or characteristic, or parameter level established in statewide water quality control plans and Regional Water Boards’ Basin Plans, for the reasonable protection of beneficial uses of surface waters and groundwater and the prevention of nuisance.

ATTACHMENT B – APPLICATION FOR ENROLLMENT

1. Enrollment Status: (Mark only one item)

New Enrollee

New Enrollee with previous regulatory coverage under Order 2006-0003-DWQ
(that failed to certify continuation of coverage in CIWQS per Order 2022-XXXX-DWQ)
Existing WDID Number: _____

2. Applicant Information:

Legally Responsible Official Submitting Application

First and Last Name: _____

Title: _____

Phone: _____

Email: _____

System Owner/Operator Name: _____

Mailing Address: _____

City, State, Zip: _____

County: _____

Sanitary Sewer System Name: _____

Regional Water Quality Control Board(s): _____

Signature and Date: _____

3. Applicant Type (Check one):

City County State Federal Special District

Government Combination Private Other Non-governmental Entity

4. Wastewater Treatment Plant Receiving Sanitary Sewer System Waste:

Wastewater Treatment Plant Permittee: _____

WDID No.: _____

5. Billing Information

Billing Address: _____

City, State, Zip: _____

Billing Contact Person and Title: _____

Phone and Email Address: _____

6. Application Fee:

The application fee, as required by Water Code section 13260, is based on the daily population served by the sanitary sewer system. See updated [Fee Schedule](https://www.waterboards.ca.gov/resources/fees/water_quality/).
(https://www.waterboards.ca.gov/resources/fees/water_quality/)

Check one of the following and enter fee amount:

Population Served < 50,000 – Total Fee submitted: \$ _____

Population Served ≥ 50,000 – Total Fee submitted: \$ _____

Make the fee payment payable to the State Water Resources Control Board and mail the complete application package to:

State Water Resources Control Board, Accounting Office

P. O. Box 1888

Sacramento, CA 95812-1888

Attention: Statewide Sanitary Sewer System Program

7. Application Submittal Certification

I certify under penalty of perjury under the laws of the State of California that to the best of my knowledge and belief, the information in the submitted application package is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Print Name: _____

Title: _____

Signature: _____ Date: _____

ATTACHMENT C - NOTICE OF TERMINATION

1. Enrollee Information

Enrollee Name: _____

WDID No: _____

Legally Responsible Official Requesting Termination of Coverage: _____

First and Last Name: _____

Title: _____

Phone: _____

Email: _____

Mailing Address: _____

City, State, Zip: _____

County: _____

Sanitary Sewer System Name(s) or Unique Identifier(s): _____

Regional Water Quality Control Board(s): _____

Signature and Date: _____

2. Basis of Termination

Explanation of termination, including subsequent regulatory coverage and subsequent owner/operator of enrolled sanitary sewer system, as applicable:

3. Regulatory Coverage Termination Certification

I certify under penalty of perjury under the laws of the State of California that to the best of my knowledge: 1) the sanitary sewer system I officially represent is not required to be regulated under the Statewide Waste Discharge Requirements for Sanitary Sewer Systems Order 2022-XXXX-DWQ, and 2) the information submitted in this Notice of Termination is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. Additionally, I understand that the submittal of this Notice of Termination does not release sanitary sewer system agencies from liability for any violations of the Clean Water Act.

Print Name: _____

Title: _____

Signature: _____ Date: _____

For State Water Board Use Only

Approved for Termination

Denied and Returned to Enrollee

Deputy Director of Water Quality Signature: _____

Date: _____ Notice of Termination Effective Date: _____

ATTACHMENT D – SEWER SYSTEM MANAGEMENT PLAN – REQUIRED ELEMENTS

Table of Contents

1. Sewer System Management Plan Goal And IntroductionD-2

 1.1. Regulatory ContextD-2

 1.2. Sewer System Management Plan Update Schedule.....D-3

 1.3. Sewer System Asset OverviewD-3

2. OrganizationD-3

3. Legal AuthorityD-4

4. Operation And Maintenance Program.....D-4

 4.1. Updated Map of Sanitary Sewer SystemD-4

 4.2. Preventive Operation and Maintenance ActivitiesD-4

 4.3. TrainingD-5

 4.4. Equipment InventoryD-5

5. Design And Performance ProvisionsD-5

 5.1. Updated Design Criteria and Construction Standards and Specifications.....D-5

 5.2. Procedures and Standards.....D-5

6. Spill Emergency Response Plan.....D-6

7. Sewer Pipe Blockage Control Program.....D-7

8. System Evaluation, Capacity Assurance and Capital Improvements.....D-7

 8.1 System Evaluation and Condition Assessment.....D-7

 8.2. Capacity Assessment and Design CriteriaD-8

 8.3. Prioritization of Corrective ActionD-9

 8.4. Capital Improvement PlanD-9

9. Monitoring, Measurement and Program Modifications.....D-9

10. Internal Audits.....D-10

11. Communication ProgramD-10

ATTACHMENT D – SEWER SYSTEM MANAGEMENT PLAN – REQUIRED ELEMENTS

A Sewer System Management Plan (Plan) is a living planning document that documents ongoing local sewer system management program activities, procedures, and decision-making – at the scale necessary to address the size and complexity of the subject sanitary sewer system(s). This Plan may incorporate other programs and other plans by reference, to address short-term and long-term system resilience through:

- Proactive planning and decision-making;
- Local government ordinances;
- Updated operations and maintenance activities and procedures;
- Implementation of capital improvements;
- Sufficient local budget to support staff resources, contractors, equipment, and training; and
- Updated training of staff and contractors.

The Enrollee’s development, update, and implementation of a Sewer System Management Plan addressing the requirements of this Attachment is an enforceable component of this General Order. As specified in Provision 6.1 (Enforcement Provisions) of this General Order, consistent with the Water Code and the State Water Board Enforcement Policy, the State Water Board or a Regional Water Board may consider the Enrollee’s efforts in implementing an effective Sewer System Management Plan to prevent, contain, control, and mitigate spills when considering Water Code section 13327 factors to determine necessary enforcement of this General Order.

This Attachment includes the following required elements that the Enrollee shall address in its Plan and subsequent updates. The Enrollee shall identify any requirement in this Attachment that is not applicable to the Enrollee’s sewer system and shall explain in its Plan why the requirement is not applicable.

1. SEWER SYSTEM MANAGEMENT PLAN GOAL AND INTRODUCTION

The goal of the Sewer System Management Plan (Plan) is to provide a plan and schedule to: (1) properly manage, operate, and maintain all parts of the Enrollee’s sanitary sewer system(s), (2) reduce and prevent spills, and (3) contain and mitigate spills that do occur.

The Plan must include a narrative Introduction section that discusses the following items:

1.1. Regulatory Context

The Plan Introduction section must provide a general description of the local sewer system management program and discuss Plan implementation and updates.

1.2. Sewer System Management Plan Update Schedule

The Plan Introduction section must include a schedule for the Enrollee to update the Plan, including the schedule for conducting internal audits. The schedule must include milestones for incorporation of activities addressing prevention of sewer spills.

1.3. Sewer System Asset Overview

The Plan Introduction section must provide a description of the Enrollee-owned assets and service area, including but not limited to:

- Location, including county(ies);
- Service area boundary;
- Population and community served;
- System size, including total length in miles, length of gravity mainlines, length of pressurized (force) mains, and number of pump stations and siphons;
- Structures diverting stormwater to the sewer system;
- Data management systems;
- Sewer system ownership and operation responsibilities between Enrollee and private entities for upper and lower sewer laterals;
- Estimated number or percent of residential, commercial, and industrial service connections; and
- Unique service boundary conditions and challenge(s).

Additionally, the Plan Introduction section must provide reference to the Enrollee’s up-to-date map of its sanitary sewer system, as required in section 4.1 (Updated Map of Sanitary Sewer System) of this Attachment.

2. ORGANIZATION

The Plan must identify organizational staffing responsible and integral for implementing the local Sewer System Management Plan through an organization chart or similar narrative documentation that includes:

- The name of the Legally Responsible Official as required in section 5.1 (Designation of a Legally Responsible Official) of this General Order;
- The position titles, telephone numbers, and email addresses for management, administrative, and maintenance positions responsible for implementing specific Sewer System Management Plan elements;
- Organizational lines of authority; and
- Chain of communication for reporting spills from receipt of complaint or other information, including the person responsible for reporting spills to the State and Regional Water Boards and other agencies, as applicable. (For example, county

health officer, county environmental health agency, and State Office of Emergency Services.)

3. LEGAL AUTHORITY

The Plan must include copies or an electronic link to the Enrollee's current sewer system use ordinances, service agreements and/or other legally binding procedures to demonstrate the Enrollee possesses the necessary legal authority to:

- Prevent illicit discharges into its sanitary sewer system from inflow and infiltration (I&I); unauthorized stormwater; chemical dumping; unauthorized debris; roots; fats, oils, and grease; and trash, including rags and other debris that may cause blockages;
- Collaborate with storm sewer agencies to coordinate emergency spill responses, ensure access to storm sewer systems during spill events, and prevent unintentional cross connections of sanitary sewer infrastructure to storm sewer infrastructure;
- Require that sewer system components and connections be properly designed and constructed;
- Ensure access for maintenance, inspection, and/or repairs for portions of the service lateral owned and/or operated by the Enrollee;
- Enforce any violation of its sewer ordinances, service agreements, or other legally binding procedures; and
- Obtain easement accessibility agreements for locations requiring sewer system operations and maintenance, as applicable.

4. OPERATION AND MAINTENANCE PROGRAM

The Plan must include the items listed below that are appropriate and applicable to the Enrollee's system.

4.1. Updated Map of Sanitary Sewer System

An up-to-date map(s) of the sanitary sewer system, and procedures for maintaining and providing State and Regional Water Board staff access to the map(s). The map(s) must show gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities within the sewer system service area boundaries.

4.2. Preventive Operation and Maintenance Activities

A scheduling system and a data collection system for preventive operation and maintenance activities conducted by staff and contractors.

The scheduling system must include:

- Inspection and maintenance activities;

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

- Higher-frequency inspections and maintenance of known problem areas, including areas with tree root problems;
- Regular visual and closed-circuit television (CCTV) inspections of manholes and sewer pipes.

The data collection system must document data from system inspection and maintenance activities, including system areas/components prone to root-intrusion potentially resulting in system backup and/or failure.

4.3. Training

In-house and external training provided on a regular basis for sanitary sewer system operations and maintenance staff and contractors. The training must cover:

- The requirements of this General Order;
- The Enrollee's Spill Emergency Response Plan procedures and practice drills;
- Skilled estimation of spill volume for field operators; and
- Electronic CIWQS reporting procedures for staff submitting data.

4.4. Equipment Inventory

An inventory of sewer system equipment, including the identification of critical replacement and spare parts.

5. DESIGN AND PERFORMANCE PROVISIONS

The Plan must include the following items as appropriate and applicable to the Enrollee's system:

5.1. Updated Design Criteria and Construction Standards and Specifications

Updated design criteria, and construction standards and specifications, for the construction, installation, repair, and rehabilitation of existing and proposed system infrastructure components, including but not limited to pipelines, pump stations, and other system appurtenances. If existing design criteria and construction standards are deficient to address the necessary component-specific hydraulic capacity as specified in section 8 (System Evaluation, Capacity Assurance and Capital Improvements) of this Attachment, the procedures must include component-specific evaluation of the design criteria.

5.2. Procedures and Standards

Procedures, and standards for the inspection and testing of newly constructed, newly installed, repaired, and rehabilitated system pipelines, pumps, and other equipment and appurtenances.

6. SPILL EMERGENCY RESPONSE PLAN

The Plan must include an up to date Spill Emergency Response Plan to ensure prompt detection and response to spills to reduce spill volumes and collect information for prevention of future spills. The Spill Emergency Response Plan must include procedures to:

- Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner;
- Notify other potentially affected entities (for example, health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the State;
- Comply with the notification, monitoring and reporting requirements of this General Order, State law and regulations, and applicable Regional Water Board Orders;
- Ensure that appropriate staff and contractors implement the Spill Emergency Response Plan and are appropriately trained;
- Address emergency system operations, traffic control and other necessary response activities;
- Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system;
- Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State;
- Remove sewage from the drainage conveyance system;
- Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters;
- Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery;
- Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event;
- Conduct post-spill assessments of spill response activities;
- Document and report spill events as required in this General Order; and
- Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed.

7. SEWER PIPE BLOCKAGE CONTROL PROGRAM

The Sewer System Management Plan must include procedures for the evaluation of the Enrollee's service area to determine whether a sewer pipe blockage control program is needed to control fats, oils, grease, rags and debris. If the Enrollee determines that a program is not needed, the Enrollee shall provide justification in its Plan for why a program is not needed.

The procedures must include, at minimum:

- An implementation plan and schedule for a public education and outreach program that promotes proper disposal of pipe-blocking substances;
- A plan and schedule for the disposal of pipe-blocking substances generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of substances generated within a sanitary sewer system service area;
- The legal authority to prohibit discharges to the system and identify measures to prevent spills and blockages;
- Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, best management practices requirements, recordkeeping and reporting requirements;
- Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the fats, oils, and grease ordinance;
- An identification of sanitary sewer system sections subject to fats, oils, and grease blockages and establishment of a cleaning schedule for each section; and
- Implementation of source control measures for all sources of fats, oils, and grease reaching the sanitary sewer system for each section identified above.

8. SYSTEM EVALUATION, CAPACITY ASSURANCE AND CAPITAL IMPROVEMENTS

The Plan must include procedures and activities for:

- Routine evaluation and assessment of system conditions;
- Capacity assessment and design criteria;
- Prioritization of corrective actions; and
- A capital improvement plan.

8.1 System Evaluation and Condition Assessment

The Plan must include procedures to:

- Evaluate the sanitary sewer system assets utilizing the best practices and technologies available;

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

- Identify and justify the amount (percentage) of its system for its condition to be assessed each year;
- Prioritize the condition assessment of system areas that:
 - Hold a high level of environmental consequences if vulnerable to collapse, failure, blockage, capacity issues, or other system deficiencies;
 - Are located in or within the vicinity of surface waters, steep terrain, high groundwater elevations, and environmentally sensitive areas;
 - Are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act section 303(d) List;
- Assess the system conditions using visual observations, video surveillance and/or other comparable system inspection methods;
- Utilize observations/evidence of system conditions that may contribute to exiting of sewage from the system which can reasonably be expected to discharge into a water of the State;
- Maintain documents and recordkeeping of system evaluation and condition assessment inspections and activities; and
- Identify system assets vulnerable to direct and indirect impacts of climate change, including but not limited to: sea level rise; flooding and/or erosion due to increased storm volumes, frequency, and/or intensity; wildfires; and increased power disruptions.

8.2. Capacity Assessment and Design Criteria

The Plan must include procedures to identify system components that are experiencing or contributing to spills caused by hydraulic deficiency and/or limited capacity, including procedures to identify the appropriate hydraulic capacity of key system elements for:

- Dry-weather peak flow conditions that cause or contributes to spill events;
- The appropriate design storm(s) or wet weather events that causes or contributes to spill events;
- The capacity of key system components; and
- Identify the major sources that contribute to the peak flows associated with sewer spills.

The capacity assessment must consider:

- Data from existing system condition assessments, system inspections, system audits, spill history, and other available information;
- Capacity of flood-prone systems subject to increased infiltration and inflow, under normal local and regional storm conditions;

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

- Capacity of systems subject to increased infiltration and inflow due to larger and/or higher-intensity storm events as a result of climate change;
- Increases of erosive forces in canyons and streams near underground and above-ground system components due to larger and/or higher-intensity storm events;
- Capacity of major system elements to accommodate dry weather peak flow conditions, and updated design storm and wet weather events; and
- Necessary redundancy in pumping and storage capacities.

8.3. Prioritization of Corrective Action

The findings of the condition assessments and capacity assessments must be used to prioritize corrective actions. Prioritization must consider the severity of the consequences of potential spills.

8.4. Capital Improvement Plan

The capital improvement plan must include the following items:

- Project schedules including completion dates for all portions of the capital improvement program;
- Internal and external project funding sources for each project; and
- Joint coordination between operation and maintenance staff, and engineering staff/consultants during planning, design, and construction of capital improvement projects; and Interagency coordination with other impacted utility agencies.

9. MONITORING, MEASUREMENT AND PROGRAM MODIFICATIONS

The Plan must include an Adaptive Management section that addresses Plan-implementation effectiveness and the steps for necessary Plan improvement, including:

- Maintaining relevant information, including audit findings, to establish and prioritize appropriate Plan activities;
- Monitoring the implementation and measuring the effectiveness of each Plan Element;
- Assessing the success of the preventive operation and maintenance activities;
- Updating Plan procedures and activities, as appropriate, based on results of monitoring and performance evaluations; and
- Identifying and illustrating spill trends, including spill frequency, locations and estimated volumes.

10. INTERNAL AUDITS

The Plan shall include internal audit procedures, appropriate to the size and performance of the system, for the Enrollee to comply with section 5.4 (Sewer System Management Plan Audits) of this General Order.

11. COMMUNICATION PROGRAM

The Plan must include procedures for the Enrollee to communicate with:

- The public for:
 - Spills and discharges resulting in closures of public areas, or that enter a source of drinking water, and
 - The development, implementation, and update of its Plan, including opportunities for public input to Plan implementation and updates.
- Owners/operators of systems that connect into the Enrollee’s system, including satellite systems, for:
 - System operation, maintenance, and capital improvement-related activities.

ATTACHMENT E1 – NOTIFICATION, MONITORING, REPORTING AND RECORDKEEPING REQUIREMENTS

Table of Contents

1. Notification Requirements..... E1-3

 1.1. Notification of Spills of 1,000 Gallons or Greater to the California Office of
 Emergency Services E1-3

 1.2. Spill Notification Information..... E1-4

 1.3. Notification of Spill Report Updates..... E1-4

2. Spill-Specific Monitoring Requirements E1-5

 2.1 Spill Location and Spread E1-5

 2.2 Spill Volume Estimation..... E1-5

 2.3. Receiving Water Monitoring E1-5

 2.4. Safety and Access Exceptions E1-8

3. Reporting Requirements E1-8

 3.1. Reporting Requirements for Individual Category 1 Spill Reporting E1-8

 3.2. Reporting Requirements for Individual Category 2 Spill Reporting E1-12

 3.3. Monthly Certified Spill Reporting for Category 3 Spills E1-14

 3.4. Monthly Certified Spill Reporting for Category 4 Spills E1-16

 3.5. Amended Certified Spill Reports for Category 3 Spills E1-16

 3.6. Annual Certified Spill Reporting of Category 4 and/or Lateral Spills E1-16

 3.7. Monthly Certification of “No-Spills” or “Category 4 Spills” and/or “Non-Category 1
 Lateral Spills” E1-16

 3.8. Electronic Sanitary Sewer System Service Area Boundary Map..... E1-17

 3.9. Annual Report (Previously termed as Collection System Questionnaire in
 General Order 2006-0003-DWQ) E1-17

 3.10. Sewer System Management Plan Audit Reporting Requirements E1-19

 3.11. Sewer System Management Plan Reporting Requirements E1-19

4. Recordkeeping Requirements E1-20

 4.1. Recordkeeping Time Period..... E1-20

 4.2. Availability of Documents E1-20

 4.3. Spill Reports..... E1-20

 4.4. Recordkeeping of Category 4 Spills and Non-Category 1 Lateral Spills E1-21

 4.5. Sewer System Telemetry Records..... E1-22

 4.6. Sewer System Management Plan Implementation Records E1-22

 4.7. Audit Records..... E1-23

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

4.8. Equipment Records..... E1-23
4.9. Work Orders..... E1-23

ATTACHMENT E1– NOTIFICATION, MONITORING, REPORTING AND RECORDKEEPING REQUIREMENTS

The Notification Requirements (section 1), Spill-specific Monitoring Requirements (section 2), Reporting Requirements (section 3) and Recordkeeping Requirements (section 4) in this Attachment are pursuant to Water Code section 13267 and section 13383, and are an enforceable component of this General Order. For the purpose of this General Order, the term:

- Notification means the notifying of appropriate parties of a spill event or other activity.
- Spill-specific Monitoring means the gathering of information and data for a specific spill event to be reported or kept as records.
- Reporting means the reporting of information and data into the online California Integrated Water Quality System (CIWQS) Sanitary Sewer System Database.
- Recordkeeping means the maintaining of information and data in an official records storage system.

Failure to comply with the notification, monitoring, reporting and recordkeeping requirements in this General Order may subject the Enrollee to civil liabilities of up to \$10,000 a day per violation pursuant to Water Code section 13385; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement.

Water Code section 13193 et seq. requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Resources Control Board (State Water Board) to collect sanitary sewer spill information for each spill event and make this information available to the public. Sanitary sewer spill information for each spill event includes but is not limited to: Enrollee contact information for each spill event, spill cause, estimated spill volume and factors used for estimation, location, date, time, duration, amount discharged to waters of the State, response and corrective action(s) taken.

1. NOTIFICATION REQUIREMENTS

1.1. Notification of Spills of 1,000 Gallons or Greater to the California Office of Emergency Services

Per Water Code section 13271, for a spill that discharges in or on any waters of the State, or discharges or is deposited where it is, or probably will be, discharged in or on any waters of the State, the Enrollee shall notify the California Office of Emergency Services and obtain a California Office of Emergency Services Control Number as soon as possible **but no later than two (2) hours** after:

- The Enrollee has knowledge of the spill; and
- Notification can be provided without substantially impeding cleanup or other emergency measures.

The notification requirements in this section apply to individual spills of 1,000 gallons or greater, from an Enrollee-owned and/or operated laterals, to a water of the State.

1.2. Spill Notification Information

The Enrollee shall provide the following spill information to the California Office of Emergency Services before receiving a Control Number, as applicable:

- Name and phone number of the person notifying the California Office of Emergency Services;
- Estimated spill volume (gallons);
- Estimated spill rate from the system (gallons per minute);
- Estimated discharge rate (gallons per minute) directly into waters of the State or indirectly into a drainage conveyance system;
- Spill incident description:
 - Brief narrative of the spill event, and
 - Spill incident location (address, city, and zip code) and closest cross streets and/or landmarks;
- Name and phone number of contact person on-scene;
- Date and time the Enrollee was informed of the spill event;
- Name of sanitary sewer system causing the spill;
- Spill cause or suspected cause (if known);
- Amount of spill contained;
- Name of receiving water body receiving or potentially receiving discharge; and
- Description of water body impact and/ or potential impact to beneficial uses.

1.3. Notification of Spill Report Updates

Following the initial notification to the California Office of Emergency Services and until such time that the Enrollee certifies the spill report in the online CIWQS Sanitary Sewer System Database, the Enrollee shall provide updates to the California Office of Emergency Services regarding substantial changes to:

- Estimated spill volume (increase or decrease in gallons initially estimated);
- Estimated discharge volume discharged directly into waters of the State or indirectly into a drainage conveyance system (increase or decrease in gallons initially estimated); and
- Additional impact(s) to the receiving water(s) and beneficial uses.

2. SPILL-SPECIFIC MONITORING REQUIREMENTS

2.1 Spill Location and Spread

The Enrollee shall visually assess the spill location(s) and spread using photography, global positioning system (GPS), and other best available tools. The Enrollee shall document the critical spill locations, including:

- Photography and GPS coordinates for:
 - The system location where spill originated.
For multiple appearance points of a single spill event, the points closest to the spill origin.
- Photography for:
 - Drainage conveyance system entry locations,
 - The location(s) of discharge into surface waters, as applicable,
 - Extent of spill spread, and
 - The location(s) of clean up.

2.2 Spill Volume Estimation

To assess the approximate spill magnitude and spread, the Enrollee shall estimate the total spill volume using updated volume estimation techniques, calculations, and documentation for electronic reporting. The Enrollee shall update its notification and reporting of estimated spill volume (which includes spill volume recovered) as further information is gathered during and after a spill event.

2.3. Receiving Water Monitoring

2.3.1. Receiving Water Visual Observations

Through visual observations and use of best available spill volume-estimating techniques and field calculation techniques, the Enrollee shall gather and document the following information for spills discharging to surface waters:

- Estimated spill travel time to the receiving water;
- For spills entering a drainage conveyance system, estimated spill travel time from the point of entry into the drainage conveyance system to the point of discharge into the receiving water;
- Estimated spill volume entering the receiving water; and
- Photography of:
 - Waterbody bank erosion,
 - Floating matter,
 - Water surface sheen (potentially from oil and grease),

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

- Discoloration of receiving water, and
- Impact to the receiving water.

2.3.2. Receiving Water – Water Quality Sampling and Analysis

For sewage spills in which an estimated 50,000 gallons or greater are discharged into a surface water, the Enrollee shall conduct the following water quality sampling no later than **18 hours** after the Enrollee's knowledge of a potential discharge to a surface water:

- Collect one water sample, each day of the duration of the spill, at:
 - The DCS-001 location as described in section 2.3.4 (Receiving Water Sampling Locations) of this Attachment, if sewage discharges to a surface water via a drainage conveyance system; and/or
 - Each of the three receiving water sampling locations in section 2.3.4 (Receiving Water Sampling Locations) of this Attachment;

If the receiving water has no flow during the duration of the spill, the Enrollee must report "No Sampling Due To No Flow" for its receiving water sampling locations.

The Enrollee shall analyze the collected receiving water samples for the following constituents per section 2.3.3 (Water Quality Analysis Specifications) of this Attachment:

- Ammonia, and
- Appropriate bacterial indicator(s) per the applicable Basin Plan water quality objectives, including one or more of the following, unless directed otherwise by the Regional Water Board:
 - Total Coliform Bacteria
 - Fecal Coliform Bacteria
 - *E-coli*
 - Enterococcus

Dependent on the receiving water(s), sampling of bacterial indicators shall be sufficient to determine post-spill (after the spill) compliance with the water quality objectives and bacterial standards of the California Ocean Plan or the California Inland Surface Water Enclosed Bays, and Estuaries Plan, including the frequency and/or number of post-spill receiving water samples as may be specified in the applicable plans.

The Enrollee shall collect and analyze additional samples as required by the applicable Regional Water Board Executive Officer or designee.

2.3.3. Water Quality Analysis Specifications

Spill monitoring must be representative of the monitored activity (40 Code of Federal Regulations section 122.41(j)(1)).

Sufficiently Sensitive Methods

Sample analysis must be conducted according to sufficiently sensitive test methods approved under 40 Code of Federal Regulations Part 136 for the sample analysis of pollutants. For the purposes of this General Order, a method is sufficiently sensitive when the minimum level of the analytical method approved under 40 Code of Federal Regulations Part 136 is at or below the receiving water pollutant criteria.

Environmental Laboratory Accreditation Program-Accredited Laboratories

The analysis of water quality samples required per this General Order must be performed by a laboratory that has accreditation pursuant to Article 3 (commencing with section 100825) of Chapter 4 of Part 1 of Division 101 of the Health and Safety Code. (Water Code section 13176(a).) The State Water Board accredits laboratories through its Environmental Laboratory Accreditation Program (ELAP).

2.3.4. Receiving Water Sampling Locations

The Enrollee shall collect receiving water samples at the following locations.

Sampling of Flow in Drainage Conveyance System (DCS) Prior to Discharge

Sampling Location	Sampling Location Description
DCS-001	A point in a drainage conveyance system before the drainage conveyance system flow discharges into a receiving water.

Receiving Surface Water Sampling (RSW)¹

Sampling Location	Sampling Location Description
RSW-001 Point of Discharge	A point in the receiving water where sewage initially enters the receiving water.
RSW-001U: Upstream of Point of Discharge	A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts.

Sampling Location	Sampling Location Description
RSW-001D: Downstream of Point of Discharge	A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water.

¹ The Enrollee must use its best professional judgment to determine the upstream and downstream distances based on receiving water flow, accessibility to upstream/downstream waterbody banks, and size of visible sewage plume.

2.4. Safety and Access Exceptions

If the Enrollee encounters access restrictions or unsafe conditions that prevents its compliance with spill response requirements or monitoring requirements in this General Order, the Enrollee shall provide documentation of access restrictions and/or safety hazards in the corresponding required report.

3. REPORTING REQUIREMENTS

All reporting required in this General Order must be submitted electronically to the online [CIWQS Sanitary Sewer System Database](https://ciwqs.waterboards.ca.gov) (https://ciwqs.waterboards.ca.gov), unless specified otherwise in this General Order. Electronic reporting may solely be conducted by a Legally Responsible Official or Data Submitter(s) previously designated by the Legally Responsible Official, as required in section 5.8 (Designation of Data Submitters) of this General Order.

The Enrollee shall report any information that is protected by the Homeland Security Act, by email to SanitarySewer@waterboards.ca.gov, with a brief explanation of the protection provided by the Homeland Security Act for the subject report to be protected from unauthorized disclosure and/or public access, and for official Water Board regulatory purposes only.

3.1. Reporting Requirements for Individual Category 1 Spill Reporting

3.1.1. Draft Spill Report for Category 1 Spills

Within three (3) business days of the Enrollee’s knowledge of a Category 1 spill, the Enrollee shall submit a Draft Spill Report to the online CIWQS Sanitary Sewer System Database.

The Draft Spill Report must, at minimum, include the following items:

1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the Enrollee was notified of, or self-discovered, the spill;
4. Operator arrival time;

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

5. Estimated spill start date and time;
6. Date and time the Enrollee notified the California Office of Emergency Services, and the assigned control number;
7. Description, photographs, and GPS coordinates of the system location where the spill originated;
 - If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
8. Estimated total spill volume exiting the system;
9. Description and photographs of the extent of the spill and spill boundaries;
10. Did the spill reach a drainage conveyance system? If Yes:
 - Description of the drainage conveyance system transporting the spill;
 - Photographs of the drainage conveyance system entry location(s);
 - Estimated spill volume fully recovered from the drainage conveyance system;
 - Estimated spill volume remaining within the drainage conveyance system;
11. Description and photographs of all discharge point(s) into the surface water;
12. Estimated spill volume that discharged to surface waters; and
13. Estimated total spill volume recovered.

3.1.2. Certified Spill Report for Category 1 Spills

Within 15 calendar days of the spill end date, the Enrollee shall submit a Certified Spill Report for Category 1 spills, to the online CIWQS Sanitary Sewer System Database. Upon completion of the Certified Spill Report, the online CIWQS Sanitary Sewer System Database will issue a final spill event identification number.

