

A G E N D A
SAN RAFAEL SANITATION DISTRICT
BOARD OF DIRECTORS
FRIDAY – JUNE 16, 2023 - 9:00 A.M.
SAN RAFAEL CITY HALL
1400 FIFTH AVENUE – CONFERENCE ROOM CD3
SAN RAFAEL, CALIFORNIA 94901

Members of the Public may also participate in Open Session through the following:

Zoom link: <https://cityofsanrafael-org.zoom.us/j/83792027349>

Or by Phone: 1 669 444 9171 US

Meeting ID: 838 5172 2631

Public comments for this meeting can be submitted via email to the District Clerk at Kathryn.Nelson@cityofsanrafael.org. The public comment period opens when the agenda is posted online and will close two hours prior to the start of the meeting. Include your name and the item you would like to provide a written comment on.

To provide comments during the meeting, please use the “raise hand” feature in the Zoom Meeting and the host will notify and unmute you when it is your turn to speak.

Members of the public may speak on Agenda items.

1. ROLL CALL

2. OPEN PERIOD

Opportunity for the public to address the Board on items not on the agenda. (Presentations are generally limited to 2 minutes.)

3. CONSENT CALENDAR

- a. Minutes of the Special Meeting – May 26, 2023.
- b. Payments – May 2023.
- c. Adopt resolution establishing the FY 2023-24 Appropriations Limit on tax proceeds (Proposition 4).
- d. Adopt resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement for design and construction related services for the 2023 Sewer Improvements-Variou Locations Project.
- e. Adopt resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement for pipe assessment related services.

4. OTHER AGENDA ITEMS

- a. Review draft budget for Fiscal Years 2023-24 and 2024-25.
- b. Adopt Resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with Park Engineering for Engineering and Inspection related services.
- c. Approve the updated Sanitary Sewer System Management Plan.

5. INFORMATIONAL ITEMS

6. DIRECTOR REPORTS/REQUESTS FOR FUTURE AGENDA ITEMS

7. CLOSED SESSION

- a. CONFERENCE WITH LABOR NEGOTIATORS
California Government Code Section 54957.6
Unrepresented Employee: Senior Civil Engineer

8. ADJOURNMENT

The next scheduled meeting is July 21, 2023.

SAN RAFAEL SANITATION DISTRICT
Minutes of the Special Meeting
May 26, 2023

Special Meeting

In Person

The meeting was called to order at 9:08 A.M. by Chair Kate.

Attendance Kate Colin, Chair

Board: Maribeth Bushey, Secretary/Director

Absent: Katie Rice, Director

Attendance Doris Toy, District Manager/District Engineer

Staff: Kris Ozaki, Operations and Maintenance Manager

Kathryn Nelson, Administrative Analyst

Attendance Dean DiGiovanni, CMSA Commissioner for SRSD

Others:

1. ROLL CALL

A roll call was taken at 9:08 A.M., Director Bushey and Chair Kate were present, Director Rice was not present. There being a quorum, the meeting began.

2. OPEN PERIOD

No one was present to address the Board for open period.

3. CONSENT CALENDAR

a. Approve Minutes of Meeting April 21, 2023

Correction for 6b - change format to discussion format instead of adoption format and approve Minutes with said changes.

b. Payments – April 2023.

c. Adopt Resolution #23-1266 A Resolution Authorizing The District Manager/District Engineer To Execute A Professional Services Agreement For Design And Construction Related Services For The 2023 Sewer Rehabilitation Project Not To Exceed \$449,676.

d. Adopt Resolution #23-1267 A Resolution Authorizing The District Manager/District Engineer To Execute A Professional Services Agreement For Design And Construction Related Services For The Bret Harte Easement Retaining Wall Improvement Project Not To Exceed \$97,393.

MOTION by Director Bushey to adopt the **CONSENT CALENDAR**, seconded by Chair Kate.

AYES: Director Bushey, Chair Kate

NOES: None

ABSENT: None *Motion Carried*

4. INFORMATIONAL ITEMS

- a. Report on CMSA National Pollutant Discharge Elimination System (NPDES) Permit hearing on May 10, 2023, at San Francisco Bay Regional Water Quality Control Board Meeting. Discussion on San Rafael Sanitation District should not be included on the NPDES permit. The District, Ross Valley Sanitary District and SD2 will file an appeal.

5. DIRECTOR REPORTS/REQUESTS FOR FUTURE AGENDA ITEMS

Requests for Meeting items; FY 2023-24 and FY 2024-25 Budget, which will include 3-year Capital Improvement Plan, and a Staff Update

6. ADJOURNMENT

Meeting adjourned at 9:22 AM

The next scheduled meeting is June 16, 2023.