The Certified Spill Report must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report per section 3.1.1 (Draft Spill Report for Category 1 Spills) above:

1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;
2. Spill end date and time;
3. Description of how the spill volume estimations were calculated, including at a minimum:
 - The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
 - The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

4. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
5. System failure location (for example, main, lateral, pump station, etc.);
6. Description of the pipe material, and estimated age of the pipe material, at the failure location;
7. Description of the impact of the spill;
8. Whether or not the spill was associated with a storm event;
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
11. Spill response completion date;
12. Detailed narrative of investigation and investigation findings of cause of spill;
13. Reasons for an ongoing investigation (as applicable) and the expected date of completion;
14. Name and type of receiving water body(s);
15. Description of the water body(s), including but not limited to:
 - Observed impacts on aquatic life,
 - Public closure, restricted public access, temporary restricted use, and/or posted health warnings due to spill,
 - Responsible entity for closing/restricting use of water body, and
 - Number of days closed/restricted as a result of the spill.
16. Whether or not the spill was located within 1,000 feet of a municipal surface water intake; and
17. If water quality samples were collected, identify sample locations and the parameters the water quality samples were analyzed for. If no samples were taken, Not Applicable shall be selected.

3.1.3. Spill Technical Report for Individual Category 1 Spill in which 50,000 Gallons or Greater Discharged into a Surface Water

For any spill in which 50,000 gallons or greater discharged into a surface water, **within 45 calendar days** of the spill end date, the Enrollee shall submit a Spill Technical Report to the online CIWQS Sanitary Sewer System Database. The Spill Technical Report, at minimum, must include the following information:

1. Spill causes and circumstances, including at minimum:
 - Complete and detailed explanation of how and when the spill was discovered;

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

- Photographs illustrating the spill origin, the extent and reach of the spill, drainage conveyance system entrance and exit, receiving water, and post-cleanup site conditions;
 - Diagram showing the spill failure point, appearance point(s), the spill flow path, and ultimate destinations;
 - Detailed description of the methodology employed, and available data used to calculate the discharge volume and, if applicable, the recovered spill volume;
 - Detailed description of the spill cause(s);
 - Description of the pipe material, and estimated age of the pipe material, at the failure location;
 - Description of the impact of the spill;
 - Copy of original field crew records used to document the spill; and
 - Historical maintenance records for the failure location.
2. Enrollee's response to the spill:
- Chronological narrative description of all actions taken by the Enrollee to terminate the spill;
 - Explanation of how the Sewer System Management Plan Spill Emergency Response Plan was implemented to respond to and mitigate the spill; and
 - Final corrective action(s) completed and a schedule for planned corrective actions, including:
 - Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable,
 - Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences, and
 - Necessary modifications to the Emergency Spill Response Plan to incorporate lessons learned in responding to and mitigating the spill.
3. Water Quality Monitoring, including at minimum:
- Description of all water quality sampling activities conducted;
 - List of pollutant and parameters monitored, sampled and analyzed; as required in section 2.3 (Receiving Water Monitoring) of this Attachment;
 - Laboratory results, including laboratory reports;
 - Detailed location map illustrating all water quality sampling points; and
 - Other regulatory agencies receiving sample results (if applicable).
4. Evaluation of spill impact(s), including a description of short-term and long-term impact(s) to beneficial uses of the surface water.

3.1.4. Amended Certified Spill Reports for Individual Category 1 Spills

The Enrollee shall update or add additional information to a Certified Spill Report within **90 calendar days** of the spill end date by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The Enrollee shall certify the amended report.

After **90 calendar days**, the Enrollee shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the Amended Spill Report due date.

3.2. Reporting Requirements for Individual Category 2 Spill Reporting

3.2.1. Draft Spill Report for Category 2 Spills

Within three (3) business days of the Enrollee's knowledge of a Category 2 spill, the Enrollee shall submit a Draft Spill Report to the online CIWQS Sanitary Sewer System Database.

The Draft Spill Report must, at minimum, include the following items:

1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the Enrollee was notified of, or self-discovered, the spill;
4. Operator arrival time;
5. Estimated spill start date and time;
6. Date and time the Enrollee notified the California Office of Emergency Services, and the assigned control number;
7. Description, photographs, and GPS coordinates of the system location where the spill originated;

If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;

8. Estimated total spill volume exiting the system;
9. Description and photographs of the extent of the spill and spill boundaries;
10. Did the spill reach a drainage conveyance system? If Yes:
 - Description of the drainage conveyance system transporting the spill;
 - Photographs of the drainage conveyance system entry location(s);
 - Estimated spill volume fully recovered from the drainage conveyance system;
 - Estimated spill volume remaining within the drainage conveyance system;

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

- Estimated spill volume discharged to a groundwater infiltration basin or facility, if applicable; and

11. Estimated total spill volume recovered.

3.2.2. Certified Spill Report for Category 2 Spills

Within 15 calendar days of the spill end date, the Enrollee shall submit a Certified Spill Report for the Category 2 spill, to the online [CIWQS Sanitary Sewer System Database](https://ciwqs.waterboards.ca.gov) (<https://ciwqs.waterboards.ca.gov>). Upon completion of the Certified Spill Report, the online CIWQS Sanitary Sewer System Database will issue a final spill event identification number.

The Certified Spill Report must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report per section 3.2.1 (Draft Spill Report for Category 2 Spills) above:

1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;
2. Spill end date and time;
3. Description of how the spill volume estimations were calculated, including at a minimum:
 - The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
 - The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;
4. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
5. System failure location (for example, main, pump station, etc.);
6. Description of the pipe/infrastructure material, and estimated age of the pipe material, at the failure location;
7. Description of the impact of the spill;
8. Whether or not the spill was associated with a storm event;
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
11. Spill response completion date;
12. Detailed narrative of investigation and investigation findings of cause of spill;
13. Reasons for an ongoing investigation (as applicable) and the expected date of completion; and

14. Whether or not the spill was located within 1,000 feet of a municipal surface water intake.

3.2.3. Amended Certified Spill Reports for Individual Category 2 Spills

The Enrollee shall update or add additional information to a Certified Spill Report within **90 calendar days** of the spill end date by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The Enrollee shall certify the amended report.

After **90 calendar days**, the Enrollee shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the Amended Spill Report due date.

3.3. Monthly Certified Spill Reporting for Category 3 Spills

The Enrollee shall report and certify all Category 3 spills to the online CIWQS Sanitary Sewer System Database within 30 calendar days after the end of the month in which the spills occurred. (For example, all Category 3 spills occurring in the month of February shall be reported and certified by March 30th). After the Legally Responsible Official certifies the spills, the online CIWQS Sanitary Sewer System Database will issue a spill event identification number for each spill.

The monthly reporting of all Category 3 spills must include the following items for each spill:

1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the Enrollee was notified of, or self-discovered, the spill;
4. Operator arrival time;
5. Estimated spill start date and time;
6. Description, photographs, and GPS coordinates where the spill originated:
 - If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
7. Estimated total spill volume exiting the system;
8. Description and photographs of the extent of the spill and spill boundaries;
9. Did the spill reach a drainage conveyance system? If Yes:
 - Description of the drainage conveyance system transporting the spill;
 - Photographs of the drainage conveyance system entry locations(s);
 - Estimated spill volume fully recovered from the drainage conveyance system; and

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

- Estimated spill volume discharged to a groundwater infiltration basis or facility, if applicable.
- 10. Estimated total spill volume recovered;
- 11. Description of the spill event destination(s), including GPS coordinates, if available, that represent the full spread and reaches of the spill;
- 12. Spill end date and time;
- 13. Description of how the spill volume estimations were calculated, including, at minimum:
 - The methodology and type of data relied upon, including supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
 - The methodology and type of data relied upon to estimate the spill start time, on-going spill rate at time of arrival (if applicable), and the spill end time;
- 14. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
- 15. System failure location (for example, main, pump station, etc.);
- 16. Description of the pipe/infrastructure material, and estimated age of the pipe/infrastructure material, at the failure location;
- 17. Description of the impact of the spill;
- 18. Whether or not the spill was associated with a storm event;
- 19. Description of spill response activities including description of immediate spill containment and cleanup efforts;
- 20. Description of spill corrective actions, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of the major milestones for those steps; including, at minimum:
 - Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable, and
 - Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences at the same spill event location, including:
 - Adjusted schedule/method of preventive maintenance,
 - Planned rehabilitation or replacement of sanitary sewer asset,
 - Inspected, repaired asset(s), or replaced defective asset(s),
 - Capital improvements,
 - Documentation verifying immediately implemented system modifications and operating/maintenance modifications,
 - Description of spill response activities,

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

- Spill response completion date, and
- Ongoing investigation efforts, and expected completion date of investigation to determine the full cause of spill;

21. Detailed narrative of investigation and investigation findings of cause of spill.

3.4. Monthly Certified Spill Reporting for Category 4 Spills

The Enrollee shall report and certify the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, within 30 calendar days after the end of the month in which the spills occurred.

3.5. Amended Certified Spill Reports for Category 3 Spills

Within 90 calendar days of the certified Spill Report due date, the Enrollee may update or add additional information to a certified Spill Report by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The Enrollee shall certify the amended report.

After 90 calendar days, the Legally Responsible Official shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a certified Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the 90-day timeframe for amending the certified Spill Report, as provided above.

3.6. Annual Certified Spill Reporting of Category 4 and/or Lateral Spills

For all Category 4 spills and spills from its owned and/or operated laterals that are caused by a failure or blockage in the lateral and that do not discharge to a surface water, the Enrollee shall:

- Maintain records per section 4.4. of this Attachment;
The Enrollee shall provide records upon request by State Water Board or Regional Water Board staff.
- Annually upload and certify a report, in an appropriate digital format, of all recordkeeping of spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occurred.

A spill from an Enrollee-owned and/or operated lateral that discharges to a surface water is a Category 1 spill; the Enrollee shall report all Category 1 spills per section 3.1 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

3.7. Monthly Certification of “No-Spills” or “Category 4 Spills” and/or “Non-Category 1 Lateral Spills”

If either (1) no spills occur during a calendar month or (2) only Category 4, and/or Enrollee-owned and/or operated lateral spills (that do not discharge to a surface water) occur during a calendar month, the Enrollee shall certify, within 30 calendar days after

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

the end of each calendar month, either a “No-Spill” certification statement, or a “Category 4 Spills” and/or “Non-Category 1 Lateral Spills” certification statement, in the online CIWQS Sanitary Sewer System Database, certifying that there were either no spills, or Category 4 and/or Non-Category 1 Lateral Spills that will be reported annually (per section 3.6 of this Attachment) for the designated month.

If a spill starts in one calendar month and ends in a subsequent calendar month, and the Enrollee has no further spills of any category, in the subsequent calendar month, the Enrollee shall certify “no-spills” for the subsequent calendar month.

If the Enrollee has no spills from its systems during a calendar month, but the Enrollee voluntarily reported a spill from a private lateral or a private system, the Enrollee shall certify “no-spills” for that calendar month.

If the Enrollee has spills from its owned and/or operated laterals during a calendar month, the Enrollee shall not certify “no spills” for that calendar month.

3.8. Electronic Sanitary Sewer System Service Area Boundary Map

The Legally Responsible Official shall submit, to the State Water Board, an up-to-date electronic spatial map of its sewer system service area boundaries. The map must be in accordance with section 5.14 (Electronic Sanitary Sewer System Service Area Boundary Map) of this General Order and the specification provided on the statewide Sanitary Sewer Systems program website. The map must include the location of wastewater treatment facility(ies) that treats the sewer system waste, if in the same sewer service boundary.

By the Effective Date of this General Order, specifications for the electronic sanitary sewer service area boundary map format will be provided on the statewide Sanitary Sewer Systems Order program website.

3.9. Annual Report (Previously termed as Collection System Questionnaire in General Order 2006-0003-DWQ)

A new Enrollee shall complete and submit its first certified Annual Report into the online CIWQS Sanitary Sewer System Database, **within 30 days of obtaining a CIWQS account**; Subsequent Annual Reports are due by April 1 of each year.

All enrollees shall update their previous year’s Annual Report, **by April 1 of each year after the Effective Date of this General Order**, for each calendar year (January 1 through December 31).

The Annual Report must be entered directly into the online CIWQS Sanitary Sewer System Database. The Enrollee’s Legally Responsible Official shall certify the Annual Report as instructed in CIWQS;

The Annual Report must address, and update as applicable, the following items:

- Population served;

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

- Updated sewer system service area boundary map, if service area boundary has changed from original map submitted per section 5.14 (Electronic Sanitary Sewer System Service Area Boundary Map) of this General Order;
- Number of system operation and maintenance staff:
 - Entry level (less than two years of experience),
 - Journey level (greater than two years of experience),
 - Supervisory level, and
 - Managerial level;
- Number of operation and maintenance staff certified as a certified collection system operator by the California Water Environmental Association (CWEA), with:
 - Corresponding number of certified collection system operator grade levels (Grade I, II, III, IV, and V);
- System information:
 - Miles of system gravity and force mains,
 - Number of upper and lower service laterals connected to system,
 - Estimated number of upper and lower laterals owned and/or operated by the Enrollee,
 - Portion of laterals that is Enrollee's responsibility,
 - Average age the major components of system infrastructure,
 - Number and age of pump stations, and
 - Estimated total miles of the system pipeline not accessible for maintenance;
- Name and location of the treatment plant(s) receiving sanitary sewer system's waste;
- Name of satellite sewer system tributaries;
- Number of system's gravity sewer above or underground crossings of water bodies throughout system;
- Number of force main (pressurized pipe) above or underground crossings of water bodies throughout system;
- Number of siphons used to convey waste throughout the sewer system;
- Miles of sewer system cleaned;
- Miles of sewer system video inspected, or comparable (i.e., video closed-circuit television or alternative inspection methods);
- System Performance Evaluation as specified in section 5.11 (System Performance Analysis) of this General Order;
- Major spill causes (for example, root intrusion, grease deposition);

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

- System infrastructure failure points (for example, main, pump station, lateral, etc.);
- Ongoing spill investigations; and
- Actions taken to address system deficiencies.

3.10. Sewer System Management Plan Audit Reporting Requirements

The Enrollee shall submit its Sewer System Management Plan Audit and other pertinent audit information, in accordance with section 5.4 (Sewer System Management Plan Audits) of this General Order, to the online CIWQS Sanitary Sewer System Database **by six (6) months after the end of the 3-year audit period.**

If a Sewer System Management Plan Audit is not conducted as required: the Enrollee shall:

- Update the online CIWQS Sanitary Sewer System Database and select the justification for not conducting the Audit; and
- Notify its corresponding Regional Water Board (see Attachment F (Regional Water Quality Control Board Contact Information)) of the justification for the lapsed requirements.

The Enrollee's reporting of a justification for not conducting a timely Audit does not justify non-compliance with this General Order. The Enrollee shall:

- Submit the late Audit as required in this General Order; and
- Comply with subsequent Audit requirements and due dates corresponding with the original audit cycle.

3.11. Sewer System Management Plan Reporting Requirements

For an Existing Enrollee previously regulated by Order 2006-0003-DWQ: **Within every six (6) years after the required due date of its last Plan Update**, the Legally Responsible Official shall upload and certify a local governing entity-approved Sewer System Management Plan Update to the online CIWQS Sanitary Sewer System Database. If the electronic document format or size capacity prevents the electronic upload of the Plan, the Legally Responsible Official shall report an electronic link to its updated Sewer System Management Plan posted on its own website.

Order 2006-0003-DWQ required each enrollee to develop its initial Sewer System Management Plan per the following schedule, with required Plan updates at a frequency of 5-years thereafter:

Systems serving populations: Greater than 100,000: May 2, 2009

Between 100,000 and 10,000: August 2, 2009

Between 10,000 and 2,500: May 2, 2010

Less than 2,500: August 2, 2010

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

This Order carries forth the previously-required Plan Update schedule per Order 2006-0003-DWQ. Per the six-year Plan Update frequency required in this Order, the Enrollee shall upload and certify its first Plan Update, to the online CIWQS Sanitary Sewer System Database by the following due dates, with subsequent Plan Updates at the frequency of six years thereafter:

Systems serving populations: Greater than 100,000: May 2, 2025

Between 100,000 and 10,000: August 2, 2025

Between 10,000 and 2,500: May 2, 2026

Less than 2,500: August 2, 2026

For a New Enrollee: **Within twelve (12) months of its Application for Enrollment Approval date**, the Legally Responsible Official of a new Enrollee shall upload and certify a local governing entity-approved Sewer System Management Plan to the online CIWQS Sanitary Sewer System Database. If electronic document format or size capacity prevents the electronic upload of the Plan, the Legally Responsible Official shall report an electronic link to its Sewer System Management Plan posted on its own website. The due date for subsequent 6-year Plan updates, is six (6) years from the submittal due date of the new Enrollee's first Sewer System Management Plan.

4. RECORDKEEPING REQUIREMENTS

The Enrollee shall maintain records to document compliance with the provisions of this General Order, and previous General Order 2006-0003-DWQ as applicable, for each sanitary sewer system owned, including any required records generated by an Enrollee's contractor(s).

4.1. Recordkeeping Time Period

The Enrollee shall maintain records of documents required in this Attachment, including records collected for compliance with this General Order, and records collected in accordance with previous General Order 2006-0003-DWQ, for five (5) years.

4.2. Availability of Documents

The Enrollee shall make the records required in this General Order readily available, either electronic or hard copies, for review by Water Board staff during onsite inspections or through an information request.

4.3. Spill Reports

The Enrollee shall maintain records for each of the following spill-related events and activities:

- Spill event complaint, including but not limited to records documenting how the Enrollee responded to notifications of spills. Each complaint record must, at a minimum, include the following information:
 - Date, time, and method of notification,

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

- Date and time the complainant first noticed the spill, if available,
- Narrative description of the complaint, including any information the caller provided regarding whether the spill has reached surface waters or a drainage conveyance system, if available,
- Complainant's contact information, if available, and
- Final resolution of the complaint;
- Records documenting the steps and/or remedial action(s) undertaken by the Enrollee, using all available information, to comply with this General Order, and previous General Order 2006-0003-DWQ as applicable;
- Records documenting how estimate(s) of volume(s) and, if applicable, volume(s) of spill recovered were calculated;
- All California Office of Emergency Services notification records, as applicable; and
- Records, in accordance with the Monitoring Requirements in this Attachment.

4.4. Recordkeeping of Category 4 Spills and Non-Category 1 Lateral Spills

An Enrollee must maintain the following records for each individual Category 4 spill and for each individual non-Category 1 Enrollee-owned and/or operated lateral spill, and report in accordance to section 3.6 (Annual Certified Spill Reporting of Category 4 and/or Lateral Spills) of this Attachment.

Recordkeeping of Individual Category 4 Spill Information:

1. Contact information: Name and telephone number of Enrollee contact person to respond to spill-specific questions;
2. Spill location name;
3. Description and GPS coordinates for the system location where the spill originated;
4. Did the spill reach a drainage conveyance system? If Yes:
 - Description of drainage conveyance system location,
 - Estimated spill volume fully recovered within the drainage conveyance system, and
 - Estimated spill volume remaining within the drainage conveyance system;
5. Estimated total spill volume exiting the sanitary sewer system;
6. Spill date and start time;
7. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
8. System failure location (for example, main, pump station, etc.);
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of how the volume estimation was calculated, including, at minimum:

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

- The methodology and type of data relied upon, including supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
- The methodology and type of data relied upon to estimate the spill start time, on-going spill rate at time of arrival (if applicable), and the spill end time;

11. Description of implemented system modifications and operating/maintenance modifications.

Recordkeeping of Individual Lateral Spill Information:

1. Date and time the Enrollee was notified of, or self-discovered, the spill;
2. Location of individual spill;
3. Estimated individual spill volume;
4. Spill cause(s) (for example, root intrusion, grease deposition, etc.); and
5. Description of how the volume estimations were calculated.

Total Annual Spill Information:

1. Estimated total annual spill volume;
2. Description of spill corrective actions, including at minimum:
 - Local regulatory enforcement action taken against the sewer lateral owner in response to a spill, as applicable, and
 - System operation, maintenance and program modifications implemented to prevent repeated spill occurrences at the same spill location.

4.5. Sewer System Telemetry Records

The Enrollee shall maintain the following sewer system telemetry records if used to document compliance with this General Order, and previous General Order 2006-0003-DWQ as applicable, including spill volume estimates:

- Supervisory control and data acquisition (SCADA) system(s);
- Alarm system(s);
- Flow monitoring device(s) or other instrument(s) used to estimate sewage flow rates, and/or volumes;
- Computerized maintenance management system records; and
- Asset management-related records.

4.6. Sewer System Management Plan Implementation Records

The Enrollee shall maintain records documenting the Enrollee's implementation of its Sewer System Management Plan, including documents supporting its Sewer System Management Plan audits, corrections, modifications, and updates to the Sewer System Management Plan.

4.7. Audit Records

The Enrollee shall maintain, at minimum, the following records pertaining to its Sewer System Management Plan audits, and other internal audits:

- Completed audit documents and findings;
- Name and contact information of staff and/or consultants that conducted or involved in the audit; and
- Follow-up actions based on audit findings.

4.8. Equipment Records

The Enrollee shall maintain a log of all owned and leased sewer system cleaning, operational, maintenance, construction, and rehabilitation equipment.

4.9. Work Orders

The Enrollee shall maintain record of work orders for operations and maintenance projects.

ATTACHMENT E2 – SUMMARY OF NOTIFICATION, MONITORING AND REPORTING REQUIREMENTS

This Attachment provides a summary of notification, monitoring and reporting requirements, by spill category, and for Enrollee-owned and/or operated laterals as required in Attachment E1 of this General Order, for quick reference purposes only.

Table E2-1

Spill Category 1: Spills to Surface Waters

Spill Requirement	Due	Method
Notification	<p>Within two (2) hours of the Enrollee’s knowledge of a Category 1 spill of 1,000 gallons or greater, discharging or threatening to discharge to surface waters:</p> <p>Notify the California Office of Emergency Services and obtain a notification control number.</p>	<p>California Office of Emergency Services at: (800) 852-7550 (Section 1 of Attachment E1)</p>
Monitoring	<ul style="list-style-type: none"> • Conduct spill-specific monitoring; • Conduct water quality sampling of the receiving water within 18 hours of initial knowledge of spill of 50,000 gallons or greater to surface waters. 	<p>(Section 2 of Attachment E1)</p>
Reporting	<ul style="list-style-type: none"> • Submit Draft Spill Report within three (3) business days of the Enrollee’s knowledge of the spill; • Submit Certified Spill Report within 15 calendar days of the spill end date; • Submit Technical Report within 45 calendar days after the spill end date for a Category 1 spill in which 50,000 gallons or greater discharged to surface waters; and • Submit Amended Spill Report within 90 calendar days after the spill end date. 	<p>(Section 3.1 of Attachment E1)</p>

Table E2-2

Spill Category 2: Spills of 1,000 Gallons or Greater That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	<p>Within two (2) hours of the Enrollee’s knowledge of a Category 2 spill of 1,000 gallons or greater, discharging or threatening to discharge to waters of the State:</p> <p>Notify California Office of Emergency Services and obtain a notification control number.</p>	<p>California Office of Emergency Services at: (800) 852-7550</p> <p>(Section 1 of Attachment E1)</p>
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> • Submit Draft Spill Report within three (3) business days of the Enrollee’s knowledge of the spill; • Submit Certified Spill Report within 15 calendar days of the spill end date; and • Submit Amended Spill Report within 90 calendar days after the spill end date. 	(Section 3.2 of Attachment E1)

Table E2-3

Spill Category 3: Spills of Equal or Greater than 50 Gallons and Less than 1,000 Gallons That Does Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database within 30 calendars days after the end of the month in which the spills occur; and Submit Amended Spill Reports within 90 calendar days after the Certified Spill Report due date. 	(Section 3.3 and 3.5 of Attachment E1)

Table E2-4

Spill Category 4: Spills Less Than 50 Gallons That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> If, during any calendar month, Category 4 spills occur, certify monthly, the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills into the online CIWQS Sanitary Sewer System Database, within 30 days after the end of the calendar month in which the spills occurred. Upload and certify a report, in an acceptable digital format, of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. 	(Section 3.4, 3.6, 3.7 and 4.4 of Attachment E1)

Table E2-5

Enrollee Owned and/or Operated Lateral Spills That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	<p>Within two (2) hours of the Enrollee’s knowledge of a spill of 1,000 gallons or greater, from an enrollee-owned and/or operated lateral, discharging or threatening to discharge to waters of the State:</p> <p>Notify California Office of Emergency Services and obtain a notification control number.</p> <p>Not applicable to a spill of less than 1,000 gallons.</p>	<p>California Office of Emergency Services at: (800) 852-7550</p> <p>(Section 1 of Attachment E1)</p>
Monitoring	Conduct visual monitoring.	(Section 2 of Attachment E1)
Reporting	<ul style="list-style-type: none"> • Upload and certify a report, in an acceptable digital format, of all lateral spills (that do not discharge to a surface water) to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. • Report a lateral spill of any volume that discharges to a surface water as a Category 1 spill. 	(Sections 3.6, 3.7 and 4.4 of Attachment E1)

ATTACHMENT F – REGIONAL WATER QUALITY CONTROL BOARD CONTACT INFORMATION

This Attachment provides a map, list of counties, and contact information to assist the Enrollee in identifying the corresponding Regional Water Quality Control Board office, for all Regional Water Board notification requirements in this General Order.



Region 1 -- North Coast Regional Water Quality Control Board:

Del Norte, Glenn, Humboldt, Lake, Marin, Mendocino, Modoc, Siskiyou, Sonoma, and Trinity counties.

RB1SpillReporting@waterboards.ca.gov or (707) 576-2220

Region 2 -- San Francisco Bay Regional Water Quality Control Board:

Alameda, Contra Costa, San Francisco, Santa Clara (Northern most part of Morgan Hill), San Mateo, Marin, Sonoma, Napa, Solano counties.

RB2SpillReports@waterboards.ca.gov or (510) 622-2369

Region 3 -- Central Coast Regional Water Quality Control Board:

Santa Clara (most of Morgan Hill), San Mateo (Southern portion), Santa Cruz, San Benito, Monterey, Kern (small portions), San Luis Obispo, Santa Barbara, Ventura (Northern portion) counties.

CentralCoast@waterboards.ca.gov or (805) 549-3147

Region 4 -- Los Angeles Regional Water Quality Control Board:

Los Angeles, Ventura counties (small portions of Kern and Santa Barbara counties).

rb4-ssswdr@waterboards.ca.gov or (213) 576-6600

STATEWIDE SANITARY SEWER SYSTEMS GENERAL ORDER 2022-0103-DWQ

Region 5 -- Central Valley Regional Water Quality Control Board:

Rancho Cordova (Sacramento) Office: Colusa, Lake, Sutter, Yuba, Sierra, Nevada, Placer, Yolo, Napa, (North East), Solano (West), Sacramento, El Dorado, Amador, Calaveras, San Joaquin, Contra Costa (East), Stanislaus, Tuolumne counties.

RB5sSpillReporting@waterboards.ca.gov or (916) 464-3291

Fresno Office: Fresno, Kern, Kings, Madera, Mariposa, Merced, and Tulare counties, and small portions of San Benito and San Luis Obispo counties.

RB5fSpillReporting@waterboards.ca.gov or (559) 445-5116

Redding Office: Butte, Glen, Lassen, Modoc, Plumas, Shasta, Siskiyou, and Tehama counties.

RB5rSpillReporting@waterboards.ca.gov or (530) 224-4845

Region 6 -- Lahontan Regional Water Quality Control Board:

Lake Tahoe Office: Alpine, Modoc (East), Lassen (East side and Eagle Lake), Sierra, Nevada, Placer, El Dorado counties.

RB6sSpillReporting@waterboards.ca.gov or (530) 542-5400

Victorville Office: Mono, Inyo, Kern (East), San Bernardino, Los Angeles (North East corner) counties.

RB6vSpillReporting@waterboards.ca.gov or (760) 241-6583

Region 7 -- Colorado River Basin Regional Water Quality Control Board:

Imperial county and portions of San Bernardino, Riverside, San Diego counties.

RB7SpillReporting@waterboards.ca.gov or (760) 346-7491

Region 8 -- Santa Ana Regional Water Quality Control Board:

Orange, Riverside, San Bernardino counties.

RB8SpillReporting@waterboards.ca.gov or (951) 782-4130


Region 9 -- San Diego Regional Water Quality Control Board:

San Diego county and portions of Orange and Riverside counties.

RB9Spill_Report@waterboards.ca.gov or (619) 516-1990

End of Order 2022-0103-DWQ

Sanitary District No. 5 of Marin County Sewer Spill Emergency Response Plan

Effective Date: August 15, 2023
Revised Date: 
Approved by: District Manager, Tony Rubio
Signature: _____
Date: August 15, 2023

Prepared by: David Patzer
DKF Solutions Group, LLC
dpatzer@dkfsolutions.com

© 2004-2023 DKF Solutions Group, LLC. All rights reserved.

This Spill Emergency Response Plan (SERP) is licensed to the Sanitary District No. 5 of Marin County for internal use only beginning on the effective date listed above. All right, title and interest in the SERP, including without limitation, any copyright, shall remain with DKF Solutions Group, LLC. The Sanitary District No. 5 of Marin County is granted a non-exclusive right to copy the SERP for use by Sanitary District No. 5 of Marin County personnel only. The SERP as customized for the Sanitary District No. 5 of Marin County is a public document and may be posted on the District's website or otherwise presented in a non-editable format for public view. The SERP may not, in whole or in part, be shared in an editable format with another entity other than the Sanitary District No. 5 of Marin County including, but not limited to, contractors, vendors, private companies, or other public agencies. In no case can the SERP be shared or posted online in an editable format. This document should not be construed as legal advice to any individual or agency that may use it.



TABLE OF CONTENTS

- 1. Purpose
- 2. Policy
- 3. Definitions as used in this Spill Emergency Response Plan
- 4. State Regulatory Requirements for Element 6, Spill Emergency Response Plan
- 5. Spill Emergency Response Plan Objectives
- 6. Spill Detection and Notification
- 7. Spill Response Procedures
- 8. Recovery and Cleanup
- 9. Water Quality
- 10. Notification, Reporting, Monitoring and Recordkeeping Requirements
- 11. Post-Spill Assessments of Spill Response Activities
- 12. Spill Response Training
- 13. Sewer Backup Into/Onto Private Property Claims Handling Policy
- 14. Authority
- 15. Appendices
 - A. Appendix A: Reporting Requirements by Spill Category
 - B. Appendix B: Service Call Form
 - C. Appendix C: Door Hanger
 - D. Appendix D: Sanitary Sewer Spill Response Instructions for Contractors
 - E. Appendix E: Sanitary Sewer Spill/Backup Response Workbook

Section 1:

- o Workbook InstructionsA-1
- o Contact Information -2
- o Key Definitions and Category Determination -3
- o Spill Event Checklist -4

Section 2: Regulatory Reporting

- o Regulatory Reporting Guide..... B-1
- o Regulatory Reporting Log -2

Section 3: Flowchart C-1

Section 4: Sanitary Sewer Spill Field ReportD-1

Section 5: Volume Estimation

- o Volume Estimation Computations and Examples E-1
- o Eyeball Estimation Method -2

- Duration and Flow Rate Comparison Method -3
- Area/Volume Method -4
- Upstream Connections Method..... -5
- Drawing Worksheet -6
- Section 6: Backup Forms**
 - Backup Forms Checklist **F-1**
 - First Responder Form..... -2
 - Declination of Cleaning Services -3
 - Lodging Authorization..... -4
 - Customer Information Letter -5
 - Your Responsibilities as a Private Property Owner..... -6
 - Claim Form -7
- Section 7: Surface Water Sampling Standard Operating Procedure (SOP)**
 - Table of Contents **G-1**
 - Specifications & Requirements -2
 - Introduction & Overview -3
 - Equipment & Safety -4
 - Before Sampling -5
 - Surface Water Sampling -6
 - After Sampling -7
 - Attachment E1 Summary -8
 - Quick-Reference Guide -9
 - Surface Water Sampling Worksheet -10
 - Surface Water Sample Chain of Custody Record -11
- Section 8: Post Event**
 - Post-Spill Assessment **H-1**
 - Collection System Failure Analysis -2

1. PURPOSE

The purpose of the Sanitary District No. 5 of Marin County Spill Emergency Response Plan (SERP) is to support a prompt, orderly and effective response to spills (sanitary), reduce spill volumes, and collect information for prevention of future spills. A “spill” in this document is defined, by State Water Board Order No. WQ 2022-0103-DWQ as a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure.

The SERP provides guidelines for District personnel to follow in responding to, cleaning up, reporting, and properly documenting spills that may occur within the District’s service area. This SERP satisfies the State Water Board Order No. WQ 2022-0103-DWQ, which require wastewater collection agencies to have a Spill Emergency Response Plan.

Additionally, the SERP outlines procedures for responding to sanitary sewer spill backups into structures as required by the District’s insurer. See definitions. “Backup” is a term typically used by insurers to describe property damage resulting from exposure and contact to untreated or partially treated sewage.

2. POLICY

The District’s employees are required to report all spills from agency owned sewer mains and publicly owned laterals found and to take the appropriate action to secure the spill area, properly report to the appropriate regulatory agencies, relieve the cause of the spill, and ensure that the affected area is cleaned as soon as possible to minimize health hazards to the public and protect the environment. The District’s goal is to respond to sewer system spills as soon as possible following notification. The District will follow reporting procedures regarding sewer spills as set forth by the San Francisco Regional Water Quality Control Board and the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR).

3. DEFINITIONS AS USED IN THIS SERP

ANNUAL REPORT: An Annual Report (previously termed as Collection System Questionnaire in previous State Water Board Order No. 2006-0003-DWQ) is a mandatory report in which the District provides a calendar-year update of its efforts to prevent spills.

BASIN PLAN: A Basin Plan is a water quality control plan specific to a Regional Water Quality Control Board (Regional Water Board), that serves as regulations to: (1) define and designate beneficial uses of surface and groundwaters, (2) establish water quality objectives for protection of beneficial uses, and (3) provide implementation measures.

BENEFICIAL USES: The term “Beneficial Uses” is a Water Code term, defined as the uses of the waters of the State that may be protected against water quality degradation. Examples of beneficial uses include but are not limited to, municipal, domestic, agricultural, and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

CALIFORNIA INTEGRATED WATER QUALITY SYSTEM (CIWQS): CIWQS is the statewide database that provides for mandatory electronic reporting as required in State and Regional Water Board-issued waste discharge requirements.

DATA SUBMITTER: A Data Submitter is an individual designated and authorized by the District’s Legally Responsible Official to enter spill data into the online CIWQS Sanitary Sewer System Database. A Data Submitter does not have the

authority of a Legally Responsible Official to certify reporting entered into the online CIWQS Sanitary Sewer System Database.

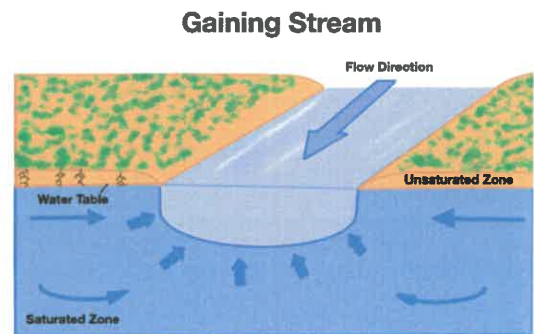
DRAINAGE CONVEYANCE SYSTEM: A drainage conveyance system is a publicly- or privately-owned separate storm sewer system, including but not limited to drainage canals, channels, pipelines, pump stations, detention basins, infiltration basins/facilities, or other facilities constructed to transport stormwater and non-stormwater flows.

ENVIRONMENTALLY SENSITIVE AREA: An environmentally sensitive area is a designated agricultural and/or wildlife area identified to need special natural landscape protection due to its wildlife or historical value.

EXFILTRATION: Exfiltration is the underground exiting of sewage from a sanitary sewer system through cracks, offset or separated joints, or failed infrastructure due to corrosion or other factors.

FOG – Fats, Oils, and Grease: Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

HYDROLOGICALLY CONNECTED: Two waterbodies are hydrologically connected when one waterbody flows, or has the potential to flow, into the other waterbody. For the purpose of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), groundwater feeds into the surface water. The surface waterbody in this example is termed a gaining stream as it gains flow from surrounding groundwater. See image, right.



LATERAL (INCLUDING LOWER AND UPPER LATERAL): A lateral is an underground segment of smaller diameter pipe that transports sewage from a customer's building or property (residential, commercial, or industrial) to the District's main sewer line in a street or easement. Upper and lower lateral boundary definitions are subject to local jurisdictional codes and ordinances, or private system ownership. A lower lateral is the portion of the lateral located between the sanitary sewer system main, and either the property line, sewer clean out, curb line, established utility easement boundary, or other jurisdictional locations. An upper lateral is the portion of the lateral from the property line, sewer clean out, curb line, established utility easement boundary, or other jurisdictional locations, to the building or property.

LEGALLY RESPONSIBLE OFFICIAL: A Legally Responsible Official is an official representative, designated by the District, with authority to sign and certify submitted information and documents required by this General Order.

MAINLINE SEWER: Refers to District wastewater collection system piping downstream of the sewer laterals that is not a private sewer lateral connection to a building.

MAINTENANCE HOLE OR MANHOLE: Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection

NOTIFICATION OF A SPILL: Refers to the time at which the District becomes aware of a spill event through observation or notification by the public or other source.

NUISANCE: For the purpose of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), a nuisance, as defined in Water Code section 13050(m), is anything that meets all of the following requirements:

- Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property;

- Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal; and
- Occurs during, or as a result of, the treatment or disposal of wastes.

PREVENTATIVE MAINTENANCE: Refers to maintenance activities intended to prevent failures of the wastewater collection system facilities (e.g. cleaning, CCTV, inspection).

PRIVATE LATERAL SEWAGE SPILL – Spills that are caused by blockages or other problems within a privately-owned lateral.

PRIVATE SANITARY SEWER SYSTEM: A private sanitary sewer system is a sanitary sewer system of any size that is owned and/or operated by a private individual, company, corporation, or organization. A private sanitary sewer system may or may not connect into a publicly owned sanitary sewer system.

PRIVATE SEWER LATERAL: A private sewer lateral is the privately-owned lateral that transports sewage from private property(ies) into a sanitary sewer system.

POTENTIAL TO DISCHARGE, POTENTIAL DISCHARGE: Potential to Discharge, or Potential Discharge, means any exiting of sewage from a sanitary sewer system which can reasonably be expected to discharge into a water of the State based on the size of the sewage spill, proximity to a drainage conveyance system, and the nature of the surrounding environment.

RECEIVING WATER: A receiving water is a water of the State that receives a discharge of waste.

SANITARY SEWER SYSTEM: A sanitary sewer system is a system that is designed to convey sewage, including but not limited to, pipes, manholes, pump stations, siphons, wet wells, diversion structures and/or other pertinent infrastructure, upstream of a wastewater treatment plant headworks, including:

- Laterals owned and/or operated by the District;
- Satellite sewer systems; and/or
- Temporary conveyance and storage facilities, including but not limited to temporary piping, vaults, construction trenches, wet wells, impoundments, tanks, and diversion structures.

For purpose of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), sanitary sewer systems include only systems owned and/or operated by the District.

SATELLITE SEWER SYSTEM: A satellite sewer system is a portion of a sanitary sewer system owned or operated by a different owner than the owner of the downstream wastewater treatment facility ultimately treating the sewage.

SEWAGE: Sewage, and its associated wastewater, is untreated or partially treated domestic, municipal, commercial and/or industrial waste (including sewage sludge), and any mixture of these wastes with inflow or infiltration of storm-water or groundwater, conveyed in a sanitary sewer system.

SEWER BACKUP A sanitary sewer spill resulting from a sanitary sewer system overflow, operational failure, and/or infrastructure failure in a publicly owned sewer system, with an appearance point and subsequent discharge into a structure.

SPILL: A spill is a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure. Exfiltration of sewage is not considered to be a spill under the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR) if the exfiltrated sewage remains in the subsurface and does not reach a surface water of the State.

- **Category 1 Spill:**

A Category 1 spill is a spill of any volume of sewage from or caused by a sanitary sewer system regulated under the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR) that results in a discharge to:

- A surface water, including a surface water body that contains no flow or volume of water; or
- A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed of properly.

Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility.

A spill from an District-owned and/or operated lateral that discharges to a surface water is a Category 1 spill; the District shall report all Category 1 spills per section 3.1 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

- **Category 2 Spill**

A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR) that does not discharge to a surface water. A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.

- **Category 3 Spill**

A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR) that does not discharge to a surface water. A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.

- **Category 4 Spill**

A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR) that does not discharge to a surface water. A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

TRAINING: Training is in-house or external education and guidance needed that provides the knowledge, skills, and abilities to comply with the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR).

WASH DOWN WATER: Wash down water is water used to clean a spill area.

WASTE: Waste, as defined in Water Code section 13050(d), includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

WATERS OF THE STATE: Waters of the State are surface waters or groundwater within boundaries of the state as defined in Water Code section 13050(e), in which the State and Regional Water Boards have authority to protect beneficial uses. Waters of the State include, but are not limited to, groundwater aquifers, surface waters, saline waters, natural washes and pools, wetlands, sloughs, and estuaries, regardless of flow or whether water exists during dry conditions. Waters of the State include waters of the United States.

WATERS OF THE UNITED STATES: Waters of the United States are surface waters or waterbodies that are subject to federal jurisdiction in accordance with the Clean Water Act.

WATER QUALITY OBJECTIVE: A water quality objective is the limit or maximum amount of pollutant, waste constituent or characteristic, or parameter level established in statewide water quality control plans and Regional Water Boards' Basin Plans, for the reasonable protection of beneficial uses of surface waters and groundwater and the prevention of nuisance.

4. STATE REGULATORY REQUIREMENTS FOR ELEMENT 6, SPILL EMERGENCY RESPONSE PLAN

The Sewer System Management Plan (SSMP) must include an up to date Spill Emergency Response Plan (SERP) to ensure prompt detection of and response to spills to reduce spill volumes and collect information for prevention of future spills. The SERP must include procedures to:

- Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner;
- Notify other potentially affected entities (for example, health agencies, water suppliers, etc.) of spills that potentially affect public health or reach waters of the State;
- Comply with the notification, monitoring and reporting requirements of State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), State law and regulations, and applicable Regional Water Board Orders;
- Ensure that appropriate staff and contractors implement the SERP and are appropriately trained;
- Address emergency system operations, traffic control and other necessary response activities;
- Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system;
- Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State;
- Remove sewage from the drainage conveyance system;
- Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters;
- Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery;
- Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event;
- Conduct post-spill assessments of spill response activities;
- Document and report spill events as required in this General Order; and
- Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update it as needed.

The Sewer System Management Plan is available to the public at <https://www.sani5.org/tiburon-belvedere-wastewater-treatment-plant>.

5. SPILL EMERGENCY RESPONSE PLAN OBJECTIVES

The Spill Emergency Response Plan includes measures to protect public health and the environment. The District will respond to spills from its system(s) in a timely manner that minimizes water quality impacts and nuisance by:

- Immediately stopping the spill and preventing/minimizing a discharge to waters of the State;
- Intercepting sewage flows to prevent/minimize spill volume discharged into waters of the State;
- Thoroughly recovering, cleaning up and disposing of sewage and wash down water; and
- Cleaning publicly accessible areas while preventing discharges to waters of the State.

Additionally, District Staff will:

- Work safely;
- Properly document each spill event in a separate file including photos and/or video where applicable;
- Collect information for prevention of future spills;
- Minimize public contact with the spilled wastewater;
- Mitigate the impact of the spill;
- Meet the regulatory reporting requirements;
- Evaluate the causes of failure related to spills;
- Perform post-spill response evaluation for adherence to procedures and effectiveness of response; and
- Revise response procedures, modify maintenance practices or provide additional training based on the results from the debrief and failure analysis of spills, if needed.

6. SPILL DETECTION AND NOTIFICATION

ref. State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), ATTACHMENT D, Element 6, Page D-6

The processes that are employed to notify the District of the occurrence of a spill include: observation by the public, receipt of an alarm, or observation by District staff during the normal course of their work.

6.1 LIFT STATION ALARMS

The District operates 24 wastewater lift stations. In the event of a station failure the SCADA alarm system is activated and the District is contacted. To prevent spills, wastewater from the wet well can either be pumped into a vacuum truck for disposal to a nearby sanitary sewer manhole or bypassed around the station into the sanitary sewer system.

6.2 PUBLIC OBSERVATION

Public observation is the most common way that the District is notified of blockages and spills. Contact numbers and information for reporting sewer spills and backups are on the District's website: <https://www.sani5.org>. The District's telephone number for reporting sewer problems during business hours is (415) 435-1501. The District's telephone number for reporting sewer problems after business hours (415) 779-9048.

- **Normal Work Hours:** District staff will take service requests noting the callers address and details of the request. This info is relayed to Collections Staff. They will respond and perform an investigation and if an odor complaint record in the Logbook for odor complaints. If it a spill, staff will complete the Spill Emergency Response Workbook.
- **After Hours:** The answering service will receive the call and relay info to the Standby Employee. They will respond within 30-60minutes and perform an investigation and if an odor complaint record in the Logbook for odor complaints. If it a spill, staff will complete the Spill Emergency Response Workbook.

When calls are received, either during normal work hours or after hours, the individual receiving the call will collect and include in the spill event file, at a minimum, the following information to record the complaint:

- Date, time, and method of notification,
- Date and time the complainant first noticed the spill, if available,
- Narrative description of the complaint, including any information the caller provided regarding whether the spill has reached surface waters or a drainage conveyance system, if available,
- Complainant's contact information, if available, and
- Final resolution of the complaint.

If the spill or backup is not in the District's service area the individual receiving the call provides the customer with the contact information for the responsible agency, and then notifies that agency.

If the spill or backup is in the District's service area, the Collections Crew (during business hours) or standby employee (after hours) will respond to the address of the complaint and do an investigation. If the complaint is not a spill, the crew members' findings and actions taken, if any, are logged into the District Computerized Maintenance Management System (CMMS) using a field laptop if available. If a field laptop is not available, the information will be entered into the CMMS when the employee returns to the District.

If the complaint is a spill, the crew member will complete the Sanitary Sewer Spill and Backup Response Workbook and then enter the findings and actions taken into the District's CMMS.

6.3 DISTRICT STAFF OBSERVATION

District staff conducts periodic inspections of its sewer system facilities as part of their routine activities. Any problems noted with the sewer system facilities are reported to appropriate District staff that, in turn, responds to emergency situations. Work orders are issued to correct non-emergency conditions.

6.4 CONTRACTOR OBSERVATION

Contractors working on the District sewer system will be informed of contractor spill response procedures. Contractors working on behalf of property owners will be provided spill response information by the District main office when they pull a permit. The following procedures are to be followed in the event that a contractor/plumber causes or witnesses a sanitary sewer spill. If the contractor/plumber causes or witnesses a spill they should:

1. Immediately notify the District at (415) 779-9048 and provide the following information if available:
 - a. Date, time contractor first noticed the spill

- b. Description of the contractor's observation, including any information regarding whether the spill has reached surface waters or a drainage conveyance system
 - c. Contractor's contact information
 2. Protect storm drains.
 3. Protect the public.
 4. Direct ALL media and public relations requests to the District Manager.

6.5 NO OBSERVATION

If there are no witnesses or no call was received for a spill, the District staff will contact nearby residences or business owners in the vicinity of the spill, in an attempt to obtain information that brackets a given start time that the spill began. This information will be collected and documented on the Sanitary Sewer Spill Report in the Sanitary Sewer Spill/Backup Response Workbook.

7. SPILL RESPONSE PROCEDURES (Ref. State Water Board Order No. WQ 2022-0103-DWQ (SSWDR), ATTACHMENT D Element 6 page D-6)

7.1 SEWER OVERFLOW/BACKUP RESPONSE SUMMARY

The District will respond to spills as soon as feasible following notification of a spill/backup.

If it is not possible that the spill/backup is due to a failure in the District-owned/maintained sewer lines the Collections Crew performs the following:

- Follows the instructions in the Sanitary Sewer Spill/Backup Response Workbook.
- If the customer is not home the Collections Crew completes the Door Hanger and leaves it on the customer's door.
- If the customer is home the Collections Crew:
 - Explains that the blockage is in the customer's lateral and the District does not have legal authority to maintain or perform work on privately owned laterals.
 - Recommends to the customer that they hire a licensed contractor to clear their line.
 - Gives the customer the Your Responsibilities as a Private Property Owner pages from the Sanitary Sewer Spill/Backup Response Workbook.

If it is possible that the spill/backup is due to a failure in the District-owned/maintained sewer lines the Collections Crew:

- Follows the instructions in the Sanitary Sewer Spill/Backup Response Workbook.
- Notifies District Manager and Collections System Superintendent of the incident.
- Relieves blockage and cleans impacted areas.
- Forwards the completed Sanitary Sewer Spill/Backup Response Workbook to the District Manager.

The District Manager and Collections System Superintendent performs required regulatory reporting in accordance with the Sanitary Sewer Spill/Backup Response Workbook's Regulatory Reporting section.

If the overflow has impacted private property, the Collections Crew:

- Follows the instructions in the Sanitary Sewer Spill/Backup Response Workbook.
- Provides the customer with forms and information as indicated in the Sanitary Sewer Spill/Backup Response Workbook.
- Forwards the completed Sanitary Sewer Spill/Backup Response Workbook to the District Manager.

The District Manager or designee:

- Reviews incident reports, claim form and other incident information and forwards, as appropriate, to Carl Warren and Co c/o Alan Dialon.
- Communicates with claimant as appropriate.
- Communicates with Carl Warren and Co. c/o Alan Dialon. to adjust and administer the claim to closure.
- Properly documents in writing all activities and communications before approving the final event file.

7.2 FIRST RESPONDER PRIORITIES

The first responder's priorities are:

- Prompt response to spills.
- To follow safe work practices.
- To respond promptly with the appropriate and necessary equipment.
- To reduce spill volume and contain the spill wherever feasible.
- To restore the flow as soon as practicable.
- To minimize public access to and/or contact with the spilled sewage.
- To promptly notify the District Manager in event of a spill needing additional resources, and/or impacting environmentally sensitive areas.
- To return the spilled sewage to the sewer system.
- To restore the area to its original condition (or as close as possible). Collect information for the prevention of future spills.
- Properly document the spill and response activities on the forms provided in the Sanitary Sewer Spill/Backup Response Workbook, including photos and/or video where practicable.

7.3 SAFETY

The first responder is responsible for following safety procedures at all times. Special safety precautions must be observed when performing sewer work. There may be times when District personnel responding to a sewer system event are not familiar with potential safety hazards peculiar to sewer work. In such cases it is appropriate to take the time to discuss safety issues, consider the order of work, and check safety equipment before beginning response activities.

If the first responders encounter access restrictions or unsafe conditions that prevent its compliance with spill response requirements or monitoring requirements in this General Order, the District provides written documentation of access restrictions and/or safety hazards in the corresponding required report.

7.4 INITIAL RESPONSE

The first responder must respond to the site of the spill/backup and visually check for potential sewer stoppages. The first responder will:

- Note arrival time at the site of the spill/backup.
- Verify the existence of a public sewer system spill or backup.
- Identify and assess the affected area and extent of spill.
- Assess the spill location(s) and spread using photography, global positioning system (GPS), and other best available tools.
- Contact caller if time permits.
- Document the spill according to the requirements described in Section 10 of this SERP, including taking photos and/or videos of overflowing manhole(s)/cleanout(s).
- Take steps to contain, recover, and return the spill to the sanitary sewer as feasible. For procedures refer to the Sanitary Sewer Spill/Backup Response Workbook.
- Protect surface waters to the extent practicable. For procedures refer to the Sanitary Sewer Spill/Backup Response Workbook.
- Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event.

7.5 INITIATE SPILL CONTAINMENT MEASURES

The first responder will attempt to contain as much of the spilled sewage as possible using the following steps:

- Determine the immediate destination of the overflowing sewage.
- Plug storm drains using air plugs, sandbags, and/or plastic mats to contain the spill, whenever appropriate. If spilled sewage has made contact with the storm drainage system, attempt to contain the spilled sewage by plugging downstream storm drainage facilities.
- Contain/direct the spilled sewage using dike/dam or sandbags.
- Vacuum retrieve sewage whenever practicable.
- Pump around the blockage/pipe failure.

Containment efforts will be documented. For procedures refer to the Sanitary Sewer Spill/Backup Response Workbook.

7.6 RESTORE FLOW

Using the appropriate cleaning equipment, set up downstream of the blockage and hydro-clean upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not reoccur downstream. If the blockage cannot be cleared within a reasonable time from arrival, or sewer requires construction repairs to restore flow, then initiate containment and/or bypass pumping. If other assistance is required, immediately contact the District Manager. For procedures refer to the Sanitary Sewer Spill/Backup Response Workbook.

7.7 EQUIPMENT

This section provides a list of specialized equipment that may be used to support this Spill Emergency Response Plan.

- *Closed Circuit Television (CCTV) Inspection Unit* – A CCTV Inspection Unit is required to determine the root cause for all spills from gravity sewers.
- *Camera* -- A digital or disposable camera (photo, video or phone) is required to record the conditions upon arrival, during clean up, and upon departure.
- *Emergency Response Trucks* -- A utility body pickup truck, or open bed is required to store and transport the equipment needed to effectively respond to sewer emergencies. The equipment and tools will include containment and clean up materials.
- *Portable Generators, Portable Pumps, Piping, and Hoses* – Equipment used to bypass pump, divert, or power equipment to mitigate a spill.
- *Combination Sewer Cleaning Trucks* -- Combination high velocity sewer cleaning trucks with vacuum tanks and rodder are required to clear blockages in gravity sewers, vacuum spilled sewage, and wash down the impacted area following the spill event.
- *Rodding (snake) equipment for responding to lateral blockages.*
- *Air plugs, sandbags and plastic mats*
- *Spill Sampling Kits*
- *Portable Lights*

Standard operating procedures for equipment that may be necessary in the event of a sanitary sewer overflow or backup can be found in the District server.

8. RECOVERY AND CLEANUP (*Ref. State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), Element 6, ATTACHMENT D, Page D-6*)

The recovery and cleanup phase begins immediately after the flow has been restored and the spilled sewage has been contained to the extent possible. The spill recovery and cleanup procedures are described in the following sections.

8.1 ESTIMATE THE FLOW AND VOLUME OF SPILLED SEWAGE

A variety of approaches exist for estimating the volume of a sanitary sewer spill. The Collections Crew members should use the method most appropriate to the sewer overflow in question and reference the Sanitary Sewer Spill/Backup Response Workbook which provides four (4) methods:

- Eyeball Estimation Method
- Duration and Flow Rate Calculation Method
- Area/Volume Method
- Upstream Connections Method

In addition, the following will be documented on the Sewer Spill Report form:

1. Description, photographs, and GPS coordinates of the system location where the spill originated. If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
2. Estimated total spill volume exiting the system;
3. Description and photographs of the extent of the spill and spill boundaries;
4. Did the spill reach a drainage conveyance system? If yes:
 - Description of the drainage conveyance system transporting the spill;
 - Photographs of the drainage conveyance system entry location(s);
 - Estimated spill volume that reached the drainage conveyance system;
 - Estimated spill volume fully recovered from the drainage conveyance system;
 - Estimated spill volume remaining within the drainage conveyance system
 - Estimated spill volume discharged to a groundwater infiltration basin or facility, if applicable;
 - Estimated spill travel time from the point of entry into the drainage conveyance system to the point of discharge into the receiving water.
5. Estimated total spill volume recovered.

8.2 RECOVERY OF SPILLED SEWAGE

Vacuum up and/or pump the spilled sewage and wash down water and discharge it back into the sanitary sewer system. Thoroughly recover and dispose of sewage and wash down water.

8.3 CLEAN-UP AND DISINFECTION

Clean up procedures will be implemented to reduce the potential for human health issues and adverse environmental impacts associated with a spill event. The procedures described are for dry weather conditions and will be modified as required for wet weather conditions. Where cleanup is beyond the capabilities of District staff, a cleanup contractor will be used.

Private Property

District crews are responsible for the cleanup when the property damage is minor in nature and is outside of private building dwellings, such as in front, side and backyards, easements, etc. In all other cases, affected property owners can call a water damage restoration contractor to complete the cleanup and restoration. If the overflow into property is the definite cause of District system failure, the property owner can call out a water damage restoration contractor to complete the cleanup and restoration. In both cases, property owners may submit a claim form.

Hard Surface Areas

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water and/or deozyme or similar non-toxic biodegradable surface disinfectant until the water runs clear. The flushing volume will be approximately three times the estimated volume of the spill. Take steps to contain and vacuum up the wastewater. Allow area to dry. Repeat the process if additional cleaning is required.

Landscaped and Unimproved Natural Vegetation

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water until the water runs clear. The flushing volume will be approximately three times the estimated volume of the spill. Either contain or vacuum up the wash water so that none is released. Allow the area to dry. Repeat the process if additional cleaning is required.

Natural Waterways

The Department of Fish and Wildlife will be notified by CalOES for spills greater than or equal to 1,000 gallons. For spills less than 1,000 gallons, contact Marin County Environmental Health for direction.

Wet Weather Modifications

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Omit flushing and sampling during heavy storm events (i.e., sheet of rainwater across paved surfaces) with heavy runoff where flushing is not required and sampling would not provide meaningful results.

8.4 PUBLIC NOTIFICATION

Signs will be posted and barricades put in place to keep vehicles and pedestrians away from contact with spilled sewage. Marin County Environmental Health instructions and directions regarding placement and language of public warnings will be followed. Additionally, the District Manager in consultation with Marin County Environmental Health, as needed, will use their best judgment regarding supplemental sign placement in order to protect the public and local environment. Signs will not be removed until directed by Marin County Environmental Health or District Manager in consultation with Marin County Environmental Health, as needed.

Creeks, streams and beaches that have been contaminated as a result of a spill will be posted at visible access locations until the risk of contamination has subsided to acceptable background bacteria levels. Document the number and location of posted signs. The area and warning signs, once posted, will be checked every day to ensure that they are still in place. Photographs of sign placement will be taken.

In the event that an overflow occurs at night, the location will be inspected first thing the following day. The field crew will look for any signs of sewage solids and sewage-related material that may warrant additional cleanup activities.

When contact with the local media is deemed necessary, the District Manager or their designee will provide the media with all relevant information.

9. WATER QUALITY (Ref. State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), *Element 6, Attachment A - DEFINITIONS page A-5, Attachment E1 2.3 through 2.4 pages E1-5 through E1-8*)

9.1 SURFACE WATERS OF CONCERN

The following waters of the State are in the District's service area:

- Richardson Bay
- San Francisco Bay
- Tiburon Lagoon

9.2 WATER QUALITY SAMPLING AND TESTING

For sewage spills in which an estimated 50,000 gallons or greater are discharged into a surface water, the District will conduct the following water quality sampling as soon as possible but no later than **18 hours** after the District's knowledge of a potential discharge to a surface water. Collect one water sample, each day of the duration of the spill, at:

- The DCS-001 location as described in section 9.5 (Receiving Water Sampling Locations) below, if sewage discharges to a surface water via a drainage conveyance system; and/or
- Each of the three receiving water sampling locations in section 9.5 (Receiving Water Sampling Locations) below;

If the receiving water has no flow during the duration of the spill, the District must report "No Sampling Due To No Flow" for its receiving water sampling locations.

The Collections Crew will collect water quality samples in accordance with State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR).

The Collections Crew collecting the samples will complete the Chain of Custody prior to transferring ownership of the samples to CalTest Laboratory or Brelje and Race Labs.

CalTest Laboratory or Brelje and Race Labs shall analyze the collected receiving water samples for the following constituents:

- Ammonia, and
- Appropriate bacterial indicator(s) per the applicable Basin Plan water quality objectives, including one or more of the following from the table below, unless directed otherwise by the Regional Water Board: *ref. San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan), November 5, 2019*

Water Quality Objectives for Bacteria^a				
Beneficial Use	Fecal Coliform^a (MPN/100mL)	Total Coliform^a (MPN/100mL)	Enterococcus (CFU/100mL)^g	E. coli (CFU/100mL)^g
Water Contact Rec- reation			geometric mean < 30 STV < 110	geometric mean < 100 STV < 320
Shellfish Harvesting ^b	median < 14 90th percentile < 43	median < 70 90th percentile < 230 ^c		
Non-contact Water Recreation ^d	mean < 2000 90th percentile < 4000	geometric mean < 100		
Municipal Supply: Surface Water ^e	geometric mean < 20			
Municipal Supply: Groundwater		< 1.1 ^f		
<p>Notes:</p> <p>a. Based on a minimum of five consecutive samples equally spaced over a 30-day period.</p> <p>b. Source: National Shellfish Sanitation Program.</p> <p>c. Based on a five-tube decimal dilution test or 300 MPN/100 ml when a three-tube decimal dilution test is used.</p> <p>d. Source: Report of the Committee on Water Quality Criteria, National Technical Advisory Committee, 1968.</p> <p>e. Source: California Department of Public Health recommendation.</p> <p>f. Based on multiple tube fermentation technique; equivalent test results based on other analytical techniques, as specified in the National Primary Drinking Water Regulation, 40 CFR, Part 141.21(f), revised June 10, 1992, are acceptable.</p> <p>g. Numeric values are from Part 3 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California based on Section 7958 of Title 17 of the California Code of Regulations, 69FR 67217 et seq., and 40 CFR Part 131.41 (effective date December 16, 2004). The Enterococcus objective applies to marine and estuarine waters where the salinity is greater than 1 part per thousand more than 5 percent of the time. The E. coli objective applies to freshwaters where the salinity is equal to or less than 1 part per thousand 95 percent or more of the time. The geometric mean for enterococcus and E. coli is computed weekly for all samples in a 6-week interval. There is no fecal coliform objective to protect water contact recreation for inland surface waters, enclosed bays, or estuaries, but a fecal coliform objective protecting this use remains in the California Ocean Plan. The STV is the statistical threshold value and shall not be exceeded by more than 10 percent of the samples collected in a calendar month.</p>				

Dependent on the receiving water(s), sampling of bacterial indicators shall be sufficient to determine post-spill (after the spill) compliance with the water quality objectives and bacterial standards of the California Ocean Plan or the California Inland Surface Water Enclosed Bays, and Estuaries Plan, including the frequency and/or number of post-spill receiving water samples as may be specified in the applicable plans.

The District shall collect and analyze additional samples as required by the applicable Regional Water Board Executive Officer or designee.

9.3 LAB SELECTION

Analytical Lab

Samples collected for spill response and background monitoring purposes will be analyzed at CalTest Laboratory or Brelje and Race Labs, which are accredited through the California State Water Resources Control Board Environmental Laboratory Accreditation Program (ELAP). ELAP provides evaluation and accreditation of environmental testing laboratories to ensure the quality of analytical data used for regulatory purposes to meet the requirements of the State's drinking water, wastewater, shellfish, food, and hazardous waste programs. The State agencies that monitor the environment use the analytical data from these accredited labs. The ELAP-accredited laboratories have demonstrated capability to analyze environmental samples using approved methods.

Getting Samples to the Lab

At all times, sample hold times identified below will be observed in accordance with the following:

Analytical Parameter	Maximum Holding Time	Required Container Type	Required Preservative	Minimum Amount
Ammonia (NH ₃ as N); SM 4500NH ₃ B/C or B/G	28 days	Plastic / Glass	H ₂ SO ₄ pH <2 +0-6°C	200 mL
Coliform, Total / Fecal; SM 9221 B/E	8 hours – wastewater/storm-water 30 hours – drinking water	Plastic (sterile)	Na ₂ S ₂ O ₃ + 0-10°C; No regulatory temp. req. for drinking water)	100 mL
Coliform, Total / E.Coli; SM 9223 B (Present/Absent or Quantitray)	30 hours – drinking water	Plastic (sterile)	Na ₂ S ₂ O ₃ + 0-10°C; No regulatory temp. req. for DW	100 mL
Enterococcus by Enterolert	8 hours	Plastic (sterile)	Na ₂ S ₂ O ₃ + 0-10°C	100 mL

Once samples are collected, they will be transported by the Collections Crew to the lab to be processed.

9.4 WATER QUALITY ANALYSIS SPECIFICATIONS

Spill monitoring must be representative of the monitored activity (40 Code of Federal Regulations section 122.41(j)(1)).

Sufficiently Sensitive Methods

Sample analysis must be conducted according to sufficiently sensitive test methods approved under 40 Code of Federal Regulations Part 136 for the sample analysis of pollutants. For the purposes of this General Order, a method is sufficiently sensitive when the minimum level of the analytical method approved under 40 Code of Federal Regulations Part 136 is at or below the receiving water pollutant criteria.

Environmental Laboratory Accreditation Program-Accredited Laboratories

The analysis of water quality samples required per this General Order must be performed by a laboratory that has accreditation pursuant to Article 3(commencing with section 100825) of Chapter 4 of Part 1 of Division 101 of the Health and Safety Code. (Water Code section 13176(a).) The State Water Board accredits laboratories through its Environmental Laboratory Accreditation Program (ELAP).

9.5 RECEIVING WATER SAMPLING LOCATIONS

Receiving water samples shall be collected at the following locations.

Sampling of Flow in Drainage Conveyance System (DCS) Prior to Discharge

Sampling Location	Sampling Location Description
DCS-001	A point in a drainage conveyance system before the drainage conveyance system flow discharges into a receiving water.

Receiving Surface Water Sampling (RSW)¹

Sampling Location	Sampling Location Description
RSW-001: Point of Discharge	A point in the receiving water where sewage initially enters the receiving water.
RSW-001U: Upstream of Point of Discharge	A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts.

Sampling Location	Sampling Location Description
RSW-001D: Downstream of Point of Discharge	A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water.

9.6 STREAM VELOCITY MEASUREMENTS

If sampling is performed after the spill has stopped, the velocity of the impacted surface water must be determined to estimate spill travel time and select an accurate Downstream sample location. One way to measure the spill travel time is to use a velocity probe (such as a Global Water FP111-S Flow Probe) to determine the rate of flow in the water body. In cases where a water velocity probe is used, the manufacturer’s instructions will be followed.

9.7 SAMPLE TYPES

Grab Samples

Grab samples are appropriate for the characterization of surface waters at a particular time and place, to provide information about minimum and maximum concentrations, and to allow for the collection of variable sample volume.

Grab samples may be collected directly into the sample container, or a clean decontaminated intermediate container may be used if a wading sample is not possible or safe. If an intermediate container is used, when in the field, double rinse the sampling device (bucket, automatic sampler) with sample water prior to collecting the

¹ The District must use its best professional judgment to determine the upstream and downstream distances based on receiving water flow, accessibility to upstream/downstream waterbody banks, and size of visible sewage plume.

sample and be sure to discard rinse water downstream of where sample will be collected. If samples are collected into a bucket and distributed into a consolidation collection container, swirl the contents of the bucket as it is being poured into the consolidation collection container to avoid settling of solids (and pour in back-and-forth pattern – e.g., 1-2-3-3-2-1).

- **Grab Sample:** A grab sample is defined as an individual sample collected at a given time. Grab samples represent only the condition that exists at the time the sample is collected (US EPA 1977).
- **Surface Grab Sample:** A sample collected at the water surface (i.e., skimming) directly into the sample container or into an intermediate container such as a clean bucket. A single or discrete sample collected at a single location.

Field Blanks

Field Blanks are used to evaluate the potential for contamination of a sample by site contaminants from a source not associated with the sample collected (e.g., airborne dust, etc.). Sterile, deionized water is taken into the field in a sealed container. This is the stock water. The stock water is then poured into the sample container. The containers and sample submission forms are labeled as “Field Blank.” The same template selected for the test samples should be used. Field blanks are subject to the same holding time limitations as samples. The appropriate FIELD QC box on the sample Chain of Custody form should be checked.

9.8 SAMPLE LABELING AND CHAIN OF CUSTODY PROCEDURES

At a minimum, the following grab samples will be collected:

- **Field Blank:** See Section 9.7 for discussion.
- **Upstream:** A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts.
- **Source:** A point in the receiving water where sewage initially enters the receiving water.
- See Section 9.6 for information on determining velocity of the surface water in order to determine the Source sample location.
- **“Downstream” of spill:** A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water. This location will vary with the velocity of the surface water to be sampled (*see Section 9.6*).

Sample labels shall be completed for each sample, using waterproof ink.

Photos or video of each sample location will be taken, properly labeled with date, time, and view direction and a map of the photo locations completed. Photos and videos shall include relevant landmarks to identify sampling locations and their surroundings.

Due to the evidentiary nature of samples collected during enforcement investigations, possession must be traceable from the time the samples are collected until they are analyzed. To maintain and document sample possession, a Surface Water Sample Chain of Custody Record (see Sewer Spill/Backup Response Workbook) must be completed. A sample is under custody if:

- It is in your possession, or
- It is in your view, after being in your possession, or
- It was in your possession and under your control to prevent tampering, or
- It is in a designated secure area.

As few people as possible should handle samples. The person taking the samples is personally responsible for the care and custody of the samples collected until they are transferred or dispatched properly.

Samples are accompanied by a chain of custody record. When transferring the possession of samples, the individuals relinquishing and receiving will sign, date, and note the time on the record. This record documents sample custody transfer from the sampler, often through another person, to the analyst at the laboratory. The samples are typically transferred to the sample-receiving custodian at the laboratory.

9.9 SAMPLING EQUIPMENT

The following are examples of sampling equipment used by the District:

- Sampling pole with fixed container
- Sampling pole with removable container
- Sampling pail and rope
- Stream velocity meter
- Grab-n-Go Sample Kit

9.10 GRAB-N-GO SAMPLING KIT

The District maintains a Grab-n-Go sampling kit located at the lab. The kit is inspected quarterly by the Lab Director. Additionally, any District employee utilizing the kit is responsible for decontaminating sampling equipment and field monitoring devices and replenishing the kit.

Spill Sample Collection Kit Inventory:

- Cooler
- Surface Water Sampling SOP (in Sewer Spill/Backup Response Workbook)
- Ice Pack
- 5 Ammonia sample bottles, preserved
- 15 Bacti sample bottles: 6 for samples (3 sets of duplicates), 2 for Field Blanks and 1 extra in the event of contamination, or other contingency
- Minimum of 20 blank sample bottle labels
- Digital camera or smart phone camera
- Latex gloves
- Safety glasses/goggles
- Waterproof Pen
- Surface Water Sampling Worksheet (in Sewer Spill/Backup Response Workbook)
- Chain of Custody form (in Sewer Spill/Backup Response Workbook)

9.11 DECONTAMINATION PROCEDURES

Removing or neutralizing contaminants from sampling equipment minimizes the likelihood of sample cross contamination, reduces or eliminates transfer of contaminants to clean areas, and prevents the mixing of incompatible substances.

Gross contamination can be removed by physical decontamination procedures. These abrasive and non-abrasive methods include the use of brushes, air and wet blasting, and high- and low- pressure water cleaning.

The decontamination procedures for the sample types and sampling equipment (other than sample bottles, which are provided to Collections Crew in a “ready to be used” condition by the lab) used at the District may be summarized as follows:

1. Physical removal
2. Tap water rinse
3. Air dry

9.12 SAMPLING PROCEDURES

9.12.1 Sample Location and Identification Procedures

Samples will be collected by the Collections Crew. It is impossible to establish hard and fast rules concerning sampling locations. However, the following general guidelines should be applied whenever surface waters are sampled:

- The sampling location should be far enough upstream or downstream of confluences or point sources so that the surface water and spill volume is well mixed. Natural turbulence can be used to provide a good mixture.
- Samples should be collected at a location where the velocity is sufficient to prevent deposition of solids, and to the extent practical, should be in straight reach having uniform flow. All flow in the reach should be represented, so divided flow areas should be avoided and samples should be taken towards the middle of the reach where feasible.
- Sampler must always stand downstream of the collection vessel, and sample “into the current.” Care must be taken to avoid introducing re-suspended sediment into the sample.

9.12.2 Surface Water Sampling Standard Operating Procedure (SOP)

The Surface Water Sampling SOP, Section G in the Sewer Spill/Backup Response Workbook, provides step-by-step procedures to collect samples and deliver them for analysis in accordance with State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), Element 6.

9.12.3 Follow Up Sampling

Sampling will be repeated every 24 hours, or as directed by the RWQCB or the Marin County Environmental Health, until such time as one of the following criteria have been met:

- The Marin County Environmental Health or the RWQCB indicates follow up sampling is no longer required, or
- Both the ammonia and bacteria levels downstream are approximately equal to or less than the upstream levels.

9.13 SAFETY AND ACCESS EXCEPTIONS

If the District encounters access restrictions or unsafe conditions that prevents its compliance with spill response requirements or monitoring requirements in this General Order, the District shall provide documentation of access restrictions and/or safety hazards in the corresponding required report.

Personal safety of staff engaged in any fieldwork activity (e.g. in transit, walking or hiking, and any field activities while at the sample site) is of primary importance. Staff should never place themselves in dangerous or risky situations. Any hazards that are known by field personnel should be communicated to other members of the field crew.

Fieldwork should be postponed if there is indication that engagement in the field activity could cause bodily harm. Working during lightning storms, in heavy vegetation or poison oak, near aggressive wildlife or domestic animals, traversing steep or rugged terrain, unstable slopes or creek banks, near swiftly moving water or potential flash flood conditions, or during snowy weather is not considered "normal risk." If any member of the field crew is uncomfortable with a reasonable self-determined hazardous field condition, it is that person's responsibility to bring this to the attention of the onsite field supervisor or their supervisor. A "reasonable self-determined hazardous field condition" is defined as other than normal risk. Supervisors shall not dismiss any person's spoken concerns that field conditions are too hazardous to complete the work assignment.

The person taking the samples must have adequate protection, including protective clothing. They must wear gloves, as protection against chemical and/or bacteriological hazards, while they are sampling or handling samples that are known or suspected to be hazardous (e.g. visible solids or sheens, downstream from sewage spills, etc.), or if hands have open wounds. The type of gloves worn shall be determined by the sampling circumstance and type of pollutants expected – for instance longer gloves are needed when samples must be taken well below the surface.

When in a boat or wading in a stream and where the danger of drowning exists, a personal floatation device shall be worn at all times in addition to following the other requirements of Title 8 CCR 1602 Working Over or Near Water. Other protective measures shall be taken in accordance with District safety procedures.

Upon arrival at a sampling site, safety equipment such as signs, cones, lights, etc. shall be set out as appropriate. Vehicles shall be parked in locations and directions to minimize traffic disruption and avoid sample contamination. Photos should be ultimately taken of the placement of all safety equipment and signage.

The following guidelines apply to all fieldwork by District staff.

- No sample or measurement is worth the risk of injury.
- All staff shall use proper personnel protective gear as appropriate for the incident (e.g., life preservers, gloves, goggles, etc.)
- Field sampling crews should consist of at least two members unless otherwise approved by a supervisor.
- Be conscious of the whereabouts of rattlesnakes, mountain lions, and other dangerous animals.
- Open body wounds are entry sites for infection; take the necessary precautions for self-protection.
- If there is storm activity in the work area, wait for safer conditions to develop or postpone the sampling.
- Do not sample at night without approval from your supervisor.

- Do not trespass on private property or posted restricted public lands without prior permission and written approval from property owner or administrator.
- If strange or suspicious looking people are in the work area, either wait for them to leave or postpone the work to a later time. Do not force confrontations with strangers and back away from any confrontations with the public. Be courteous and understanding of public concerns of the situation.
- Take the necessary precautions against exposure to harmful weather conditions such as heat, wind, snow, cold, rain, etc.
- Carefully evaluate a given on-site situation to determine if the task can be performed safely.
- Streams will not be entered unless the responding employees have the necessary protective footwear (e.g. rubber boots, waders) and the footwear does not pose an additional risk to worker safety (e.g. waders filling with water if the employee slips in the stream).
- Streams will not be entered if deemed unsafe to do so by the most senior employee on the responding crew and if entered, will only be done so in accordance with Title 8 CCR Section 1602 Work Over or Near Water.

9.14 SPILL TECHNICAL REPORT: Spill Technical Report for Individual Category 1 Spill in which 50,000 Gallons or Greater Discharged into a Surface Water

For any spill in which 50,000 gallons or greater discharged into a surface water, **within 45 calendar days** of the spill end date, the District Manager shall submit a Spill Technical Report to the online CIWQS Sanitary Sewer System Database. The Spill Technical Report, at minimum, must include the following information:

1. Spill causes and circumstances, including at minimum:
 - Complete and detailed explanation of how and when the spill was discovered;
 - Photographs illustrating the spill origin, the extent and reach of the spill, drainage conveyance system entrance and exit, receiving water, and post-cleanup site conditions;
 - Diagram showing the spill failure point, appearance point(s), the spill flow path, and ultimate destinations;
 - Detailed description of the methodology employed, and available data used to calculate the discharge volume and, if applicable, the recovered spill volume;
 - Detailed description of the spill cause(s);
 - Description of the pipe material, and estimated age of the pipe material, at the failure location;
 - Description of the impact of the spill;
 - Copy of original field crew records used to document the spill; and
 - Historical maintenance records for the failure location.
2. District's response to the spill:
 - Chronological narrative description of all actions taken by the District to terminate the spill;
 - Explanation of how the Sewer System Management Plan Spill Emergency Response Plan was implemented to respond to and mitigate the spill; and
 - Final corrective action(s) completed and a schedule for planned corrective actions, including:
 - Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable,

- Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences, and
 - Necessary modifications to the Emergency Spill Response Plan to incorporate lessons learned in responding to and mitigating the spill.
3. Water Quality Monitoring, including at minimum:
- Description of all water quality sampling activities conducted;
 - List of pollutant and parameters monitored, sampled and analyzed; as required in Section 9.2.
 - Laboratory results, including laboratory reports;
 - Detailed location map illustrating all water quality sampling points; and
 - Other regulatory agencies receiving sample results (if applicable).
5. Evaluation of spill impact(s), including a description of short-term and long-term impact(s) to beneficial uses of the surface water.

9.15 TRAINING

Training will be provided in accordance with the table below:

Surface Water Sampling Training Program	
Who Is Trained to Collect Surface Water Samples?	Collections Crew
Training Curriculum	At a minimum, training shall include: <ul style="list-style-type: none"> • The Sanitary District No. 5 of Marin County Water Quality Monitoring Plan • Sampling technique, including hands on practice • Sampling equipment calibration, use and decontamination procedures, including hands on practice • Sampling safety • Completion of the Sampling Equipment Calibration/Maintenance Log, Surface Water Sampling Report and Chain of Custody
Training Documentation	Attendees shall be required to sign-in to all training on the appropriate forms used by the District.
Refresher Training Frequency	Annual
Who is Responsible for Ensuring Training Occurs?	District Manager and Collections System Supervenient
Required Training Records	Employee training sign in log
Who is Responsible for Maintaining Records?	District Manager and Collections System Supervenient

10. NOTIFICATION, REPORTING, MONITORING AND RECORDKEEPING REQUIREMENTS

ref. ORDER WQ 2022-0103-DWQ Attachment E-1 and E-2

10.1 REPORTING REQUIREMENTS

All reporting required in this General Order must be submitted electronically to the online CIWQS Sanitary Sewer System Database (<https://ciwqs.waterboards.ca.gov>), unless specified otherwise in this General Order. Electronic reporting may solely be conducted by a Legally Responsible Official or Data Submitter(s) previously designated by the Legally Responsible Official, as required in section 5.8 (Designation of Data Submitters) of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR).

The District shall report any information that is protected by the Homeland Security Act, by email to SanitarySewer@waterboards.ca.gov, with a brief explanation of the protection provided by the Homeland Security Act for the subject report to be protected from unauthorized disclosure and/or public access, and for official Water Board regulatory purposes only.

Refer to APPENDIX A for detailed reporting requirements by spill category.

10.2 REGULATOR REQUIRED NOTIFICATIONS

10.2.1 Spill Category 1: Spills to Surface Waters

Spill Requirement	Due	Method
Notification	Within two (2) hours of the District's knowledge of a Category 1 spill of 1,000 gallons or greater, discharging or threatening to discharge to surface waters notify the California Office of Emergency Services and obtain a notification control number.	California Office of Emergency Services at: (800) 852-7550 (Section 1 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))
Monitoring	<ul style="list-style-type: none"> Conduct spill-specific monitoring; Conduct water quality sampling of the receiving water within 18 hours of initial knowledge of spill of 50,000 gallons or greater to surface waters. 	(Section 2 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))
Reporting	<ul style="list-style-type: none"> Submit Draft Spill Report within three (3) business days of the District's knowledge of the spill; Submit Certified Spill Report within 15 calendar days of the spill end date; Submit Technical Report within 45 calendar days after the spill end date for a Category 1 spill in which 50,000 gallons or greater discharged to surface waters; and Submit Amended Spill Report within 90 calendar days after the spill end date. 	(Section 3.1 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))

10.2.2 Spill Category 2: Spills of 1,000 Gallons or Greater That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	Within two (2) hours of the District’s knowledge of a Category 2 spill of 1,000 gallons or greater threatening to discharge to waters of the State: Notify California Office of Emergency Services and obtain a notification control number.	California Office of Emergency Services at: (800) 852-7550 (Section 1 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))
Reporting	<ul style="list-style-type: none"> Submit Draft Spill Report within three (3) business days of the District’s knowledge of the spill; Submit Certified Spill Report within 15 calendar days of the spill end date; and Submit Amended Spill Report within 90 calendar days after the spill end date. 	(Section 3.2 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))

10.2.3 Spill Category 3: Spills of Equal or Greater than 50 Gallons and Less than 1,000 Gallons That Does Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))
Reporting	<ul style="list-style-type: none"> Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database within 30 calendars days after the end of the month in which the spills occur; and Submit Amended Spill Reports within 90 calendar days after the Certified Spill Report due date. 	(Section 3.3 and 3.5 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))

10.2.4 Spill Category 4: Spills Less Than 50 Gallons That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	Conduct spill-specific monitoring.	(Section 2 of Attachment E1

		of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))
Reporting	<ul style="list-style-type: none"> If, during any calendar month, Category 4 spills occur, certify monthly, the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills into the online CIWQS Sanitary Sewer System Database, within 30 days after the end of the calendar month in which the spills occurred. Upload and certify a report, in an acceptable digital format, of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. 	(Section 3.4, 3.6, 3.7 and 4.4 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))

10.2.5 District Owned and/or Operated Lateral Spills That Do Not Discharge to Surface Waters

Spill Requirements	Due	Method
Notification	<p>Within two (2) hours of the District's knowledge of a spill of 1,000 gallons or greater, from an District- owned and/or operated lateral, discharging or threatening to discharge to waters of the State: Notify California Office of Emergency Services and obtain a notification control number.</p> <p>Not applicable to a spill of less than 1,000 gallons.</p>	<p>California Office of Emergency Services at: (800) 852-7550</p> <p>(Section 1 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))</p>
Monitoring	Conduct visual monitoring.	(Section 2 of Attachment E1 of the State Water Board ORDER WQ 2022-0103-DWQ)
Reporting	<ul style="list-style-type: none"> Upload and certify a report, in an acceptable digital format, of all lateral spills (that do not discharge to a surface water) to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occur. Report a lateral spill of any volume that discharges to a surface water as a Category 1 spill. 	(Sections 3.6, 3.7 and 4.4 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))

10.3 COMPLAINT RECORDS

The District maintains records of all complaints received whether or not they result in sanitary sewer overflows. These complaint records include, but are not limited to, records documenting how the District responded to notifications of spills. Each complaint record must, at a minimum, include the following information:

- Date, time, and method of notification,
- Date and time the complainant first noticed the spill, if available,
- Narrative description of the complaint, including any information the caller provided regarding whether the spill has reached surface waters or a drainage conveyance system, if available,
- Complainant's contact information, if available, and
- Final resolution of the complaint;

Odor complaint records will be maintained for a minimum of five years whether or not they result in a spill. Spill files (field notes, spill/Backup Response Workbook) are kept in District files as hardcopy and e-copy.

11. POST-SPILL ASSESSMENTS OF SPILL RESPONSE ACTIVITIES

(ref. State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), *Element 6, ATTACHMENT D, Page D-6*)

Every spill event is an opportunity to evaluate the District adherence to response and reporting procedures and effectiveness of the response. Each spill event is unique, with its own elements and challenges including volume, cause, location, terrain, climate, and other parameters.

As soon as possible after spill events all the participants, from the person who received the call to the last person to leave the site, will meet to review the procedures used and to discuss what worked and where improvements could be made in responding to and mitigating future spill events. The results of the debriefing will be documented and tracked to ensure the action items are completed as scheduled.

11.1 FAILURE ANALYSIS INVESTIGATION

The objective of the failure analysis investigation is to determine the "root cause" of the spill and to identify corrective action(s) needed that will reduce or eliminate future potential for the spill to recur or for other spills to occur.

The investigation will include reviewing all relevant data to determine appropriate corrective action(s) for the line segment. The investigation may include:

- Reviewing and completing the Sanitary Sewer Spill Report and any other documents related to the incident
- Reviewing the incident timeline and other documentation regarding the incident
- Reviewing communications with the reporting party and witness
- Reviewing volume estimate, volume recovered estimate, volume estimation assumptions and associated drawings
- Reviewing available photographs
- Interviewing staff that responded to the spill

- Reviewing past maintenance records
- Reviewing past CCTV records,
- Conducting a CCTV inspection to determine the condition of all line segments immediately following the spill and reviewing the video and logs,
- Reviewing any Fats, Oils, Roots and Grease (FROG) related information or results
- Post spill debrief records
- Interviews with the public at the spill location

The product of the failure analysis investigation will be the determination of the root cause and the identification and scheduling of the corrective actions. The Collection System Failure Analysis Form (in Sanitary Sewer Spill/Backup Response Workbook) will be used to document the investigation.

12. SPILL RESPONSE TRAINING

(ref. State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), Element 6, Attachment D 4.3 page D-5 and Element 6 page D-6)

This section provides information on the training that is required to support this Spill Emergency Response Plan.

12.1 INITIAL AND ANNUAL REFRESHER TRAINING

All District personnel who may have a role in responding to, reporting, and/or mitigating a sewer system spill will receive training on the contents of this SERP. All new employees will receive training before they are placed in a position where they may have to respond. Current employees will receive annual refresher training on this SERP and the procedures to be followed. The District will document all training.

Affected employees will receive annual training on the following topics by knowledgeable trainers:

- The requirements of State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), Element 6
- The District's Spill Emergency Response Plan procedures and practice drills
- Containment and cleanup methods
- Researching and documenting Sanitary Sewer Spill Start Times
- Skilled estimation of spill volume for field operators
- Impacted Surface Waters: Sample location selection, sampling, and documentation procedures
- Electronic CIWQS reporting procedures for staff submitting data
- State Water Resources Control Board Employee Knowledge Expectations

Through SWRCB Employee Knowledge Expectations training, the employee will be able to answer the following:

1. Please briefly describe your name and job title.

2. Please describe for us approximately when you started in this field and how long you have worked for your agency.
3. Please expand on your current position duties and role in responding in the field to any spill complaints.
4. Please describe your SOPs used to respond/mitigate spills when they occur.
5. Describe any training your agency provides or sends you to for conducting spill volume estimates.
6. We are interested in learning more about how your historical spill response activities have worked in the field. We understand from discussions with management earlier that you use the SERP from the SSMP. Please elaborate on how you implement and utilize the procedures in the plan.
7. Historically, before any recent changes, can you please walk us through how you would typically receive and respond to any spill complaints in the field?
8. Can you tell us who is responsible for estimating spill volumes discharged? If it is you, please describe how you go about estimating the spill volume that you record on the work order/service request forms?
9. What other information do you collect or record other than what is written on the work order form?
10. Describe if and when you ever talk with people that call in spills (either onsite or via telephone) to further check out when the spill might have occurred based on what they or others know? If you do this, can you tell us where this information is recorded?
11. We understand you may be instructed to take pictures of some sewer spills/backups into structures. Other than these spills, when else would you typically take any pictures of a spill?
12. Please walk us through anything else you'd like to add to help us better understand how your field crews respond and mitigate spill complaints.

12.2 SPILL RESPONSE DRILLS

Periodic training drills or field exercises will be held to ensure that employees are up to date on these procedures, equipment is in working order, and the required materials are readily available. The training drills will cover scenarios typically observed during sewer related emergencies (e.g. mainline blockage, mainline failure, and lateral blockage). The results and the observations during the drills will be recorded and action items will be tracked to ensure completion.

12.3 SPILL TRAINING RECORD KEEPING

Records will be kept of all training that is provided in support of this SERP for 5 years. The records for all scheduled training courses and for each overflow emergency response training event will include date, time, place, content, name of trainer(s), names and titles of attendees, brief narrative description of the training, including training method(s) and training materials and/or equipment used.

12.4 CONTRACTORS WORKING ON DISTRICT SEWER FACILITIES

All contractors working on District sewer facilities will be required to follow the spill response instructions on the Sanitary Sewer Spill Response Instructions for Contractors (Appendix D). Additional training may be required depending on the nature of the work on any or all of the following:

- The requirements of State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), Element 6
- Communication procedures to District in the event a spill is caused or witnessed
- The District's Spill Emergency Response Plan procedures and practice drills
- Skilled estimation of spill volume for field operators
- Electronic CIWQS reporting procedures for staff submitting data

13. SEWER BACKUP INTO/ONTO PRIVATE PROPERTY CLAIMS HANDLING POLICY

It is the policy of the District that a claims form shall be offered to anyone wishing to file a claim. The following procedures will be observed for all sewer overflows/backups into/onto private property:

- District staff will offer a District claim form irrespective of fault whenever it is possible that the sanitary sewer backup may have resulted from an apparent blockage in the District-owned sewer lines or whenever a District customer requests a claim form. The claim may later be rejected if subsequent investigations into the cause of the loss indicate the District was not at fault.
- It is the responsibility of the Collections Crew to gather information regarding the incident and notify the District Manager or their designee.
- It is the responsibility of the District Manager or their designee to review all claims and to oversee the adjustment and administration of the claim to closure.

14. AUTHORITY

This SERP is written in accordance with the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR).

15. APPENDICES

- A. Reporting Requirements by Spill Category
- B. Service Call Form
- C. Door Hanger
- D. Sanitary Sewer Spill Response Instructions for Contractors
- E. Sanitary Sewer Spill/Backup Response Workbook

APPENDIX A:
Reporting Requirements by Spill Category

REPORTING REQUIREMENTS FOR INDIVIDUAL CATEGORY 1 SPILL REPORTING

Draft Spill Report

Within three (3) business days of the District's knowledge of a Category 1 spill, the District shall submit a Draft Spill Report to the online CIWQS Sanitary Sewer System Database.

The Draft Spill Report must, at minimum, include the following items:

1. Contact information: Name and telephone number of District contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the District was notified of, or self-discovered, the spill;
4. Operator arrival time;
5. Estimated spill start date and time;
6. Date and time the District notified the California Office of Emergency Services, and the assigned control number;
7. Description, photographs, and GPS coordinates of the system location where the spill originated; If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
8. Estimated total spill volume exiting the system;
9. Description and photographs of the extent of the spill and spill boundaries;
10. Did the spill reach a drainage conveyance system? If Yes:
 - a. Description of the drainage conveyance system transporting the spill;
 - b. Photographs of the drainage conveyance system entry location(s);
 - c. Estimated spill volume fully recovered from the drainage conveyance system;
 - d. Estimated spill volume remaining within the drainage conveyance system;
 - e. Description and photographs of all discharge point(s) into the surface water;
 - f. Estimated spill volume that discharged to surface waters; and
 - g. Estimated total spill volume recovered.

Certified Spill Report

Within 15 calendar days of the spill end date, the District shall submit a Certified Spill Report for Category 1 spills, to the online CIWQS Sanitary Sewer System Database.

Upon completion of the Certified Spill Report, the online CIWQS Sanitary Sewer System Database will issue a final spill event identification number.

(Category 1 continued)

The Certified Spill Report must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report:

1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;
2. Spill end date and time;
3. Description of how the spill volume estimations were calculated, including at a minimum:
 - a. The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
 - b. The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;
4. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
5. System failure location (for example, main, lateral, pump station, etc.);
6. Description of the pipe material, and estimated age of the pipe material, at the failure location;
7. Description of the impact of the spill;
8. Whether or not the spill was associated with a storm event;
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
11. Spill response completion date;
12. Detailed narrative of investigation and investigation findings of cause of spill;
13. Reasons for an ongoing investigation (as applicable) and the expected date of completion;
14. Name and type of receiving water body(s);
15. Description of the water body(s), including but not limited to:
 - a. Observed impacts on aquatic life,
 - b. Public closure, restricted public access, temporary restricted use, and/or posted health warnings due to spill,
 - c. Responsible entity for closing/restricting use of water body, and
 - d. Number of days closed/restricted as a result of the spill.
16. Whether or not the spill was located within 1,000 feet of a municipal surface water intake; and
17. If water quality samples were collected, identify sample locations and the parameters the water quality samples were analyzed for. If no samples were taken, Not Applicable shall be selected.

(Category 1 continued)

Amended Certified Spill Reports

The District shall update or add additional information to a Certified Spill Report within **90 calendar days** of the spill end date by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The District shall certify the amended report.

After **90 calendar days**, the District shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the Amended Spill Report due date.

REPORTING REQUIREMENTS FOR INDIVIDUAL CATEGORY 2 SPILL REPORTING

Draft Spill Report

Within three (3) business days of the District's knowledge of a Category 2 spill, the District shall submit a Draft Spill Report to the online CIWQS Sanitary Sewer System Database.

The Draft Spill Report must, at minimum, include the following items:

1. Contact information: Name and telephone number of District contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the District was notified of, or self-discovered, the spill;
4. Operator arrival time;
5. Estimated spill start date and time;
6. Date and time the District notified the California Office of Emergency Services, and the assigned control number;
7. Description, photographs, and GPS coordinates of the system location where the spill originated; If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
8. Estimated total spill volume exiting the system;
9. Description and photographs of the extent of the spill and spill boundaries;
10. Did the spill reach a drainage conveyance system? If Yes:
 - Description of the drainage conveyance system transporting the spill;
 - Photographs of the drainage conveyance system entry location(s);
 - Estimated spill volume fully recovered from the drainage conveyance system;
 - Estimated spill volume remaining within the drainage conveyance system;
11. Estimated spill volume discharged to a groundwater infiltration basin or facility, if applicable; and
12. Estimated total spill volume recovered.

Certified Spill Report

Within 15 calendar days of the spill end date, the District shall submit a Certified Spill Report for the Category 2 spill, to the online CIWQS Sanitary Sewer System Database (<https://ciwqs.waterboards.ca.gov>). Upon completion of the Certified Spill Report, the online CIWQS Sanitary Sewer System Database will issue a final spill event identification number.

The Certified Spill Report must, at minimum, include the following mandatory information in addition to all information in the Draft Spill Report:

1. Description of the spill event destination(s), including GPS coordinates if available, that represent the full spread and reach of the spill;

(Category 2 continued)

2. Spill end date and time;
3. Description of how the spill volume estimations were calculated, including at a minimum:
 - The methodology, assumptions and type of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
 - The methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time;
4. Spill cause(s) (for example, root intrusion, grease deposition, etc.);
5. System failure location (for example, main, pump station, etc.);
6. Description of the pipe/infrastructure material, and estimated age of the pipe material, at the failure location;
7. Description of the impact of the spill;
8. Whether or not the spill was associated with a storm event;
9. Description of spill response activities including description of immediate spill containment and cleanup efforts;
10. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps;
11. Spill response completion date;
12. Detailed narrative of investigation and investigation findings of cause of spill;
13. Reasons for an ongoing investigation (as applicable) and the expected date of completion; and
14. Whether or not the spill was located within 1,000 feet of a municipal surface water intake.

Amended Certified Spill Reports

The District shall update or add additional information to a Certified Spill Report within **90 calendar days** of the spill end date by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The District shall certify the amended report.

After **90 calendar days**, the District shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the Amended Spill Report due date.

REPORTING REQUIREMENTS FOR INDIVIDUAL CATEGORY 3 SPILL REPORTING

Monthly Certified Spill Reporting

The District shall report and certify all Category 3 spills to the online CIWQS Sanitary Sewer System Database within 30 calendar days after the end of the month in which the spills occurred. (For example, all Category 3 spills occurring in the month of February shall be reported and certified by March 30th). After the Legally Responsible Official certifies the spills, the online CIWQS Sanitary Sewer System Database will issue a spill event identification number for each spill.

The monthly reporting of all Category 3 spills must include the following items for each spill:

1. Contact information: Name and telephone number of District contact person to respond to spill-specific questions;
2. Spill location name;
3. Date and time the District was notified of, or self-discovered, the spill;
4. Operator arrival time;
5. Estimated spill start date and time;
6. Description, photographs, and GPS coordinates where the spill originated. If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the spill appearance point explanation field;
7. Estimated total spill volume exiting the system;
8. Description and photographs of the extent of the spill and spill boundaries;
9. Did the spill reach a drainage conveyance system? If Yes:
 - a. Description of the drainage conveyance system transporting the spill;
 - b. Photographs of the drainage conveyance system entry location(s);
 - c. Estimated spill volume fully recovered from the drainage conveyance system; and
 - d. Estimated spill volume discharged to a groundwater infiltration basin or facility, if applicable.
10. Estimated total spill volume recovered;
11. Description of the spill event destination(s), including GPS coordinates, if available, that represent the full spread and reaches of the spill;
12. Spill end date and time;
13. Description of how the spill volume estimations were calculated, including, at minimum:
 - a. The methodology and type of data relied upon, including supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered), and
 - b. The methodology and type of data relied upon to estimate the spill start time, on-going spill rate at time of arrival (if applicable), and the spill end time;
14. Spill cause(s) (for example, root intrusion, grease deposition, etc.);

(Category 3 Continued)

15. System failure location (for example, main, pump station, etc.);
16. Description of the pipe/infrastructure material, and estimated age of the pipe/infrastructure material, at the failure location;
17. Description of the impact of the spill;
18. Whether or not the spill was associated with a storm event;
19. Description of spill response activities including description of immediate spill containment and cleanup efforts;
20. Description of spill corrective actions, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of the major milestones for those steps; including, at minimum:
 - a. Local regulatory enforcement action taken against an illicit discharge in response to this spill, as applicable, and
 - b. Identifiable system modifications, and operation and maintenance program modifications needed to prevent repeated spill occurrences at the same spill event location, including:
 - Adjusted schedule/method of preventive maintenance,
 - Planned rehabilitation or replacement of sanitary sewer asset,
 - Inspected, repaired asset(s), or replaced defective asset(s),
 - Capital improvements,
 - Documentation verifying immediately implemented system modifications and operating/maintenance modifications,
 - Description of spill response activities,
 - Spill response completion date, and
 - Ongoing investigation efforts, and expected completion date of investigation to determine the full cause of spill;
21. Detailed narrative of investigation and investigation findings of cause of spill.

Amended Certified Spill Reports

Within 90 calendar days of the certified Spill Report due date, the District may update or add additional information to a certified Spill Report by amending the report or by adding an attachment to the Spill Report in the online CIWQS Sanitary Sewer System Database. The District shall certify the amended report.

After 90 calendar days, the Legally Responsible Official shall contact the State Water Board at SanitarySewer@waterboards.ca.gov to request to amend a certified Spill Report. The Legally Responsible Official shall submit justification for why the additional information was not reported within the 90-day timeframe for amending the certified Spill Report, as provided above.

REPORTING REQUIREMENTS FOR INDIVIDUAL CATEGORY 4 SPILL REPORTING

Monthly Certified Spill Reporting

The District shall report and certify the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills to the online CIWQS Sanitary Sewer System Database, within 30 calendar days after the end of the month in which the spills occurred.

Annual Certified Spill Reporting of Category 4 and/or Lateral Spills

For all Category 4 spills and spills from its owned and/or operated laterals that are caused by a failure or blockage in the lateral and that do not discharge to a surface water, the District shall:

- Maintain records per section 4.4. of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order. The District shall provide records upon request by State Water Board or Regional Water Board staff.
- Annually upload and certify a report, in an appropriate digital format, of all recordkeeping of spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occurred.

A spill from an District-owned and/or operated lateral that discharges to a surface water is a Category 1 spill; the District shall report all Category 1 spills per section 3.1 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order.

Monthly Certification of “No-Spills” Or “Category 4 Spills” and/or “Non-Category 1 Lateral Spills”

If either (1) no spills occur during a calendar month or (2) only Category 4, and/or District-owned and/or operated lateral spills (that do not discharge to a surface water) occur during a calendar month, the District shall certify, within 30 calendar days after the end of each calendar month, either a “No-Spill” certification statement, or a “Category 4 Spills” and/or “Non-Category 1 Lateral Spills” certification statement, in the online CIWQS Sanitary Sewer System Database, certifying that there were either no spills, or Category 4 and/or Non-Category 1 Lateral Spills that will be reported annually (per section 3.6 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of this General Order) for the designated month.

If a spill starts in one calendar month and ends in a subsequent calendar month, and the District has no further spills of any category, in the subsequent calendar month, the District shall certify “no-spills” for the subsequent calendar month.

If the District has no spills from its systems during a calendar month, but the District voluntarily reported a spill from a private lateral or a private system, the District shall certify “no-spills” for that calendar month.

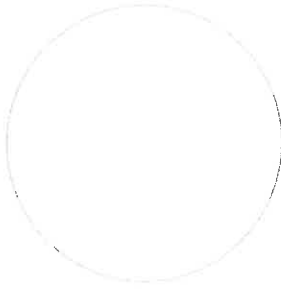
If the Districts has spills from its owned and/or operated laterals during a calendar month, the District shall not certify “no spills” for that calendar month.

APPENDIX B:
Service Call Form

SERVICE CALL / COMPLAINT FORM

CALL RECEIVED:	
Received by (name):	
Date:	Time:
CALLER'S INFORMATION	
Name:	Phone:
Address:	
NATURE OF CALL (COMPLAINT)	
Date and time caller first noticed the spill:	
LOCATION OF POTENTIAL PROBLEM	
CALLER'S OBSERVATION	
<i>(e.g., odor, duration, location on property, known impacts, indication if surface water impacted, appearance at cleanout or manhole)</i>	
In case of spill, estimated start time:	
ADDITIONAL COMMENTS/INFORMATION	
RESPONSE ACTION TAKEN/FINAL RESOLUTION	

APPENDIX C:
Door Hanger



Sanitary District No. 5 of Marin Cour

date) _____

ocation) _____

we responded to a reported blockage of the sanitary sewer service to your property.

We discovered a blockage in:

- The sanitary sewer main and cleared the line
- Your sanitary sewer lateral, which is your responsibility to maintain.

If you require assistance to clear your portion of the lateral you can search the internet for "Sewer Contractors" or "Plumbing Drains & Sewer Cleaning." If you plan to hire a contractor, we recommend getting estimates from more than one company.

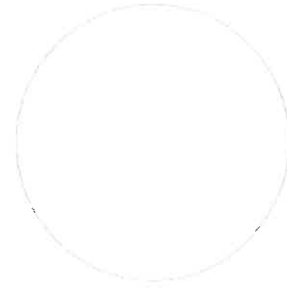
istrict representative notes: _____

District representative name:

r questions or comments, please call

Sanitary District No. 5 of Marin County

**Business Hours: (415) 435-1501
After Hours: (415) 779-9048**



Sanitary District No. 5 of Marin Count

On (date) _____

at (location) _____

we responded to a reported blockage of the sanitary sewer service to your property.

We discovered a blockage in:

- The sanitary sewer main and cleared the line
- Your sanitary sewer lateral, which is you responsibility to maintain.

If you require assistance to clear your portion of the lateral you can search the internet for "Sewer Contractors" or "Plumbing Drains & Sewer Cleaning." If you plan to hire a contrac- tor, we recommend getting estimates from more than one company.

District representative notes: _____

District representative name:

For questions or comments, please call

Sanitary District No. 5 of Marin County

**Business Hours: (415) 435-1501
After Hours: (415) 779-9048**

APPENDIX D:
Sanitary Sewer Spill Response Instructions for Contractors

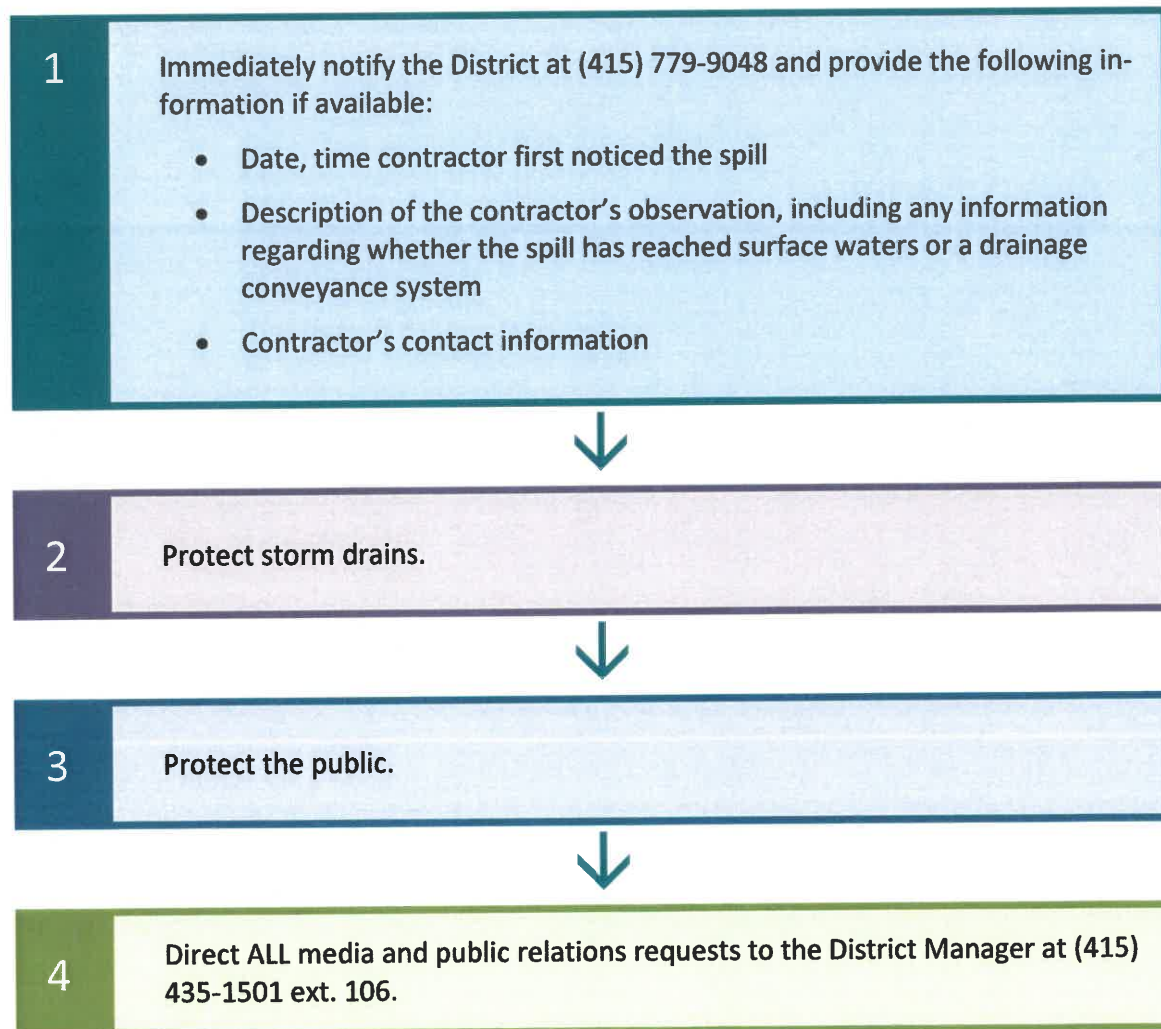
Sanitary District No. 5 of Marin County Spill Emergency Response Plan

Sanitary Sewer Spill Response Instructions for Contractors

For contractors working on the sanitary sewer system the District expects them to have, at all worksites, spill response materials necessary to block drainage conveyance system entry points near the work area and surface waters.

Additionally, contractor must be trained on spill response materials and equipment.

The following procedures are to be followed in the event that a contractor/plumber causes or witnesses a sanitary sewer spill. If the contractor/plumber causes or witnesses a spill they should:



APPENDIX E:
Sanitary Sewer Overflow/Backup Response Workbook

Sanitary District No. 5 of Marin County

Sewer Spill/Backup Response Workbook



**INSERT TAB:
Tab A: Start Here**

Sanitary Sewer Spill/Backup Response Workbook

See the following page for contact information as needed.

- Make immediate notifications:**
 - If this spill is discharging or threatening to discharge greater than or equal to 1,000 gallons to waters of the State, immediately contact CalOES at (800) 852-7550 within 2 hours and obtain a control number. Record this number on the following pages: A-4, B-2, and D-1 Page 1.
 - If there is a backup into a residence/business that may be due to a problem in the District’s sewer, notify the District Manager at (415) 435-1501 ext. 106 and the Collections System Superintendent at (415) 435-1501 ext. 107.
 - For media inquiries/requests contact the District Manager at (415) 435-1501.
- Refer to the Regulatory Reporting Guide in this Workbook for additional reporting requirements.

<p>COLLECTIONS CREW:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Refer to the Spill Event Checklist (A-4), follow the instructions on the Spill/Backup Response Flowchart (C-1), and complete forms in this Workbook as indicated. <input type="checkbox"/> Complete the chain of custody record (to the right) and deliver this workbook to the District Manager. 	<p style="text-align: center; margin: 0;">CHAIN OF CUSTODY</p> <p>Print Name:</p> <hr/> <p>Initial:</p> <hr/> <p>Date:</p> <hr/>
---	---

<p>DISTRICT MANAGER:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Review the Spill Event Checklist (A-4) and the forms in this Workbook. Contact the Collections Crew for additional information if necessary. <input type="checkbox"/> Confirm that all required regulatory notifications have been made (B-1). <input type="checkbox"/> If this was a Sewer Backup, follow instructions on the Backup Forms Checklist (F-1). <input type="checkbox"/> Complete the Post Spill Assessment (H-1) and Collection System Failure Analysis Form (H-2). <input type="checkbox"/> Complete the Chain of Custody record (right) and forward Workbook to Data Submitter 	<p style="text-align: center; margin: 0;">CHAIN OF CUSTODY</p> <p>Print Name:</p> <hr/> <p>Initial:</p> <hr/> <p>Date:</p> <hr/>
---	---

<p>DATA SUBMITTER:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Refer to Spill Event Checklist (A-4) Data Submitter Responsibilities <input type="checkbox"/> Complete the chain of custody record (to the right) and deliver this workbook to a Legally Responsible Official (see A-2 for LROs). 	<p style="text-align: center; margin: 0;">CHAIN OF CUSTODY</p> <p>Print Name:</p> <hr/> <p>Initial:</p> <hr/> <p>Date:</p> <hr/>
---	---

<p>LEGALLY RESPONSIBLE OFFICIAL:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Refer to Spill Event Checklist (A-4) Data Submitter Responsibilities <input type="checkbox"/> Complete the chain of custody record (to the right) and file this Workbook with the spill file. 	<p style="text-align: center; margin: 0;">CHAIN OF CUSTODY</p> <p>Print Name:</p> <hr/> <p>Initial:</p> <hr/> <p>Date:</p> <hr/>
---	---

Contact Information

Contact	Description	Telephone/Email/Address
CAL/OES	California Office of Emergency Services	(800) 852-7550
District Manager	Media inquiries/requests	(415) 435-1501 ext. 106
District Manager Collections System Superintendent	CalOES 2-hour notification and other regulatory notifications	(415) 435-1501 ext. 106 (415) 435-1501 ext. 107
	Outside Assistance / Mutual Aid	
CalTest Laboratory	Water quality sample analysis	(707) 258-4000 1885 North Kelly Road Napa, California 94558 707.258.4000
Brelje and Race		(707) 576-1322 475 Aviation Blvd, Suite 120 Santa Rosa, CA 95403
San Francisco Regional Water Quality Control Board		(510) 622-2300
Carl Warren & Co. Alan Dialon	Assistance with sewer backup customers	(855) 763-5898 2300 Clayton Road Concord, CA 94520 csrmaclaims@carlwarren.com
Marin County Environmental Health Services	<ul style="list-style-type: none"> ○ Notifications ○ Sign placement guidance 	(415) 473-6907 3501 Civic Center Dr # 236, San Rafael, CA 94903
Restoration/Remediation National Response Team	Cleaning services	(415) 430-9372
Restoration Brothers		(707) 413-5958
State Water Resources Control Board	Walter Mobley	(916) 323-0878 Walter.Mobley@waterboards.ca.gov

Authorized Personnel:

The following are authorized to perform regulatory reporting of spills:

Job Title	Telephone	Check if LRO
District Manager	(415) 435-1501 ext. 106	✓
Collections System Superintendent	(415) 435-1501 ext. 107	✓

The District's Legally Responsible Official (LRO) is authorized to electronically sign and certify spill reports in CIWQS.

NOTE: All references to “SSWDR” refer to State Water Board Order No. WQ 2022-0103-DWQ.

DRAINAGE CONVEYANCE SYSTEM: A drainage conveyance system is a publicly- or privately-owned separate storm sewer system, including but not limited to drainage canals, channels, pipelines, pump stations, detention basins, infiltration basins/facilities, or other facilities constructed to transport stormwater and non-stormwater flows.

SPILL: A spill is a discharge of sewage from any portion of a sanitary sewer system due to a sanitary sewer system overflow, operational failure, and/or infrastructure failure. Exfiltration of sewage is not considered to be a spill under SSWDR if the exfiltrated sewage remains in the subsurface and does not reach a surface water of the State.

- **Category 1 Spill:**

A Category 1 spill is a spill of any volume of sewage from or caused by a sanitary sewer system regulated under SSWDR that results in a discharge to:

- A surface water, including a surface water body that contains no flow or volume of water; or
- A drainage conveyance system that discharges to surface waters when the sewage is not fully captured and returned to the sanitary sewer system or disposed of properly.

Any spill volume not recovered from a drainage conveyance system is considered a discharge to surface water, unless the drainage conveyance system discharges to a dedicated stormwater infiltration basin or facility.

A spill from an District-owned and/or operated lateral that discharges to a surface water is a Category 1 spill; the District shall report all Category 1 spills per section 3.1 of Attachment E1 (Notification, Monitoring, Reporting and Recordkeeping Requirements) of SSWDR.

- **Category 2 Spill**

A Category 2 spill is a spill of 1,000 gallons or greater, from or caused by a sanitary sewer system regulated under SSWDR that does not discharge to a surface water. A spill of 1,000 gallons or greater that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system, is a Category 2 spill.

- **Category 3 Spill**

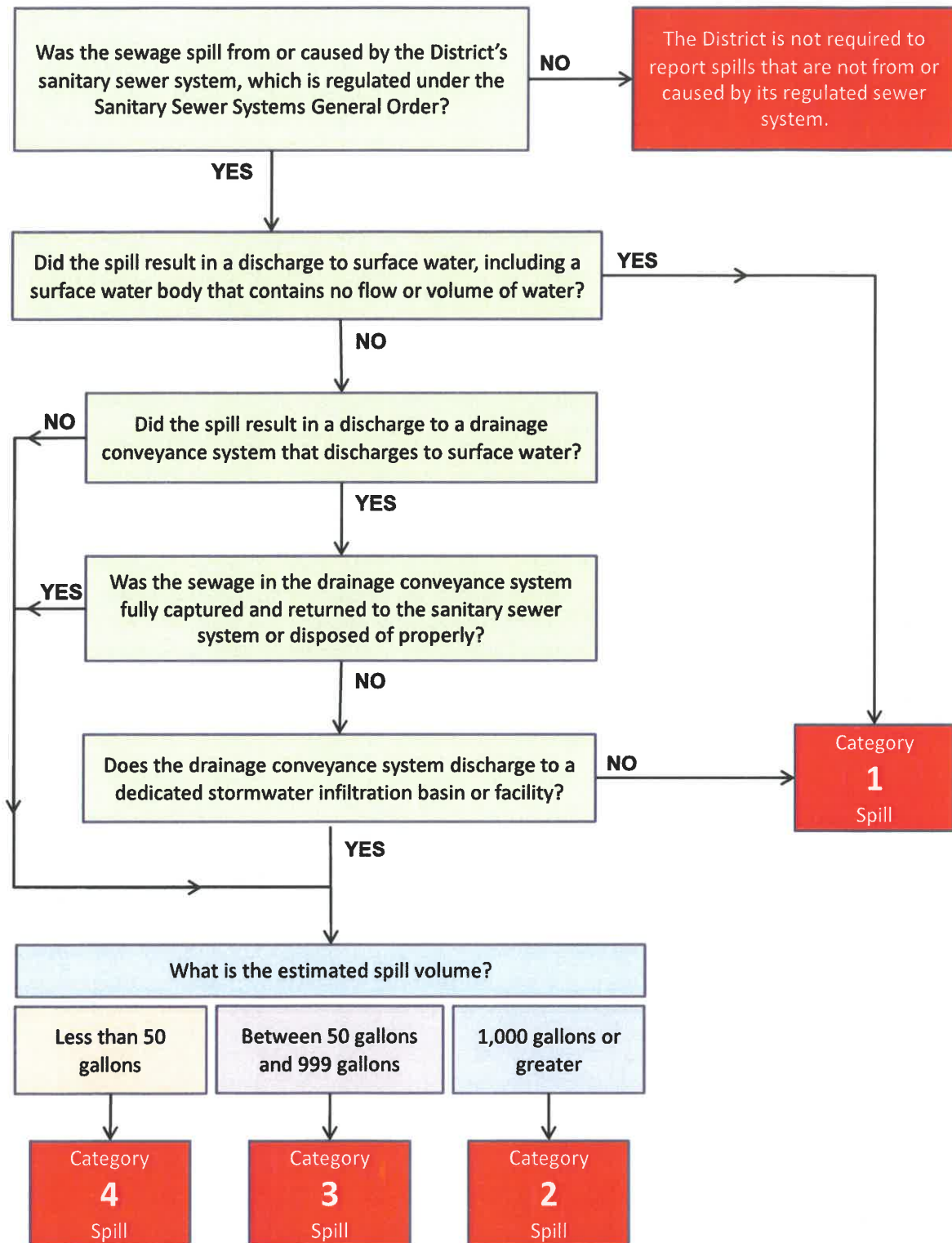
A Category 3 spill is a spill of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system regulated under SSWDR that does not discharge to a surface water. A spill of equal to or greater than 50 gallons and less than 1,000 gallons, that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 3 spill.

- **Category 4 Spill**

A Category 4 spill is a spill of less than 50 gallons, from or caused by a sanitary sewer system regulated under SSWDR that does not discharge to a surface water. A spill of less than 50 gallons that spills out of a lateral and is caused by a failure or blockage in the sanitary sewer system is a Category 4 spill.

WATERS OF THE STATE: Waters of the State are surface waters or groundwater within boundaries of the state as defined in Water Code section 13050(e), in which the State and Regional Water Boards have authority to protect beneficial uses. Waters of the State include, but are not limited to, groundwater aquifers, surface waters, saline waters, natural washes and pools, wetlands, sloughs, and estuaries, regardless of flow or whether water exists during dry conditions. Waters of the State include waters of the United States.

INSTRUCTIONS: Answer each question in order and stop at the red box once you have determined the category.



Spill Event Checklist

Date of Spill: _____ Spill Location/Name: _____
 CIWQS Event ID #: _____ Category? 1 2 3 4 OES#: _____
 Property Damage? Yes No Service Request #: _____

COLLECTIONS CREW RESPONSIBILITIES

- | | |
|--|---|
| <input type="checkbox"/> Effort made to contain and return a portion/all to the sanitary sewer | <input type="checkbox"/> Impacted waters identified? |
| <input type="checkbox"/> Pictures/video taken of spill | <input type="checkbox"/> Assess and document spill location and spread including photos |
| <input type="checkbox"/> Pictures taken of affected/unaffected area | <input type="checkbox"/> Spill Report Form Complete (includes fields for all required fields in CIWQS, and a sketch of spill) |
| <input type="checkbox"/> If property damage, start that process | <input type="checkbox"/> Volume Estimation Worksheet(s) done |
| <input type="checkbox"/> Pictures taken of containment efforts | <input type="checkbox"/> Start Time Determination Form done |
| <input type="checkbox"/> If spill is Cat 1 > 1000 gallons or Cat 2 > 1000 gal threatening to discharge to waters of the State: OES Control # _____ | <input type="checkbox"/> Follow Water Quality Monitoring and Sampling procedures |
| <input type="checkbox"/> Were surface waters impacted? | |

DISTRICT MANAGER RESPONSIBILITIES

- | | |
|--|---|
| <input type="checkbox"/> Map of where samples were taken, if applicable | <input type="checkbox"/> Conduct Post Spill Assessment & complete form (H-1) |
| <input type="checkbox"/> For Cat 1 Spills 50,000 gallons or larger, obtain sampling results | <input type="checkbox"/> Failure Analysis <ul style="list-style-type: none"> ○ TV to determine cause ○ Review Asset History |
| <input type="checkbox"/> Ensure Technical Report is written | <input type="checkbox"/> Determine next steps to prevent recurrence |
| <input type="checkbox"/> Initial review of forms is complete (ensure consistency of dates, times, volumes, and other data) | <input type="checkbox"/> Document findings and next steps on Spill Report |
| <input type="checkbox"/> Review of photos and videos (label/date) | |
| <input type="checkbox"/> Start folder for all documentation for this spill event. Put everything in it (Spill Report, Field Reports, Worksheets/Forms, follow-up work orders, notes, photos, drawings, CIWQS print outs, emails, etc.) | |

DATA SUBMITTER RESPONSIBILITIES

- | | |
|---|---|
| <input type="checkbox"/> Submit Draft in CIWQS w/in 3 business days (for Categories 1 and 2 only) | <input type="checkbox"/> Attach Technical Report to CIWQS, if applicable |
| <input type="checkbox"/> Print CIWQS Draft hard copy and email | <input type="checkbox"/> Submit Ready to Certify in CIWQS (with sufficient time for LRO review) |
| <input type="checkbox"/> Review CIWQS, spill Report, Worksheets, CMMS, and any other documentation to ensure data is consistent (e.g. dates, times, volumes, cause, follow-up action, etc.) | <input type="checkbox"/> Print CIWQS Ready to Certify and email |
| <input type="checkbox"/> Attach photos, forms etc. to CIWQS | <input type="checkbox"/> Hand Workbook to LRO and complete Chain of Custody form |

LRO RESPONSIBILITIES

- | | |
|--|---|
| <input type="checkbox"/> LRO review Workbook and CIWQS verify accurate and consistent data | <input type="checkbox"/> Move completed Workbook and spill folder to spill files |
| <input type="checkbox"/> Certify in CIWQS (within 15 calendar days for Categories 1 & 2, 30 days after the month for Category 3 & 4) | <input type="checkbox"/> If any changes are made to SSMP <ul style="list-style-type: none"> ○ Update SSMP and link on CIWQS to SSMP ○ Add change to SSMP Change Log ○ Consider need to re-certify SSMP |
| <input type="checkbox"/> Print Certified CIWQS and email | |
| <input type="checkbox"/> Any changes? Change in CIWQS and hard copies and explain changes, print our current version | |

INSERT TAB:
Tab B: Regulatory Reporting

The District’s Legally Responsible Officials (LROs) are authorized to electronically sign and certify spill reports in CIWQS. See contact information for LROs on page A-2.

Deadline	Category 1 Spill*	Category 2 Spill**	Category 3 Spill**	Category 4 Spill**
2 hours after awareness of spill	Within two (2) hours of the District’s knowledge of a Category 1 spill of 1,000 gallons or greater, discharging or threatening to discharge to Waters of the State, notify CalOES and obtain a notification control number.	Within two (2) hours of the District’s knowledge of a Category 2 spill of 1,000 gallons or greater threatening to discharge to Waters of the State, notify CalOES and obtain a notification control number.	-	-
As soon as possible	Notify Marin County Environmental Health Services			
Within 18 hours of awareness of spill	Conduct water quality sampling of the receiving water within 18 hours of initial knowledge of spill of 50,000 gallons or greater to surface waters.	-	-	-
3 Business Days after awareness of spill	Submit Draft Spill Report in the CIWQS database.	Submit Draft Spill Report in the CIWQS database.	-	-
15 Days after the spill end date	Submit Certified Spill Report within 15 calendar days of the spill end date. (Submit Amended Spill Report, as needed, within 90 calendar days after the spill end date.)	Submit Certified Spill Report within 15 calendar days of the spill end date. (Submit Amended Spill Report, as needed, within 90 calendar days after the spill end date.)	-	-
Within 30 calendars days after the end of the calendar month in which the spill occurs	-	-	Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database (Submit Amended Spill Report, as needed, within 90 calendar days after the Certified Spill Report due date.)	Certify monthly, the estimated total spill volume exiting the sanitary sewer system, and the total number of all Category 4 spills into the online CIWQS Sanitary Sewer System Database.
45 days after spill end date	Submit Technical Report within 45 calendar days after the spill end date for a Category 1 spill in which 50,000 gallons or greater discharged to surface waters; and	-	-	-
By February 1 st after the end of the calendar year in which the spills occur.	-	See ** note below.	-	Upload and certify a report, in an acceptable digital format, of all Category 4 spills to the online CIWQS Sanitary Sewer System Database.

* A spill from an Enrollee-owned and/or operated lateral that discharges to a surface water is a Category 1 spill.

** See following page for notes.

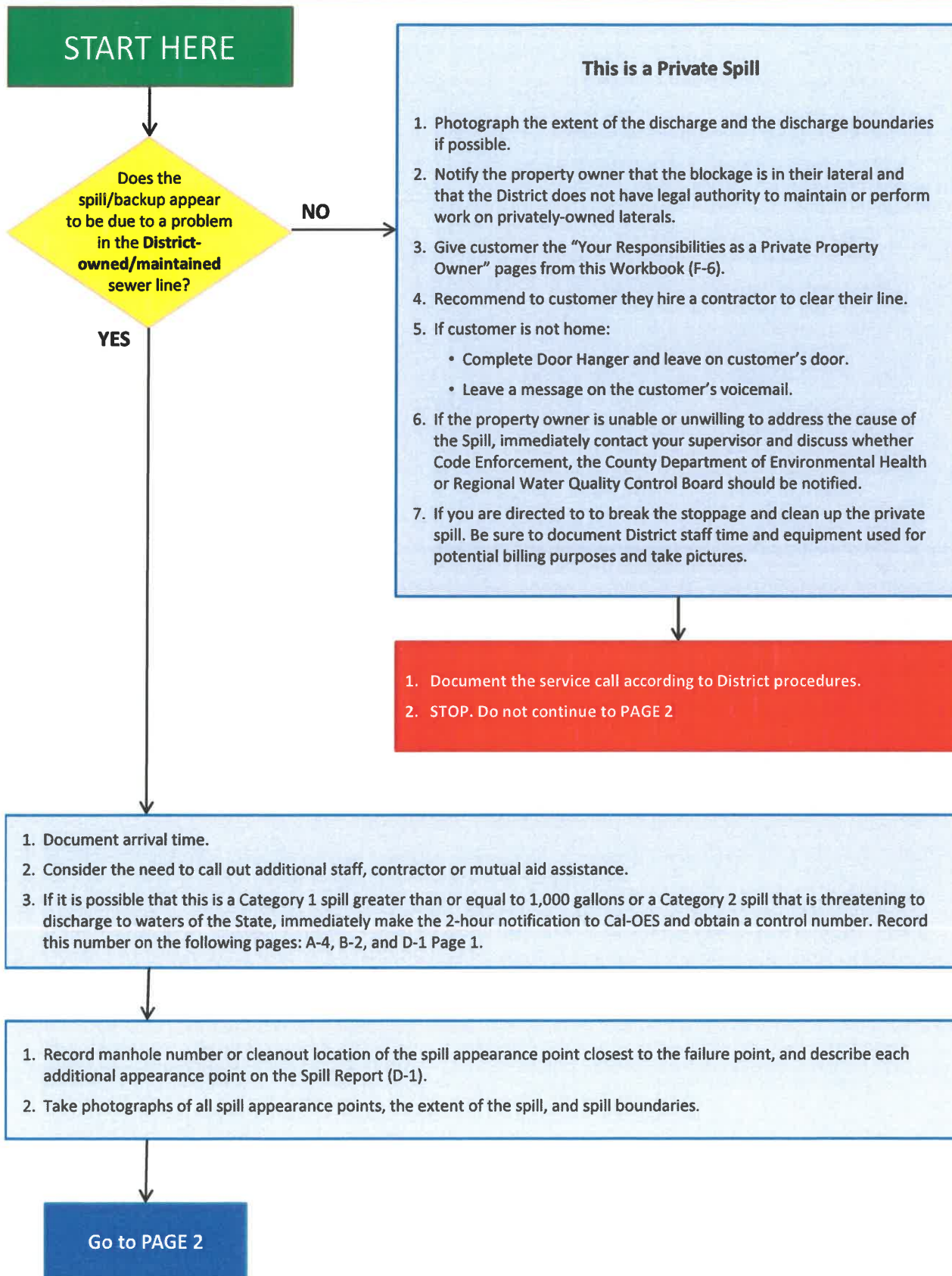
++ Agency owned lateral spills (Cat 2-4) to be reported by Feb 1 of the following year.

- **Monthly Spill Reporting of Non-Category 1 Lateral Spills:** If either (1) no spills occur during a calendar month or (2) only Category 4, and/or Enrollee-owned and/or operated lateral spills (that do not discharge to a surface water) occur during a calendar month, the Enrollee shall certify, within 30 calendar days after the end of each calendar month, either a “No-Spill” certification statement, or a “Category 4 Spills” and/or “Non-Category 1 Lateral Spills” certification statement, in the online CIWQS Sanitary Sewer System Database, certifying that there were either no spills, or Category 4 and/or Non-Category 1 Lateral Spills that will be reported annually for the designated month.
- **Annual Certified Spill Reporting of Category 4 and/or Lateral Spills:** For all Category 4 spills and spills from its owned and/or operated laterals that are caused by a failure or blockage in the lateral and that do not discharge to a surface water, the Enrollee shall annually upload and certify a report, in an appropriate digital format, of all recordkeeping of spills to the online CIWQS Sanitary Sewer System Database, by February 1st after the end of the calendar year in which the spills occurred.

Regulatory Reporting/Notifications Log

Agency/Firm Contacted	Individual Spoken to:	Date	Time	Notes
CalOES				Control Number:

**INSERT TAB:
Tab C: Flowchart**



Continue from PAGE 1

BEGIN DIVERSION AND CONTAINMENT, AS NECESSARY

1. DIVERT AWAY FROM SENSITIVE AREAS:

- a. Cover unplugged storm drains w/mats, or use dirt/other material to divert sewage away from sensitive areas (e.g., schools, playgrounds, intersections, etc.)
- b. ENSURE PUBLIC CONTACT DOES NOT OCCUR. Use cones/barricades to isolate area.

2. CONTAIN SPILL & RETURN TO SYSTEM, IF POSSIBLE:

- a. As practical, plug or block drainage conveyance system entry locations or use rubber mats to cover basin inlet and divert flow to a downstream sanitary sewer manhole (*barricade manhole if left open and monitor after barricade*) or area suitable to capture the spill for later collection.

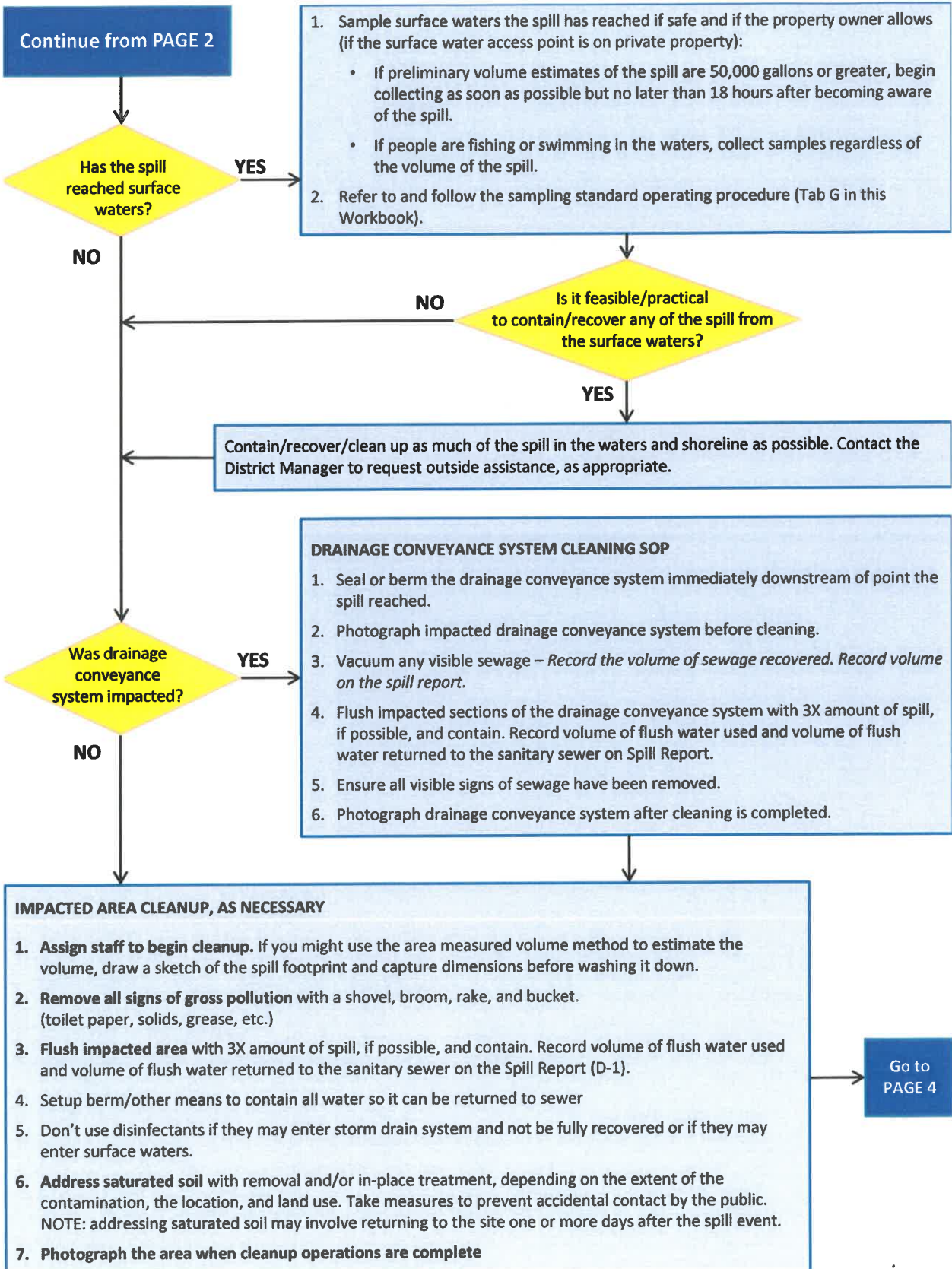
If any amount has already reached the drainage conveyance system, trace it downstream to a dry manhole and block it from entering surface waters. i.e., plugs, sandbags, or vacuum truck.
- b. If you are confident that you can capture the spill in the drainage conveyance system, trace it downstream to a dry manhole and then divert the spill to the drainage conveyance system for later recovery and return to the sanitary sewer.
- c. Use bypass pumps to pump around blockage until it can be removed.
- d. Divert to low area of ground where it can be collected later.

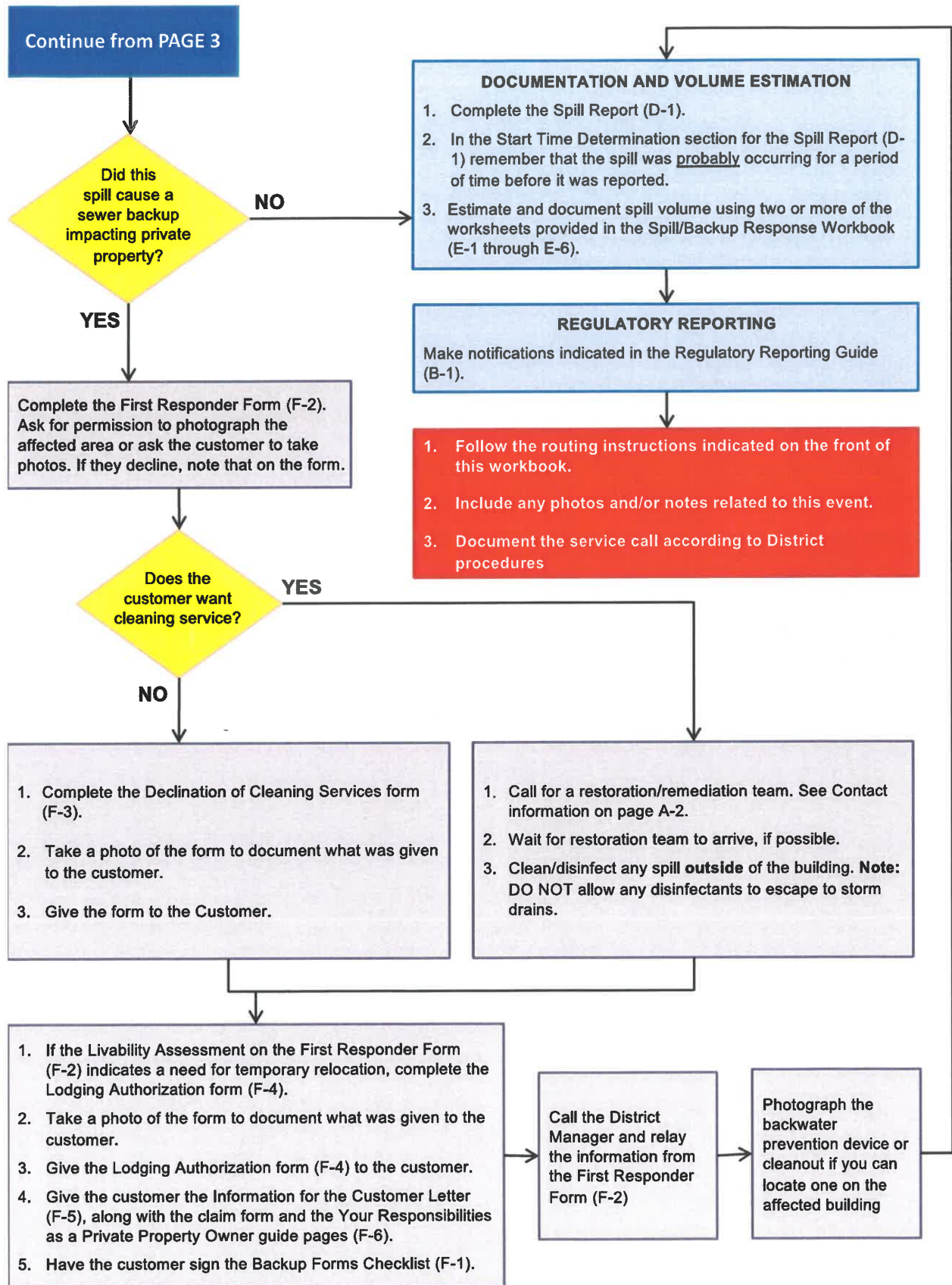
3. PHOTOGRAPH each drainage conveyance system entry location.

ADDRESS CAUSE OF SPILL/BACKUP ASAP

- 1. For spill/backups not related to a pump station, relieve the stoppage. Note the distance of the obstruction from the manhole and catch/remove debris that could cause another stoppage. After flow has returned to normal, clean the pipe thoroughly. Consider televising (CCTV) the affected line.
- 2. For pump station related spill/backups refer to that station's Emergency Response Plan.
- 3. Photograph staff activities while clearing the blockage.

Go to
PAGE 3





INSERT TAB:
Tab D: Spill Report

Sanitary Sewer Spill Field Report

Check spill category (see A-3 for definitions): CATEGORY 1 CATEGORY 2 CATEGORY 3 CATEGORY 4

CaIOES NOTIFICATION*		
Date:	Time:	Assigned Control Number:

Names of the Persons Completing this Report	Contact Information

PHYSICAL LOCATION DETAILS	
Spill location name:	
Location description:	
Address of spill:	
City:	Cross Street:
Regional Water Quality Control Board: San Francisco	County: Marin

DATE/TIME
Date and time the District was notified of, or self-discovered, the spill: _____
Operator arrival time: _____

PHOTOGRAPHS
<p>Photos must be taken during the spill event. At a minimum, the following photos must be taken:</p> <ul style="list-style-type: none"> <li style="display: inline-block; width: 45%;">○ Appearance point closest to the failure point <li style="display: inline-block; width: 45%;">○ All discharge points into surface waters <li style="display: inline-block; width: 45%;">○ Extent of the spill and spill boundaries <li style="display: inline-block; width: 45%;">○ Location(s) of clean up <li style="display: inline-block; width: 45%;">○ Entry location of each drainage conveyance system the sewage entered
Where are photographs stored?

* Within two (2) hours of the District's knowledge of a Category 1 or Category 2 spill of 1,000 gallons or greater, discharging or threatening to discharge to waters of the State, notify CalOES and obtain a notification control number.

SPILL ORIGINATION	
<p>Description and GPS coordinates of the system location where the spill originated*: <i>Include manhole number or cleanout location of the spill appearance point closest to the failure point as applicable.</i></p>	
Latitude:	Longitude:
Number of additional appearance points:	
<p>Spill appearance points: (Check all that apply)</p> <p><input type="checkbox"/> Backflow Prevention Device</p> <p><input type="checkbox"/> Combined Sewer Drain Inlet (Combined Collection System Only)</p> <p><input type="checkbox"/> Force Main</p> <p><input type="checkbox"/> Gravity Mainline</p> <p><input type="checkbox"/> Inside Building/Structure</p> <p><input type="checkbox"/> Lateral Clean Out (Private)</p> <p><input type="checkbox"/> Lateral Clean Out (Public)</p> <p><input type="checkbox"/> Lower Lateral (Private)</p> <p><input type="checkbox"/> Lower Lateral (Public)</p> <p><input type="checkbox"/> Manhole</p> <p><input type="checkbox"/> Other Sewer System Structure</p> <p><input type="checkbox"/> Pump Station</p> <p><input type="checkbox"/> Upper Lateral (Private)</p> <p><input type="checkbox"/> Upper Lateral (Public)</p> <p><input type="checkbox"/> Other, describe:</p>	
Describe each spill appearance point:	
Check to confirm photos were taken of all appearance points: <input type="checkbox"/>	

* Note: If a single spill event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the "Describe each spill appearance point" description section above. Take photos of spill appearance point(s).

SPILL DESTINATION (Check all that apply)	
<p>Final spill destination(s):</p> <p><input type="checkbox"/> Drainage Conveyance System That Discharges to Surface Water</p> <p><input type="checkbox"/> Surface Water</p> <p><input type="checkbox"/> Building or Structure</p> <p><input type="checkbox"/> Drainage Conveyance System</p> <p><input type="checkbox"/> Groundwater Infiltration Basic or Facility</p> <p><input type="checkbox"/> Paved Surface</p> <p><input type="checkbox"/> Street/Curb and Gutter</p> <p><input type="checkbox"/> Unpaved Surface</p> <p><input type="checkbox"/> Other, describe:</p>	
<p>Description of the spill event destination(s) including GPS coordinates if available that represent the full spread and reach of the spill.</p>	
Latitude:	Longitude:
Latitude (if needed):	Longitude (if needed):
Latitude (if needed):	Longitude (if needed):
Latitude (if needed):	Longitude (if needed):
<p>Check to confirm photos were taken of spill destination/boundaries: <input type="checkbox"/></p>	

SPILL VOLUME
Estimated total spill volume exiting the system: _____ gallons
Did the spill reach a drainage conveyance system? <input type="checkbox"/> YES <input type="checkbox"/> NO If yes: <ul style="list-style-type: none"> • Estimated time the spill reached the drainage conveyance system: _____ • Distance from drainage conveyance system to entry point to surface waters: _____ feet • Method to determine travel time from point of entry to drainage conveyance system to receiving waters: _____ _____ _____ • Describe the drainage conveyance system transporting the spill: _____ _____ _____
Estimated spill volume fully recovered from the drainage conveyance system: _____ gallons
Estimated spill volume remaining within the drainage conveyance system: _____ gallons
Check to confirm photos taken of entry location of drainage conveyance system the sewage entered: <input type="checkbox"/>
Did the spill reach surface water? <input type="checkbox"/> YES <input type="checkbox"/> NO If yes: <ul style="list-style-type: none"> • Estimated time the spill entered the surface water: _____ • Distance from spill appearance point to entry point to surface water: _____ feet • Method to determine travel time to receiving waters: _____ _____ _____ • Describe all discharge points: _____ _____ _____
Estimated spill volume that discharged to surface waters: _____ gallons
Estimated total spill volume recovered: _____ gallons
Check to confirm photos were taken of the following, as applicable: all discharge points into surface waters, waterbody bank erosion, floating matter, water surface sheen, discoloration of receiving water, any notable impacts to the receiving water: <input type="checkbox"/>
Did the spill discharge to a groundwater infiltration basin or facility? <input type="checkbox"/> YES <input type="checkbox"/> NO If yes, <ul style="list-style-type: none"> • Estimated time the spill entered the groundwater infiltration basin or facility: _____ • Estimated spill volume discharged to the groundwater infiltration basin or facility: _____ gallons
Estimated spill volume that did NOT reach drainage conveyance system, surface water, or groundwater infiltration basin or facility: _____ gallons
Estimated Total Spill Volume Recovered: _____ gallons

SPILL VOLUME (continued)

Method and explanation of volume estimation methods used: (Check all that apply)

- Eyeball Estimate (worksheet included in Spill/Backup Response Workbook)
- Counting Upstream Connections (worksheet included in Spill/Backup Response Workbook)
- Duration and Flow Rate (worksheet included in Spill/Backup Response Workbook)
- Measured Volume (worksheet included in Spill/Backup Response Workbook)
- Other (provide worksheet/calculations)

Description of how the spill volume estimations were calculated, including at a minimum, the methodology, assumptions and types of data relied upon, such as supervisory control and data acquisition (SCADA) records, flow monitoring or other telemetry information, used to estimate the volume of the spill discharged, and the volume of the spill recovered (if any volume of the spill was recovered):

SPILL START TIME and END TIME DETERMINATION	
Were there witnesses to the spill? <input type="checkbox"/> YES <input type="checkbox"/> NO If yes, provide Spill Witness Statements below:	
Witness 1 Name:	Witness 1 Contact Information:
Where did they see sewage spill from? <input type="checkbox"/> Manhole <input type="checkbox"/> Inside Building <input type="checkbox"/> Vent/Clean Out <input type="checkbox"/> Catch Basin <input type="checkbox"/> Wet Well/Lift Station <input type="checkbox"/> Other (describe):	
When did the witness notice the sewage spilling? _____ AM / PM Date ____ / ____ / ____	
Witness description of spill and affected area: Is it currently spilling? <input type="checkbox"/> YES <input type="checkbox"/> NO	
When did the witness last observe NO Spill occurring? _____ AM / PM Date ____ / ____ / ____	
Did the witness notice if the spill had reached the storm drain or surface waters?	
Comments:	
Witness 2 Name:	Witness 2 Contact Information:
Where did they see sewage spill from? <input type="checkbox"/> Manhole <input type="checkbox"/> Inside Building <input type="checkbox"/> Vent/Clean Out <input type="checkbox"/> Catch Basin <input type="checkbox"/> Wet Well/Lift Station <input type="checkbox"/> Other (describe):	
When did the witness notice the sewage spilling? _____ AM / PM Date ____ / ____ / ____	
Witness description of spill and affected area: Is it currently spilling? <input type="checkbox"/> YES <input type="checkbox"/> NO	
When did the witness last observe NO Spill occurring? _____ AM / PM Date ____ / ____ / ____	
Did the witness notice if the spill had reached the storm drain or surface waters?	
Comments:	
Witness 3 Name:	Witness 3 Contact Information:
Where did they see sewage spill from? <input type="checkbox"/> Manhole <input type="checkbox"/> Inside Building <input type="checkbox"/> Vent/Clean Out <input type="checkbox"/> Catch Basin <input type="checkbox"/> Wet Well/Lift Station <input type="checkbox"/> Other (describe):	
When did the witness notice the sewage spilling? _____ AM / PM Date ____ / ____ / ____	
Witness description of spill and affected area: Is it currently spilling? <input type="checkbox"/> YES <input type="checkbox"/> NO	
When did the witness last observe NO Spill occurring? _____ AM / PM Date ____ / ____ / ____	
Did the witness notice if the spill had reached the storm drain or surface waters?	
Comments:	

SPILL START TIME and END TIME DETERMINATION (continued)
<p>Are the volume of the spill and rate of flow known? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>If yes, divide volume by rate of flow to get duration of spill event:</p> $\frac{\text{Spill Volume}}{\text{Flow Rate}} \text{ Gallons} \div \frac{\text{GPM}}{\text{Spill Duration}} = \text{Minutes}$ <p>Subtract the duration from the spill end date/time to establish the spill start date/time:</p> $\text{Spill End Date/Time} - \text{Duration} = \text{Spill Start Time}$ <p>Method to determine flow rate:</p>
<p>Solids Present? <input type="checkbox"/> None or small amount (indicates recent start) <input type="checkbox"/> Significant amount of buildup</p>
<p>Staining? <input type="checkbox"/> None (indicates recent start) <input type="checkbox"/> Minor <input type="checkbox"/> Significant</p>
<p>Distance sewage has traveled from spill point:</p>
<p>Spill Start Time:</p>
<p>Spill End Date and Time:</p>
<p>How was end time determined? <input type="checkbox"/> Broke stoppage <input type="checkbox"/> Turned pump station back on <input type="checkbox"/> Other, explain:</p>
<p>Description of the methodology(ies), assumptions and type of data relied upon for estimations of the spill start time and the spill end time.</p>

SPILL CAUSE (check all that apply)

- Air Relief Valve (ARV)/Blow Off Valve (BOV)/Backwater Valve Failure
- Construction Diversion Failure
- Collection System Maintenance Failure (Specify Below)
- Damage by Others Not Related to CS Construction/Maintenance (Specify Below)
- Debris from Construction
- Debris from Lateral
- Debris-General
- Debris-Rags
- Debris-wipes/Non-disposables
- Flow Exceeded Capacity (Separate CS Only)
- Fats, Oils and Grease (FOG)
- Inappropriate Discharge to CS
- Natural Disaster (Specify Below)
- Operator Error (Specify Below)
- Pipe Structural Problem/Failure – Installation
- Pipe Structural Problem/Failure – Controls
- Pump Station Failure – Power
- Pump Station Failure – Mechanical
- Pump Station Failure – Controls
- Rainfall Exceeded Design, I and I (Separate CS Only)
- Root Intrusion
- Siphon Failure
- Surcharged Pipe (Combines CS Only)
- Vandalism (Specify Below)
- Other, specify:

SYSTEM FAILURE LOCATION	
<p>System failure location:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Air Relief Valve (ARV)/Blow Off Valve (BOV) Failure <input type="checkbox"/> Force Main <input type="checkbox"/> Gravity Mainline <input type="checkbox"/> Lower Lateral <input type="checkbox"/> Manhole <input type="checkbox"/> Pump Station Failure – Controls <input type="checkbox"/> Pump Station Failure – Mechanical <input type="checkbox"/> Pump Station Failure – Power <input type="checkbox"/> Siphon <input type="checkbox"/> Upper Lateral (Specify Below) <input type="checkbox"/> Other, specify: 	
<p>Description of the pipe material at the failure location:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Copper <input type="checkbox"/> Galvanized Steel <input type="checkbox"/> Polyvinyl Chloride (PVC) <input type="checkbox"/> Acrylonitrile Butadiene Styrene (ABS) <input type="checkbox"/> Cross-Linked Polyethylene (PEX) <input type="checkbox"/> Cast Iron <input type="checkbox"/> Vitrified Clay <input type="checkbox"/> Concrete <input type="checkbox"/> Ductile Iron <input type="checkbox"/> Fiberglass <input type="checkbox"/> Other, specify: 	
Estimated age of sewer asset at the point of blockage or failure (if applicable):	
	years
Diameter of sewer pipe at the point of blockage or failure:	
	inches

SPILL IMPACT

Description of the impact of the spill:

STORM EVENT

Was spill associated with a storm event? YES NO

SPILL RESPONSE ACTIVITIES (check all that apply)

- Cleaned Up (Specify Below)
- Mitigated Effects of Spill (Specify Below)
- Contained All or Portion of Spill
- Restored Flow
- Returned All Spill to Sanitary Sewer System
- Returned Portion of Spill to Sanitary Sewer System
- Property Owner Notified
- Other Enforcement Agency Notified
- Other, specify:

Description of spill response activities including description of immediate spill containment and cleanup efforts:

SPILL CORRECTIVE ACTION (check all that apply)
<input type="checkbox"/> Added Sewer to Preventive Maintenance Program <input type="checkbox"/> Adjusted Schedule/Method of Preventive Maintenance <input type="checkbox"/> Enforcement Action Against FOG Source <input type="checkbox"/> Inspected Sewer Using CCTV to Determine Cause <input type="checkbox"/> Plan Rehabilitation or Replacement of Sewer <input type="checkbox"/> Repaired Facilities or Replaced Defect <input type="checkbox"/> Other, specify:
Refer to Collection System Failure Analysis Report for details about: <ul style="list-style-type: none">• Spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the spill, and a schedule of major milestones for those steps.• Schedule of major milestones Check to confirm completion of each report: <input type="checkbox"/> Post-Spill Assessment <input type="checkbox"/> Collection System Failure Analysis
Spill response completion date:

INVESTIGATION
Detailed narrative of investigation and investigation findings of cause of spill:
Is the District conducting an ongoing investigation? <input type="checkbox"/> YES <input type="checkbox"/> NO If yes, reasons for an ongoing investigation: If yes, expected date of completion of investigation: _____

SURFACE WATERS (Complete for Category 1 Spills Only)		
Name of receiving water body	Type of receiving water body: Stream, Ocean, Wetland, Slough, Estuary, River, Lake, Reservoir, Vernal Pool, Wash, or Other (specify)	Description of the water body(s), including but not limited to: <ul style="list-style-type: none"> ○ Observed impacts on aquatic life, ○ Public access impact(s): public closure, restricted public access, temporary restricted use, and/or other (specify below) ○ Responsible entity for closing/restricting use of water body, and ○ Number of days closed/restricted as a result of the spill.

MUNICIPAL INTAKE (Complete for Category 1 and 2 Spills Only)		
Was the spill located within 1,000 feet of a municipal surface water intake?	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Describe:		

WATER SAMPLING

Were water quality samples collected? YES NO N/A

If yes, identify sample locations:

Identify parameters the water quality samples were analyzed for: (Check all that apply)

- Total Coliform Bacteria
- Fecal coliform bacteria
- E-coli
- Ammonia
- Other, specify:

INSERT TAB:
Tab E: Volume Estimation

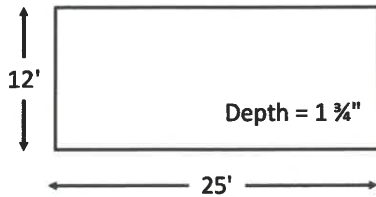
Miscellaneous Computations & Examples

<p>To convert inches to feet (NOTE: for the purposes of this worksheet, the unit of measurement will be in feet for formula examples)</p>	<p>Divide the inches by 12 or use the chart on the right.</p> <p>Example 1: $27" \div 12 = 2.25'$</p> <p>Example 2: $1\frac{3}{4}" = ?'$</p> <p>$1" (0.08') + \frac{3}{4}" (0.06') = 0.14'$</p>
<p>Volume of one cubic foot</p>	<p>7.48 gallons of liquid</p>
<p>Area: Two-dimensional measurement represented in square feet (SQ/FT or ft²)</p>	<p>Square/rectangle: Area = Length x Width</p> <p>Circle: Area = $\pi \times r^2$ (where $\pi \approx 3.14$ and $r = \text{radius} = \frac{1}{2} \text{ diameter}$)</p> <p>Triangle: Area = $\frac{1}{2} (\text{Base} \times \text{Height})$</p>
<p>Volume: Three-dimensional measurement represented in cubic feet (CU/FT or ft³)</p>	<p>Rectangle/square footprint: Volume = Length x Width x Depth</p> <p>Circle footprint (cylinder): Volume = $\pi \times r^2 \times \text{Depth}$ (where $\pi \approx 3.14$ and $r = \text{radius} = \frac{1}{2} \text{ diameter}$)</p> <p>Triangle footprint: Volume = $\frac{1}{2} (\text{Base} \times \text{Height}) \times \text{Depth}$</p>
<p>Depth: Wet Stain on Concrete or asphalt surface</p>	<p>If the depth is not measurable because it is only a wet stain, use the following estimated depths:</p> <ul style="list-style-type: none"> ○ Depth of a wet stain on concrete surface: 0.0026' (1/32") ○ Depth of a wet stain on asphalt surface: 0.0013' (1/64") <p>These were determined to be a reasonable depth to use on the respective surfaces through a process of trial and error. One gallon of water was poured onto both asphalt and concrete surfaces. Once the area was determined as accurately as possible, different depths were used to determine the volume of the wetted footprint until the formula produced a result that (closely) matched the one gallon spilled. This process was repeated several times.</p>
<p>Depth: Contained or "Ponded" sewage</p>	<p>Measure actual depth of standing sewage whenever possible. When depth varies, measure several representative sample points and determine the average. Use that number in your formula to determine volume.</p>

Miscellaneous Computations & Examples (continued)

Area/Volume of a Rectangle or Square

Formula: Length x Width x Depth = Volume in cubic feet



$$\frac{25'}{\text{Length}} \times \frac{12'}{\text{Width}} \times \frac{0.14'}{\text{Depth}} = \frac{42 \text{ Cubic Feet}}{\text{Volume}}$$

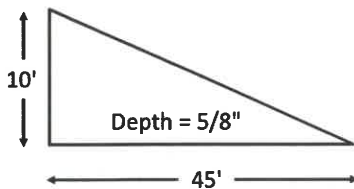
Multiply the volume by 7.48 gallons to determine the volume in gallons:

$$\frac{42 \text{ ft}^3}{\text{Volume}} \times \frac{7.48}{\text{gal/ft}^3} = \frac{314.16 \text{ gallons}}{\text{Volume}}$$

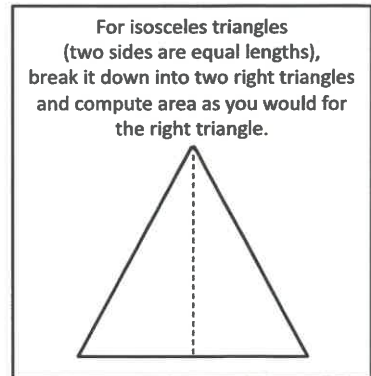
Convert Inches to Feet	
Inches	Feet
1/8"	0.01'
1/4"	0.02'
3/8"	0.03'
1/2"	0.04'
5/8"	0.05'
3/4"	0.06'
7/8"	0.07'
1"	0.08'
2"	0.17'
3"	0.25'
4"	0.33'
5"	0.42'
6"	0.50'
7"	0.58'
8"	0.67'
9"	0.75'
10"	0.83'
11"	0.92'
12"	1.00'

Area/Volume of a Right Triangle

Formula: Base x Height x Depth = Volume in cubic feet



$$0.5 \times \frac{45'}{\text{Base}} \times \frac{10'}{\text{Height}} \times \frac{0.05'}{\text{Depth}} \times \frac{7.48}{\text{gal/ft}^3} = \frac{84.15 \text{ gallons}}{\text{Volume}}$$

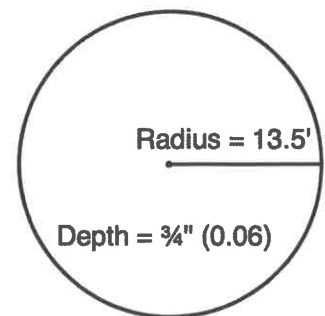


Area/Volume of a Circle

Formula: $\pi \times r^2 \times \text{Depth} = \text{Volume in cubic feet}$

The radius is 1/2 the diameter, which is a straight line passing from side to side through the center of a circle.

$$\frac{13.5'}{\text{Radius}} \times \frac{13.5'}{\text{Radius}} \times \frac{3.14}{\pi} \times \frac{0.06'}{\text{Depth}} \times \frac{7.48}{\text{gal/ft}^3} = \frac{256.8 \text{ gallons}}{\text{Volume}}$$



Volume Estimation: Eyeball Estimation Method (for ≤100 gallons)

Spill Date: _____ **Location:** _____

This method is invalid if surface conditions are wet (due to rainfall, irrigation, etc.) DO NOT use this method under these circumstances.

- STEP 1: Position yourself so that you have a vantage point where you can see the entire spill.
- STEP 2: Imagine one or more buckets or barrels of water tipped over. Depending on the size of the spill, select a bucket or barrel size as a frame of reference. It may be necessary to use more than one bucket/barrel size.
- STEP 3: Estimate how many of each size bucket or barrel it would take to make an equivalent spill. Enter those numbers in Column A of the row in the table below that corresponds to the bucket/barrel sizes you are using as a frame of reference.
- STEP 4: Multiply the number in Column A by the multiplier in Column B. Enter the result in Column C.

	A	B	C
Size of bucket(s)/barrel(s)	How many of this size?	Multiplier	Estimated Spill Volume
		x 1 gallon	
		x 5 gallons	
		x 32 gallons	
		x 55 gallons	
		x ___ gallons	
Estimated Total Spill Volume:			

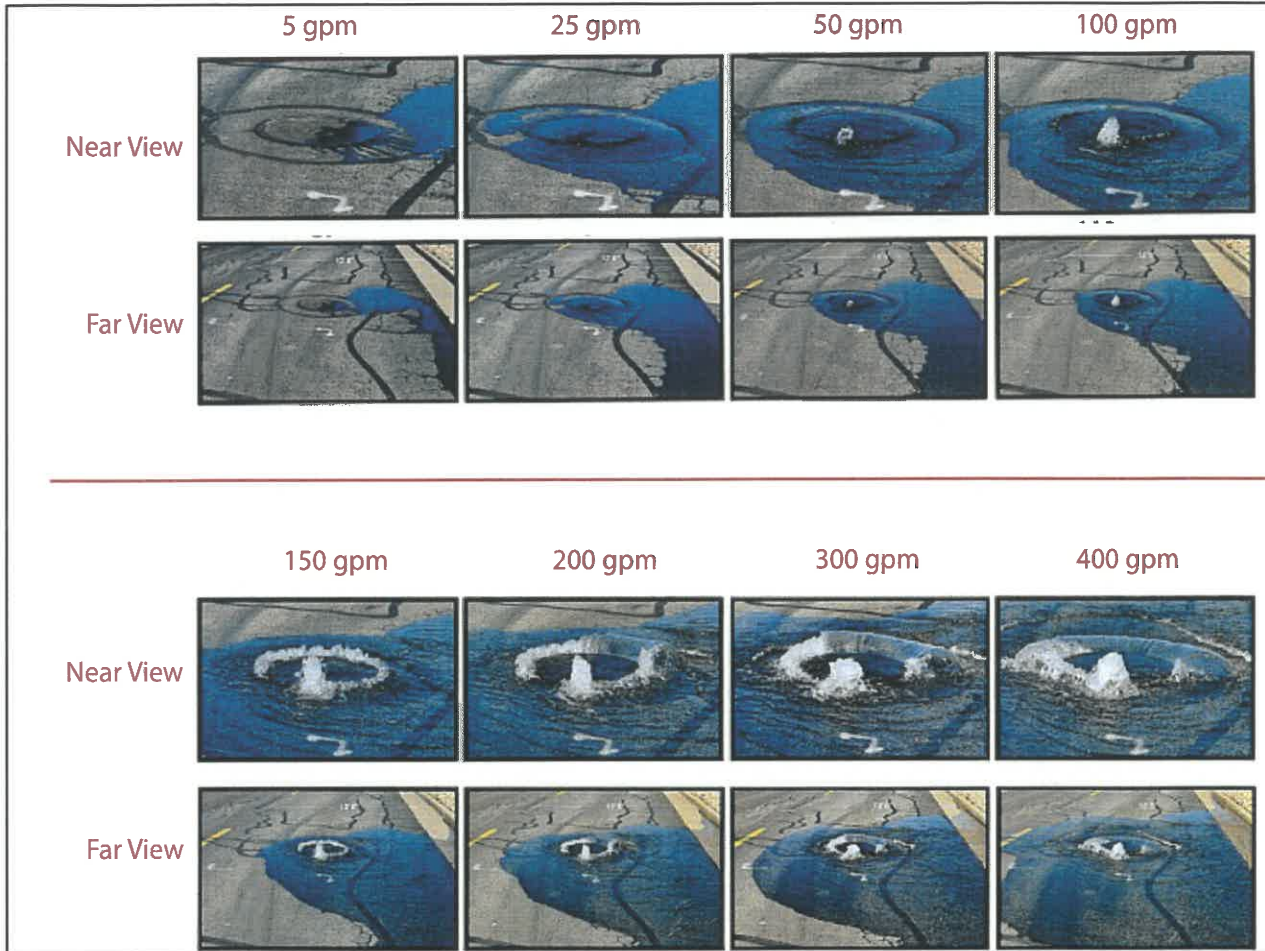
STEP 5: List assumptions made to arrive at the total estimated spill volume:

STEP 6: Take photographs. Where are photographs stored?

The following photos must be taken: appearance point closest to the failure point, extent of the spill and spill boundaries, the entry location of each drainage conveyance system the sewage entered, all discharge points into surface waters (Category 1 spill only), and location(s) of clean up.

Spill Date: _____ Location: _____

Compare the spill to reference images below to estimate flow rate of the current spill. **NOTE: If the manhole cover in your picture has vent holes or more than one pry hole, do not use these pictures for comparison.**



SSCSC Manhole Spill Gauge: CWEA Southern Section Collections Systems Committee. Spill Simulation courtesy of Eastern Municipal Water District.

Describe which reference photo(s) were used and any additional factors that influenced applying the reference photo data to the actual spill:

Flow Rate Based on Photo Comparison: _____ gallons per minute (gpm)

(Continued on next page)

Start Date and Time	1.
End Date and Time	2.
Spill Event Total Time Elapsed (subtract Line 1 from Line 2. Show in minutes.)	3.
Average Flow Rate GPM (Account for diurnal flow pattern)	4.
Total Volume Estimated Using Duration and Flow Method (Line 3 x Line 4)	5.

List assumptions made to arrive at the total estimated spill volume:

Take photographs. Where are photographs stored?

The following photos must be taken: appearance point closest to the failure point, extent of the spill and spill boundaries, the entry location of each drainage conveyance system the sewage entered, all discharge points into surface waters (Category 1 spill only), and location(s) of clean up.

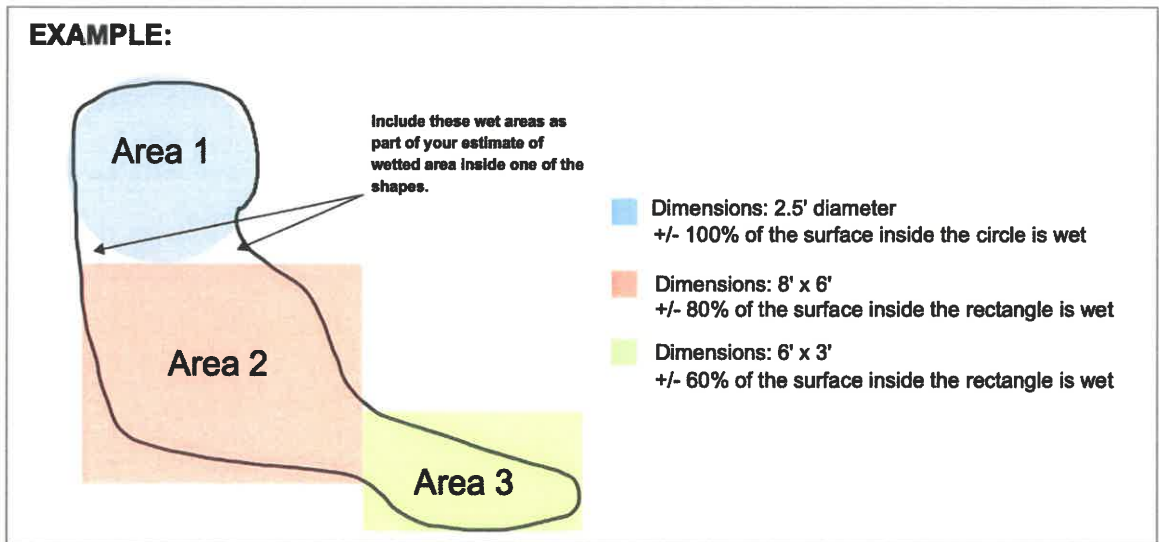
Volume Estimation: Area/Volume Method

Spill Date: _____ Location: _____

STEP 1: Describe spill area surface: Asphalt Concrete Dirt Landscape Inside Building

Other: _____

STEP 2: Draw/sketch the outline (footprint) of the spill. Then break the footprint down into recognizable shapes. Label/identify each sketch outline area (Area 1, Area 2, etc.) See example below.



STEP 3: Calculate the area of the footprint by completing the table below for each area in Step 2. Measure actual depth of standing sewage whenever possible. When depth varies, measure several representative sample points and determine the average. If the depth is not measurable because it is only a wet stain, use the following estimated depths:

Depth of a wet stain on concrete surface: 0.0026' (1/32")
 Depth of a wet stain on asphalt surface: 0.0013' (1/64")

Rectangles:

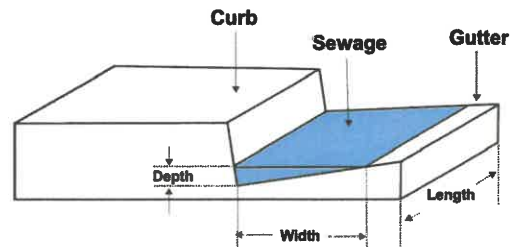
Area # (from labeled drawing)	Length	X	Width	X	% Wet	=	Area	X	Depth	=	Volume
→	ft	X	ft	X	%	=	ft ²	X	ft	=	ft ³
→	ft	X	ft	X	%	=	ft ²	X	ft	=	ft ³
→	ft	X	ft	X	%	=	ft ²	X	ft	=	ft ³

Circles:

Area # (from labeled drawing)	π	X	Radius	X	Radius	X	% Wet	=	Area	X	Depth	=	Volume
→	3.14	X	ft	X	ft	X	%	=	ft ²	X	ft	=	ft ³
→	3.14	X	ft	X	ft	X	%	=	ft ²	X	ft	=	ft ³
→	3.14	X	ft	X	ft	X	%	=	ft ²	X	ft	=	ft ³

STEP 4: If part of the spill is in a gutter, use the formula below to calculate the volume:

$$\frac{\text{Length}}{\text{Length}} \times \frac{\text{Depth}}{\text{Depth}} \times \frac{\text{Width}}{\text{Width}} \times 0.5 = \frac{\text{Volume}}{\text{Volume}} \text{ ft}^3$$



STEP 5: Calculate Total Spill Volume (sum of all of the volume calculations above): _____ ft³

STEP 6: Convert from cubic feet to gallons by multiplying by 7.48.

$$\frac{\text{spill volume in cubic feet}}{\text{spill volume in cubic feet}} \text{ ft}^3 \times 7.48 \text{ gallons} = \frac{\text{Total estimated volume}}{\text{Total estimated volume}} \text{ gallons}$$

STEP 7: List assumptions made to arrive at the total estimated spill volume. Adjust estimation up for moderate to severe cracking and/or roughness of surface (General Rule 20% to 40%):

STEP 8: Take photographs. Where are photographs stored?

The following photos must be taken: appearance point closest to the failure point, extent of the spill and spill boundaries, the entry location of each drainage conveyance system the sewage entered, all discharge points into surface waters (Category 1 spill only), and location(s) of clean up.

Volume Estimation: Upstream Connections Method

Spill Date: _____ Location: _____

Attach and/or reference system map and identify location of spill and buildings contributing to spill.

STEP 1: Determine the number of Equivalent Dwelling Units (EDUs) for this spill: _____ EDUs
 NOTE: A single-family residential home = 1 EDU. For commercial buildings, refer to agency documentation.

STEP 2: This volume estimation method utilizes daily usage data based on flow rate studies of several jurisdictions in California. Column A shows how an average daily usage of 180 gallons per day is distributed during each 6-hour period. Adjust the table as necessary to accurately represent the actual data.

Complete Column E by entering the number of minutes the spill was active during each 6-hour time period. Multiply column D times Column E to calculate the gallons spilled during each time period. Add the numbers in Column F together for the Total Estimated spill Volume per EDU.

Time Period	Flow Rate Per EDU				Spill	
	A	B	C	D	E	F
	Gallons per Period	Hours per period	A÷B = Gallons per Hour	C÷60 = Gallons per Minute	Minutes spill was active during period	D × E = Gallons spilled per period
6am-noon	72	6	12	0.20		
noon-6pm	36	6	6	0.10		
6pm-midnight	54	6	9	0.15		
midnight-6am	18	6	3	0.05		
Total Estimated Spill Volume per EDU:						

STEP 3: Multiply the Estimated spill Volume per EDU from Step 2 by the number of EDUs from Step 1.

$$\frac{\text{_____ gallons}}{\text{Volume per EDU}} \times \text{_____} = \frac{\text{_____ gallons}}{\text{Estimated spill Volume}}$$

of EDUs

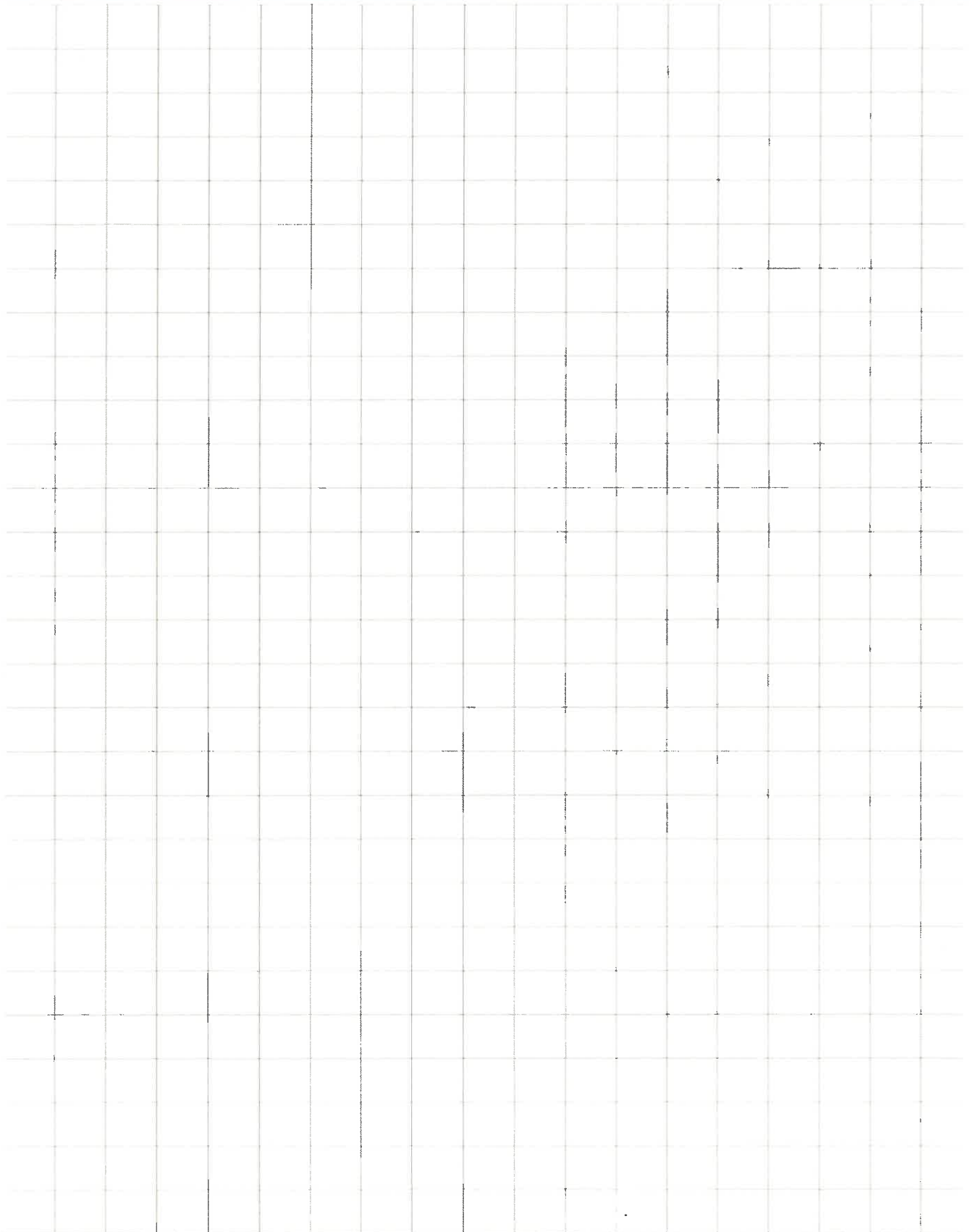
STEP 4: Adjust spill volume as necessary considering other factors, such as activity that would cause a fluctuating flow rate (doing laundry, taking showers, etc.). Explain rationale below and indicate adjusted spill estimate (attach a separate page if necessary).

Total Estimated spill Volume: _____ gallons

STEP 7: List assumptions made to arrive at the total estimated spill volume:

STEP 8: Take photographs. Where are photographs stored?

The following photos must be taken: appearance point closest to the failure point, extent of the spill and spill boundaries, the entry location of each drainage conveyance system the sewage entered, all discharge points into surface waters (Category 1 spill only), and location(s) of clean up.



INSERT TAB:
Tab F: Backup Forms

Complete this form only if there is a backup into a residence or business.

Instructions to Collections Crew:

1. Take photo of each form before giving it to the customer for documentation.
2. Tear forms listed below out of this workbook and hand to customer. *Leave the First Responder Form in this workbook, do not give to Customer.*
3. Check each item that was provided to the customer.
4. Have customer sign below.

Forms/Documents:

- Form F-3: Declination of Cleaning Services
- Form F-4: Lodging Authorization
- Form F-5: Customer Information Letter
- Form F-6: Your Responsibilities as a Private Property Owner
- Form F-7: Claim Form

Forms Provided to:

Customer Name

Customer Signature

Date

Check here if customer declines to sign:

Forms Provided by: _____

Employee Name

Initial

Date

Instructions to District Manager:

Send photos, including the photos of the documents given to the customer, and a copy of the First Responder form to Carl Warren & Co.

Complete this form only if there is a backup into a residence or business.

Fill out this form as completely as possible.

Ask customer if you may enter the home. If so, take photos of all damaged and undamaged areas.

PERSON COMPLETING THIS FORM:		PHONE:
Name: _____		DATE:
Title: _____		TIME:
TIME STAFF ARRIVED ON-SITE:		
DOES THE CUSTOMER WANT THE District TO CALL FOR CLEANING SERVICE? <input type="checkbox"/> Yes <input type="checkbox"/> No If no, give the customer the Cleaning Declination Form and have them sign here: _____ If customer called a cleaning contractor, provide name and contact number:		
RESIDENT NAME: <input type="checkbox"/> Owner <input type="checkbox"/> Renter ADDRESS: PHONE:	IF RENT, PROPERTY MANAGER(S): OWNER: ADDRESS: PHONE:	
# OF PEOPLE LIVING AT RESIDENCE:		
Approximate Age of Home:	# of Bathrooms:	# of Rooms Affected:
Numbers of Photographs or Videos Taken: <input type="checkbox"/> Photographs _____ <input type="checkbox"/> Video _____ <input type="checkbox"/> Customer did not provide or allow photographs		Where are photos/video stored?
Is nearest upstream manhole visibly higher than the drain/fixture that spilled? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Does property have a Property Line Cleanout or BPD? <input type="checkbox"/> Cleanout <input type="checkbox"/> BPD <input type="checkbox"/> Neither <input type="checkbox"/> Unknown		
If yes, was the Property Line Cleanout/BPD operational at the time of the spill?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Have there ever been any previous spills at this location?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
Has the resident had any plumbing work done recently? <i>If YES, please describe:</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown

GO TO PAGE 2

LIVABILITY ASESMENT

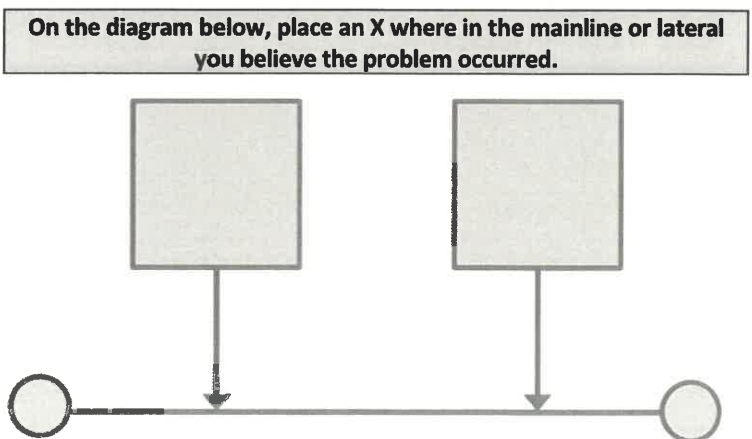
- Is there insufficient non-contaminated living space for residents to stay during cleaning including a functioning and non-contaminated bathroom? Yes No
- Are there any residents that are pregnant, are children, have severe allergies/asthma, have respiratory problems, and/or have a compromised immune system? Yes No
- Is the area a childcare or extended care facility? Yes No
- Is the food preparation area contaminated? Yes No
- Is it after 8pm or will the cleaning and disinfection be completed after 10pm? Yes No

If the answer to any of the questions above is YES, complete the Lodging Authorization form.

If temporary lodging was offered by the District check one: Accepted Rejected

SANITARY SEWER LINE BLOCKAGE LOCATION

PLEASE CHECK THE BOXES THAT DESCRIBE YOUR OBSERVATIONS:	
Building Cleanout Was: <ul style="list-style-type: none"> <input type="checkbox"/> Non-Existent <input type="checkbox"/> Full <input type="checkbox"/> Empty 	Property Line Cleanout was <ul style="list-style-type: none"> <input type="checkbox"/> Non-Existent <input type="checkbox"/> Full <input type="checkbox"/> Empty



Did sewage go under buildings? Yes No Unsure

Recommended Follow-Up Action(s):

Declination of Cleaning Services (Backup Only)

Customer Information				
NAME:		ADDRESS:		TELEPHONE:
ON (date)	AT (time)	Approximately (quantity)	GALLONS OF:	
		<input type="checkbox"/> Sewage <input type="checkbox"/> Grey Water <input type="checkbox"/> Toilet Bowl Water <input type="checkbox"/> Odor <input type="checkbox"/> Other (describe):		
Spilled from (or odor emanating from)			The spill affected the following areas (<i>check one</i>):	
<input type="checkbox"/> Toilet <input type="checkbox"/> Shower/Tub <input type="checkbox"/> Washer <input type="checkbox"/> Other (describe):			<input type="checkbox"/> Bathroom <input type="checkbox"/> Bedroom <input type="checkbox"/> Hallway <input type="checkbox"/> Garage <input type="checkbox"/> Kitchen <input type="checkbox"/> Crawlspace <input type="checkbox"/> Other (specify):	
The spill affected the following flooring:		and/or additional materials:		
<input type="checkbox"/> Tile <input type="checkbox"/> Wood Flooring <input type="checkbox"/> Linoleum <input type="checkbox"/> Carpet <input type="checkbox"/> Other (specify):		<input type="checkbox"/> Area Rugs <input type="checkbox"/> Towels <input type="checkbox"/> Clothing <input type="checkbox"/> Other (specify):		
This Form Completed By:		Name:	Date:	
(Write legibly)		Title:	Time:	

CUSTOMER, please read the following and sign below. I/We acknowledge that Sanitary District No. 5 of Marin County (District) has offered to provide professional cleaning and decontamination services to remediate the sewage backup and/or spill described above and that we declined the offer. We further understand and acknowledge that because we have declined, any necessary remediation activities will be conducted without District assistance, and that the District will not accept responsibility for work performed by persons other than those engaged by the District. The District will also not accept responsibility for any charges related to this incident that are not usual and customary. Refer to "Your Responsibilities as a Private Property Owner" (Page F-6) for recommendations regarding spill cleanup.

Customer Signature*:		Date:
The information above was explained to the customer by the following employee:	Name:	Title:
	Signature:	Date:

**Note to responders: if customer declines to sign this form, then have a co-worker sign here as a witness:*

Name: _____ Signature: _____ Date: _____

INSTRUCTIONS TO EMPLOYEE:

1. Complete this form if the Livability Assessment on the First Responder Form indicates a need for temporary relocation and the customer accepts the offer.
2. Notify the District Manager who will make arrangements via telephone and pay for the hotel with a credit card.
3. Complete the voucher as instructed by the District Manager.
4. Take a photo of the form for records and then give it to the customer.
5. Indicate if they accept or reject the offer of temporary relocation on the First Responder Form (F-2).

INSTRUCTIONS TO RESIDENT:

Sanitary District No. 5 of Marin County recommends that you temporarily relocate to one of the hotels listed below for your safety and convenience while your residence is being cleaned. Please note that this emergency authorization is granted under the following conditions:

1. This authorization provides for one (1) night's lodging at one of the hotels listed below.
2. The authorization is good for **room and tax ONLY**. Phone, food, mini-bar and other incidental charges will be your responsibility.
3. Additional nights and/or other allowances/incidentals may be discussed by contacting the District Manager at (415) 435-1501 ext.106.

VOUCHER

Good for one (1) night's stay on (date): _____ Number of Affected Residents: _____

Customer's Name: _____

Field Supervisor's Name: _____ Phone Number: _____

The Lodge at Tiburon
1651 Tiburon Blvd, Tiburon, CA
(800) 762-7770

Acqua Hotel Mill Valley
555 Redwood Hwy, Mill Valley, CA 94941
(415) 380-0400

Dear Property Owner:

We recognize that sewer backup incidents can be stressful and require immediate response while all facts concerning how an incident occurred are still unknown. Rest assured that we do all we can to prevent this type of event from occurring in the first place. Nevertheless, occasionally tree roots or other debris in the sewer lines causes a backup into homes immediately upstream of the blockage. At this time the District is investigating the cause of this incident.

If the District is found to be responsible for the incident, we are committed to cleaning and restoring your property, and to protecting the health of those affected during the remediation process.

The cleaning contractor provided by the District has been selected because of their adherence to established protocols that are designed to assure to all parties thorough, cost-effective and expeditious cleaning services. You also have the right to select your own cleaning contractor, but the District does not guarantee payment of fees/expenses incurred and reserves the right to dispute fees/expenses deemed not usual and customary.

Depending on the extent of the backup our Collections Crew may advise you to consider relocating temporarily while the living area is cleaned. In that case, the District will arrange for lodging for you for one night. Please see the Lodging Authorization form for details.

To discuss this matter, or to submit a claim, contact the District Manager at (415) 435-1501 ext. 106.

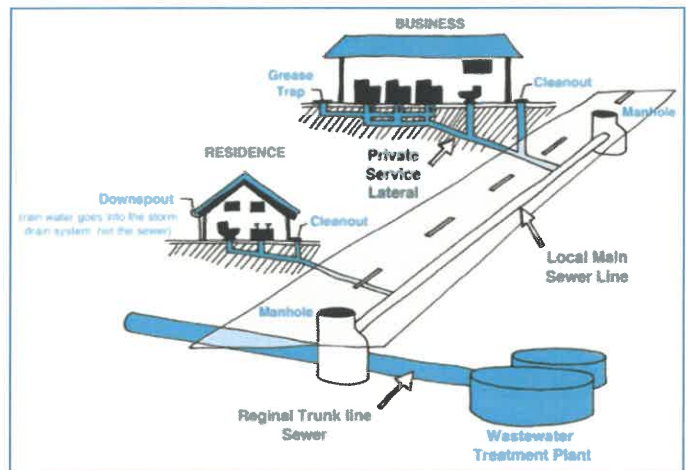
Sincerely,
The Sanitary District No. 5 of Marin County

How a Sewer System Works

A property owner's sewer pipes are called **service laterals** and are connected to larger local main and regional trunk lines. Service laterals run from the connection at the home to the connection with the public sewer. Depending on your location, a portion of the lateral is the responsibility of the property owner and must be maintained by the property owner.

How do sewage spills happen?

Sewage spills occur when the wastewater in underground pipes spills through a manhole, cleanout, or broken pipe. Most spills are relatively small and can be stopped and cleaned up quickly, but left unattended they can cause health hazards, damage to homes and businesses, and threaten the environment, local waterways, and beaches. Common causes of sewage spills include grease build-up, tree roots, broken/cracked pipes, missing or broken cleanout caps, undersized sewers, and groundwater/rainwater entering the sewer system through pipe defects and illegal connections.



Prevent most sewage backups with a Backflow Prevention Device

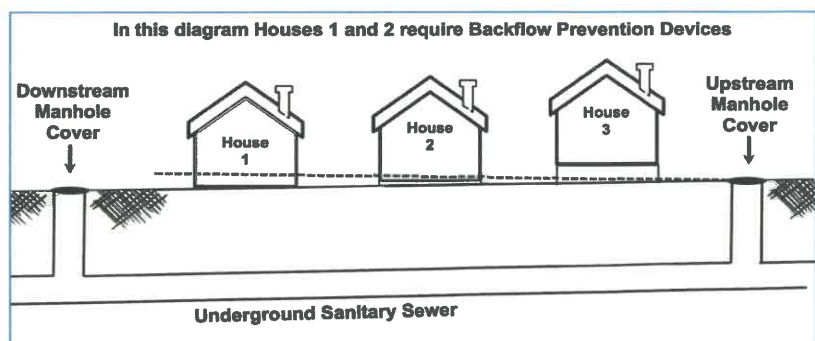
This type of device can help prevent sewage backups into homes and businesses. If you don't already have a Backflow Prevention Device, contact a professional plumber or contractor to install one as soon as possible.

Is my home required to have a backflow prevention device?

Section 710.1 of the Uniform Plumbing Code (U.P.C.) states: "Drainage piping serving fixtures which have flood level rims located below the elevation of the next upstream manhole cover or private sewer serving such drainage piping **shall** be protected from backflow of sewage by installing an approved type of backwater valve." The intent of Section 710.1 is to protect the building interior from mainline sewer spills or surcharges.

Additionally, U.P.C. 710.6 states:

"Backwater valves **shall** be located where they will be accessible for inspection and repair at all times and, unless continuously exposed, shall be enclosed in a masonry pit fitted with an adequately sized removable cover."



Spill cleanup inside the home:

For large clean ups, a professional cleaning firm should be contacted to clean up impacted areas. If you hire a contractor, it is recommended to get estimates from more than one company. Sometimes, homeowner's insurance will pay for the necessary cleaning due to sewer backups. Not all policies have this coverage, so check with your agent.

If you decide to clean up a small spill inside your home, protect yourself from contamination by observing the following safety measures. Those persons whose resistance to infection is compromised should not attempt this type of clean up.

Other Tips:

- Keep children and pets out of the affected area.
- Turn off heating/air conditioning systems
- Wear rubber boots, rubber gloves, and goggles during cleanup.
- Discard items that cannot be washed and disinfected (such as: mattresses, rugs, cosmetics, toys, etc.)
- Remove and discard drywall and insulation that has been contaminated with sewage or flood waters.
- Thoroughly clean all hard surfaces (such as flooring, concrete, molding, wood and metal furniture, countertops, appliances, sinks and other plumbing fixtures) with hot water and laundry or dish detergent.
- Help the drying process with fans, air conditioning units, and dehumidifiers.
- After completing cleanup, wash your hands with soap and water. Use water that has been boiled for 1 minute (allow the water to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water & detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a Laundromat until your onsite wastewater system has been professionally inspected and serviced.

Seek immediate attention if you become injured or ill during or after the cleanup process.

Spill cleanup outside the home:

- Keep children and pets out of the affected area until cleanup has been completed.
- Wear rubber boots, rubber gloves, and goggles during cleanup of affected area.
- Clean up sewage solids (fecal material) and place in properly functioning toilet or double bag and place in garbage container.
- On hard surfaces areas such as asphalt or concrete, it is safe to use a 2% bleach solution, or ½ cup of bleach to 5 gallons of water, but don't allow it to reach a storm drain as the bleach can harm the environment.
- After cleanup, wash hands with soap and water. Use water that has been boiled for 1 minute (allow to cool before washing your hands) OR use water that has been disinfected (solution of 1/8 teaspoon of household bleach per 1 gallon of water). Let it stand for 30 min. If water is cloudy, use ¼ teaspoon of household bleach per 1 gallon of water.
- Wash clothes worn during cleanup in hot water and detergent (wash apart from uncontaminated clothes).
- Wash clothes contaminated with sewage in hot water and detergent. Consider using a laundromat until your onsite wastewater system has been professionally inspected and serviced.

CLAIM AGAINST SANITARY DISTRICT NO. 5 OF MARIN COUNTY

PLEASE RETURN THIS FORM TO:		
SANITARY DISTRICT NO. 5 OF MARIN COUNTY ATTN: ROBIN DOHRMANN, OFFICE MANAGER P.O. BOX 227 TIBURON, CA 94920		

OR SEND VIA:	EMAIL:	rdohrmann@sani5.org
	FAX:	415.435.0221

CLAIMANT

NAME: _____

ADDRESS: _____

TELEPHONE NO.: _____ DATE OF BIRTH: _____

The undersigned respectfully submits the following claim and information:

1. Post Office address to which the claimant desires notices to be sent of other than the above:

2. Date, place and time of occurrence or transaction which claim arises from:

Date: _____

Time: _____

Place: _____

3. Specify the particular act or omission and circumstances you claim caused injury and/or damage:

4. What damage or injuries do you claim resulted?

5. Amount of reimbursement claimed as damages, with computation and supporting bills, receipts, or estimates of cost (please attach papers to claim), including the amount of any future or prospective injury, damage, or loss, insofar as it may be known at this time:

6. The name/names of the public employee/employees causing the injury, damage or loss, if known:

7. Name and Address of Witness, Doctors, Hospitals, etc.:

Name	Address	Telephone
1.		
2.		
3.		

8. Description of personal injury. If there was no personal injury, state "NONE".

9. Name of any other person injured: _____

Address of injured person: _____

10. Owner of property damaged: _____

Location of property: _____

11. Any additional information that might be helpful in considering claim:

REPRESENTATIVE INFORMATION (to be completed if the claim is filed by an attorney or representative)

Name of Attorney/Representative

(_____) _____
Telephone Number

Address City State Zip Code

Is the claim filed on behalf of a minor? ___ Yes ___ No

If yes, please indicate:

Relationship to the minor: _____

Minor's date of birth: _____

I have read the matters and statements made in the above claim and I know the same to be true of my own knowledge, except as to those matters stated upon information or belief and as to such matters I believe the same to be true. I certify that under penalty of perjury that the foregoing is true and correct.

SIGNED THIS _____ DAY OF _____, _____

CLAIMANT'S SIGNATURE

INSERT TAB:
Tab G: SAMPLING SOP

Table of Contents (this page)..... G-1
Specifications & Requirements -2
Introduction & Overview -3
Equipment & Safety -4
Before Sampling -5
Surface Water Sampling -6
After Sampling -7
Attachment E1 Summary -8
Quick-Reference Guide -9
Surface Water Sampling Worksheet..... -10
Surface Water Sample Chain of Custody Record..... -11



Process:	<i>Surface Water Sampling</i>
Personnel Required:	<ul style="list-style-type: none"> • 1
Personal Protective Equipment:	<ul style="list-style-type: none"> • Safety Glasses • Rubber Gloves
License Required:	<ul style="list-style-type: none"> • None required
Common Hazards:	<ul style="list-style-type: none"> • Drowning or submersion • Slip, trip, and fall • Exposure • Insect/Wildlife • Weather • Boat/Watercraft • Physical Strain or Injury
Safe Operation Guidelines:	<ul style="list-style-type: none"> • Wear proper PPE • Be aware of currents, depth, and unstable banks • Do not eat, drink or smoke while sampling • Avoid cross-contamination • Label all samples clearly

Lab Contact Information	<p>CalTest 1885 North Kelly Road Napa, California 94558 (707) 258.4000</p> <p>Brelje and Race 475 Aviation Blvd, Suite 120 Santa Rosa, CA 95403 (707) 576-1322</p>
--------------------------------	--

Surface water sampling helps to ensure water quality by identifying areas of concern and potential failure mechanisms that may impact surface waters or stormwater infrastructure in the service area.



Minimize Impacts

Surface water sampling allows for the proper evaluation of potential contamination following a sanitary sewer spill.



Having a thorough understanding of the service area and its various challenges can help responders be better prepared to minimize the impacts of a spill on local surface waters and stormwater infrastructure.

Before beginning the sampling process there are several important steps that must be taken to ensure that the samples collected are representative of the water quality in the area being monitored.

These steps include:

1. Gathering the necessary equipment:

- The surface water sampling worksheet, chain of custody, sampling pole, sample containers, and PPE are essential tools that must be prepared and organized before sampling can begin.

2. Donning appropriate personal protective equipment:

- To protect against exposure to potentially harmful contaminants and the sulfuric acid preservative in the Ammonia sample bottles, workers must wear gloves, eye protection, and other personal protective equipment, as needed.

3. Determining the point of spill entry into the waterway:

- It's important to locate the point at which any spill entered the waterway in order to collect the required samples: point of entry into the surface water, downstream, and upstream.



The approximate stream velocity and time since the spill flow to the surface water stopped should be determined to calculate the appropriate distance to move downstream to collect:

- 1. The downstream sample,**
- 2. Move upstream to collect the spill entry point sample,**
- 3. And move further upstream to collect the upstream or reference sample.**



Personal Protective Equipment

Personal Protective Equipment (PPE) should be used when conducting surface water sampling. The PPE that is required includes:

- Gloves
- Eye Protection



Sampling Equipment

In addition to PPE, other sampling equipment is necessary:

- Sample Bottles & Containers
- Cooler with Ice, or Ice packs
- Sampling Pole, or
- Rope & Bucket



The use of PPE and proper sampling equipment is important for the safety of the sampler and for ensuring accurate and reliable sampling results.

Test Type	Sample Locations			
	Spill Area	Downstream of Spill	Upstream of Spill	Drainage Conveyance System (as applicable)
Ammonia/ Nitrogen	1 pint with H ₂ SO ₄	1 pint with H ₂ SO ₄	1 pint with H ₂ SO ₄	1 pint with H ₂ SO ₄
Enterococcus	1 bacti bottle	1 bacti bottle	1 bacti bottle	1 bacti bottle
Fecal Coliforms	1 bacti bottle	1 bacti bottle	1 bacti bottle	1 bacti bottle
e. Coli	1 bacti bottle	1 bacti bottle	1 bacti bottle	1 bacti bottle

Water samples must be collected in different bottles for various tests and then transported in a cooler with ice packs.

For each of the three sampling sites (plus drainage conveyance system as applicable), one bottle is needed for ammonia/nitrogen testing, and one bacti bottle is required for each type of bacteria being tested.

Additionally, one field blank sample is required for each constituent. Field blank sample bottles are filled with sterilized water during sampling to serve as quality control on the sampler's sampling methods.

Since the sample bottles contain sterilized water, bacteria and ammonia should not be present in the water. If the lab analysis shows the presence of bacteria or ammonia, it indicates that the sampler's method may not have been correct, and the other bacti samples may have been contaminated.

Surface Water Sampling – Preparation



Step 1 of 4

Prepare the cooler for sample storage by adding an instant ice pack, ice pack, or ice to keep the samples cold during transport to the lab.

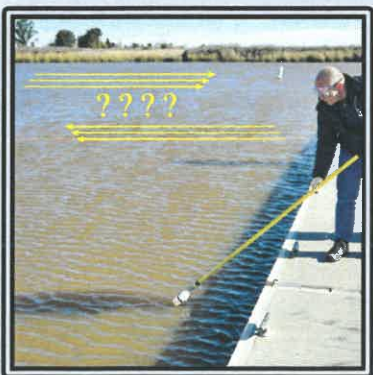


Step 2 of 4

Identify the point of the spill where the wastewater entered the waterway and take a photograph of this location with a reference point in the picture.

Step 3 of 4

Begin completing the *Surface Water Sampling Worksheet* to record the relevant information about the sampling location and collected samples.



Step 4 of 4

To determine which direction is upstream and downstream for sample collection, you should observe the direction of water movement from the point of discharge.

The purpose of this procedure is to provide a standard for collecting surface water samples to assess water quality, avoid contamination, and ensure that samples can be accurately labeled and transported to the lab for processing.

Notes:

Start by collecting downstream samples first.

In order to determine where the downstream sample is located in a stream, creek, or river, you will need to determine the velocity of the surface water. This can be accomplished through the use of a stream velocity meter or by measuring off a distance along the bank and timing how long it takes for a floating object to travel that distance.

Use the formula on the *Surface Water Sampling Worksheet* to calculate the stream velocity. Once known, determine the time that the spill **has not been** entering the surface water.

This, along with the stream velocity, will inform you how far downstream you need to travel to collect the downstream sample.



Step 1 of 9

Don the appropriate PPE from your sampling kit. This should include latex or rubber gloves and safety glasses.



Step 2 of 9

Label all samples with their location (refer to table on G-8), your name, and the date and time they are collected. Record this information on the surface water sampling worksheet.



Step 3 of 9

Take photos of each sample location and ensure a reference point is visible in each photo. In the photo (left), the dock and sign serve as excellent reference points.



Step 4 of 9

Remove the seal from the Ammonia sample container just prior to collecting your sample, as applicable.

To reduce the likelihood of contamination, remove the cap immediately before collecting each sample.



Step 5 of 9

To prevent sample contamination, do not allow the inside of the cap to touch anything while you are obtaining the sample.



Step 6 of 9

When filling the ammonia nitrogen sample bottle, don't overfill it because it contains sulfuric acid. Sweep the bottle or dipper upstream and out of the water without disturbing the bottom sediment. Remember to leave the sulfuric acid in the bottle and avoid skin contact.



Step 7 of 9

Fill the Ammonia sample bottle to the fill line, and immediately replace the cap. If there is no clear fill line, fill it to the “neck” of the bottle.



Step 8 of 9

Open the Bacteria sample container and allow water to gently flow into the bottle just to the fill line.



Repeat the sampling process for all sample points, and provide a “field blank” sample using sterile water, which verifies the quality of the samples.



Step 9 of 9

Place all samples in the cooler on the ice pack. To ensure accurate analysis, the Bacti samples must be transported to the lab within 6 hours of the time of collection.

Step 1 of 4: Documentation

All samples must be labeled with their location, your name, and the date and time they were collected. Refer to the state requirements found on the last page of this document. Record this information on the chain of custody form and the surface water sampling worksheet.

Chain of Custody Record

The form includes sections for Customer Name, Address, and Phone; Program Name; Lab Name; and Sampling By. It features a table for 'SAMPLING COLLECTION INFORMATION' with columns for Date, Time, Sample Location, and Sample Label ID. There are also sections for 'ANALYSIS REQUIREMENTS' and 'LABORATORY INFORMATION'.

Surface Water Sampling Worksheet

The worksheet includes fields for Sample Date, Time, and Location. It contains a table for recording sample data with columns for Sample Location, # of Samples, and Date/Time. There are also sections for 'LABORATORY INFORMATION' and 'NOTES/OBSERVATIONS'.

Step 2 of 4: Contact the Lab

Inform the lab that the following samples require processing: ammonia-nitrogen, total/fecal coliform, e. Coli, and/or enterococcus. Provide any additional information the lab may require.

Step 3 of 4: Transport Samples

Place the samples in the cooler on the ice pack and transport them to the lab within 6 hours of collection time. Complete the chain of custody form and ensure all samples are properly secured during transport.

Step 4 of 4: Post Warning Signs

If directed by your supervisor or the county environmental health division, post warning signs in the affected area. Keep track of sign locations and remove warning signs and lift restrictions only when authorized to do so.

The Enrollee shall collect receiving water samples
at the following locations:

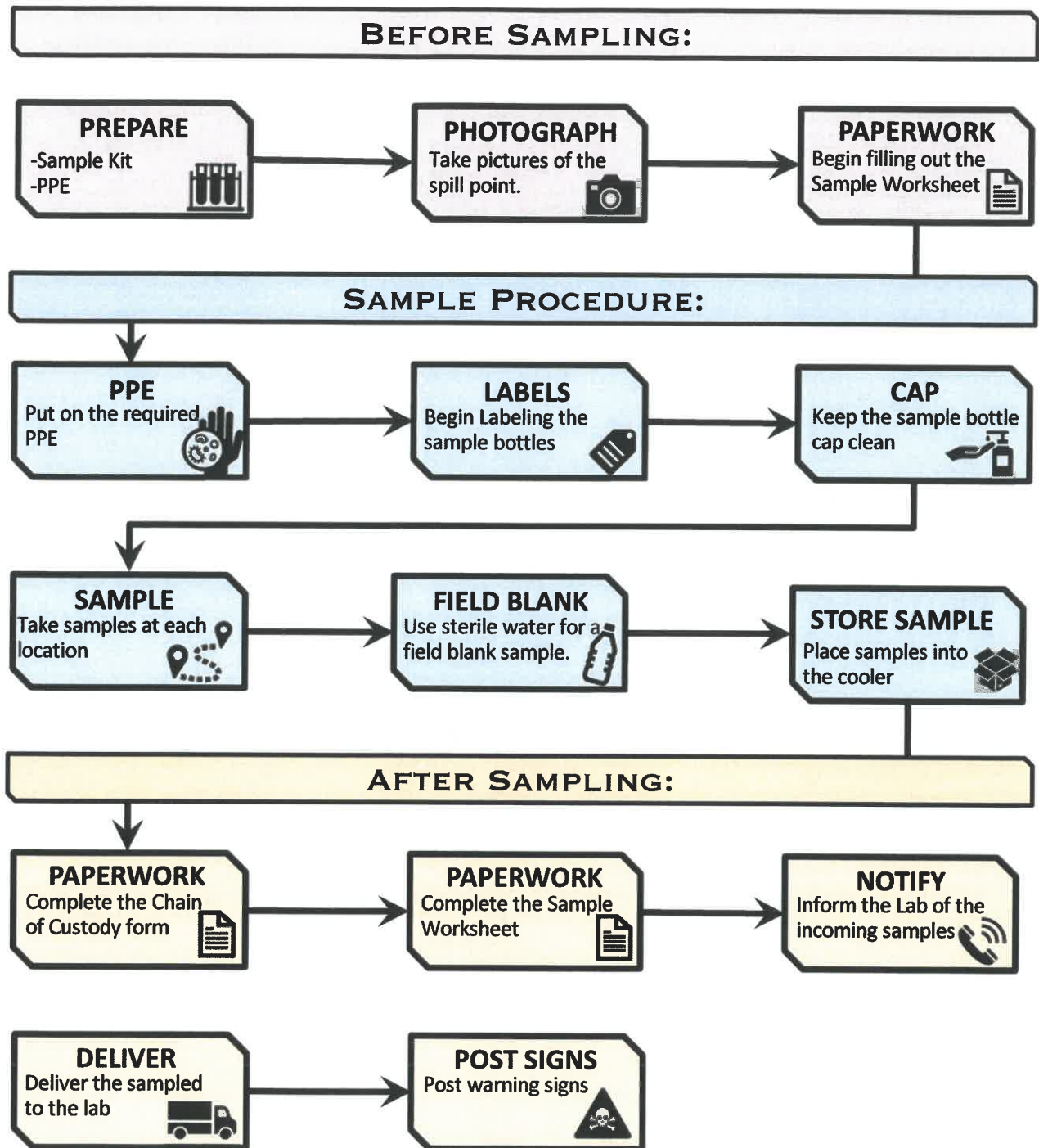
Sampling of Flow in Drainage Conveyance System (DCS) Prior to Discharge

Sampling Location	Sampling Location Description
DCS-001	A point in a drainage conveyance system before the drainage conveyance system flow discharges into a receiving water.

Receiving Surface Water Sampling (RSW¹)

Sampling Location	Sampling Location Description
RSW-001 Point of Discharge	A point in the receiving water where sewage initially enters the receiving water.
RSW-001U Upstream of Point of Discharge	A point in the receiving water, upstream of the point of sewage discharge, to capture ambient conditions absent of sewage discharge impacts.
RSW-001D Downstream of Point of Discharge	A point in the receiving water, downstream of the point of sewage discharge, where the spill material is fully mixed with the receiving water.

¹The Enrollee must use its best professional judgment to determine the upstream and downstream distances based on receiving water flow, accessibility to upstream/downstream waterbody banks, and size of visible sewage plume.



Surface Water Sampling Worksheet

Sample Date:	Sample Time: <input type="checkbox"/> AM <input type="checkbox"/> PM	Sample Location:		
Sampler(s)' Name(s):				
Sampler(s)' Signature(s):				
What is being sampled? <input type="checkbox"/> Stream <input type="checkbox"/> Pond <input type="checkbox"/> Lake <input type="checkbox"/> River <input type="checkbox"/> Other:		If the spill was not actively entering the surface water during sampling: A. Stream Velocity: _____ CFS B. How Long Has the spill NOT Been Entering the Surface Water? _____ minutes X 60sec/min = _ seconds C. How Far Downstream Did You Travel To Collect The SOURCE Sample? (A X C = Feet): _____ feet D. Explain why you travelled a different distance, if you did, to collect the source sample:		
Weather at time of sampling: <input type="checkbox"/> Sunny <input type="checkbox"/> Overcast <input type="checkbox"/> Sprinkling <input type="checkbox"/> Raining				
Was the spill actively entering the surface water during Sampling? <input type="checkbox"/> YES <input type="checkbox"/> NO If no, complete A-D in the gray box to the right.				
Sample Location	Sample Label	# of Samples*	Photo ID# of Sample Location	Visual Observations and/or Interferences
Drainage Conveyance	DCS-001	4		
Source*	RSW-001	4		
Upstream*	RSW-001U	4		
Downstream*	RSW-001D	4		
Field Blank*	Field Blank	4		

* Collect duplicate bacteria samples at each location

FINISH CHECKLIST	NOTES / OBSERVATIONS
<input type="checkbox"/> All Samples Labeled with: <input type="checkbox"/> Date: a six-digit number indicating the year, month, day of collection <input type="checkbox"/> Time: a four-digit number indicating military time of collection. e.g. 0954 <input type="checkbox"/> Sample Location: Drainage Conveyance, Source, Upstream, or Downstream <input type="checkbox"/> Samplers: each sampler is identified <input type="checkbox"/> Parameter/preservative: analysis to be conducted for sample/sample preservation <input type="checkbox"/> Chain of Custody Completed <input type="checkbox"/> Samples on Ice in Cooler <input type="checkbox"/> Pictures Taken of Each Sample Location and the Photo ID/# Noted Above <input type="checkbox"/> All Sampling Equipment Collected	

INSERT TAB:
Tab H: POST-SPILL

SPILL LOCATION	
Spill location name:	
Address of spill:	

NOTIFICATION AND COMMUNICATION PROCEDURES	
Were notification procedures adhered to?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Were notification procedures effective?	<input type="checkbox"/> Yes <input type="checkbox"/> No

RESPONSE PROCEDURES	
Were response time goals met?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Were safety procedures adhered to?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Were safety procedures effective?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Were initial response procedures adhered to?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Were initial response procedures effective?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Were containment procedures adhered to?	<input type="checkbox"/> Yes <input type="checkbox"/> No

RESPONSE PROCEDURES (continued)	
Were containment procedures effective?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Were clean up and recovery procedures adhered to?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Were clean up and recovery procedures effective?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Were sewer back up procedures adhered to?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Were sewer back up procedures effective?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Were chain of custody procedures adhered to?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Was failure analysis investigation performed and documented?	<input type="checkbox"/> Yes <input type="checkbox"/> No
REPORTING AND NOTIFICATION PROCEDURES	
Were reporting and notification timeline requirements met?	<input type="checkbox"/> Yes <input type="checkbox"/> No

DOCUMENTATION	
Was spill file created?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Was QA/QC performed to ensure field data matched CIWQS data?	<input type="checkbox"/> Yes <input type="checkbox"/> No
RECOMMENDED CHANGES	
<input type="checkbox"/> N/A	
ATTENDEES	
FACILITATED BY	
	Date:

OFFICE USE ONLY

Incident Report #		Prepared By	
Spill/Backup Information			
Cause			
Summary of Historical Spills/Backups/Service Calls/Other Problems			
Date	Cause	Date Last Cleaned	Crew
Records Reviewed By:		Record Review Date:	
Summary of CCTV Information			
CCTV Inspection Date		File Name/Number	
CCTV File Reviewed By		CCTV Review Date	
Observations			

Go to Page 2

Recommendations					
✓	Type	Specific Actions	Who is Responsible?	Completion Deadline	Who Will Verify Completion?
	No Changes or Repairs Required	n/a	n/a	n/a	n/a
	Added sewer to preventive maintenance program				
	Adjusted schedule/method of preventive maintenance				
	Enforcement action against FOG source				
	Plan rehabilitation or replacement of sewer				
	Repaired facilities or replaced defect				
	Change(s) to Spill Response Procedures				
	Training				
	Misc.				
Comments/Notes:					
Reviewed By:				Review Date:	