Respectfully submitted,

Maribeth Bushey, Recording Secretary

ATTEST THIS 26th DAY OF MAY 2023

Kate Colin, Chair

SAN RAFAEL SANITATION DISTRICT

PAYMENT SUMMARY

May 1, 2023 - May 31, 2023

Vendor/Payee	Memo	Class	Account	Amount
ARAMARK UNIFORM SERVICES	Uniforms - weekly service ending 4/19/23	200	2021 · Uniforms	232.01
ARAMARK UNIFORM SERVICES	Uniforms - weekly service ending 4/26/23	200	2021 · Uniforms	221.06
ARAMARK UNIFORM SERVICES	Uniforms - weekly service ending 5/03/23	200	2021 · Uniforms	222.21
ARAMARK UNIFORM SERVICES	Uniforms - weekly service ending 5/10/23	200	2021 · Uniforms	221.06
ARAMARK UNIFORM SERVICES	Uniforms - weekly service ending 5/17/23	200	2021 · Uniforms	222.21
AT&T *1523	Telephone Service - land lines for pump stations and dialers from 4/02/23-5/01/23	100	2534 · Telephone service	557.54
AT&T MOBILITY #1362	Telephone Service - cell phone service from 3/04/23-4/03/23	100	2534 · Telephone service	607.29
AT&T MOBILITY #1362	Telephone Service - cell phone service from 4/04/23-5/03/23	100	2534 · Telephone service	607.49
BWS DISTRIBUTORS	Safety - earplugs, nitrile gloves, and workman gloves	200	2365 · Safety equipment and supplies	359.13
BWS DISTRIBUTORS	Safety - gloves	200	2365 · Safety equipment and supplies	169.58
CALAMP WIRELESS NETWORKS CORPORATION	Vehicles - vehicle GPS	200	2083 · Parts and repairs vehicles	10.00
CALAMP WIRELESS NETWORKS CORPORATION	Vehicles - vehicles GPS	200	2083 · Parts and repairs vehicles	232.35
CALCON SYSTEMS, INC.	Pump Stations - 2023 annual electrical preventative maintenance for pump stations	200	2359 · Maint- pump sta's & force mains	27,500.00
CALIFORNIA CAD SOLUTIONS INC(CALCAD)	Facilities Mapping Services - miscellaneous projects from March to April 2023	100	4188 · Facilities mapping services	1,275.00
CENTRAL MARIN SANITATION AGENCY	CMSA Connection Fees - 9 unique addresses	200	221000 · Connection fees payable cmsa	295,626.49
CENTRAL MARIN SANITATION AGENCY	FOG Program - FOG Control Program Management from 1/01/23-3/31/23	100	4300 · FOG Program	12,239.34
CITY OF SAN RAFAEL	Third Street (Fourth Street to Mary) - construction mgmt. and inspection services, progress payments #13-16	300	4340 · Third St (4th to Mary) (80)	823,167.52
COLIN, KATE	Director's Fees - Kate Colin on 2/03/23	100	2282 · Director's fees	100.00
COLIN, KATE	Director's Fees - Kate Colin on 3/17/23	100	2282 · Director's fees	100.00
COLIN, KATE	Director's Fees - Kate Colin on 4/21/23	100	2282 · Director's fees	100.00
COUNTY OF MARIN	Director's Fees - Katie Rice on 2/03/23	100	2282 · Director's fees	100.00
COUNTY OF MARIN	Director's Fees - Katie Rice on 3/17/23	100	2282 · Director's fees	100.00
COUNTY OF MARIN	Director's Fees - Katie Rice on 4/21/23	100	2282 · Director's fees	100.00
CRANETECH INC	Pump Stations - crane inspection and certification	200	2359 · Maint- pump sta's & force mains	1,695.00
CSW/STUBER-STROEH ENGR GROUP INC.	Third Street (Fourth Street to Mary) - design support during construction through 4/02/23	300	4340 · Third St (4th to Mary) (80)	410.00
DIEGO TRUCK REPAIR, INC.	Vehicles - vehicle repairs for vactor truck on 3/13/23	200	2083 · Parts and repairs vehicles	874.52
ENVIRONMENTAL PRODUCTS & ACCESS., LLC	Collection System - vactor hose	200	2360 · O&M - collection systems	340.50
EVOQUA WATER TECHNOLOGIES, LLC	Odor Control - service and inspections of chemical tanks at pump stations from 4/01/23-4/30/23	200	2106 · Odor control chemicals	1,899.86
EXPRESS SERVICES INC.	Consulting Services - temporary administrative assistant for the week ending on 4/16/23	100	2325 · Consulting services	1,495.88
EXPRESS SERVICES INC.	Consulting Services - temporary administrative assistant for the week ending on 4/23/23	100	2325 · Consulting services	1,495.88
EXPRESS SERVICES INC.	Consulting Services - temporary administrative assistant for the week ending on 4/30/23	100	2325 · Consulting services	1,495.88
EXPRESS SERVICES INC.	Consulting Services - temporary administrative assistant for the week ending on 5/07/23	100	2325 · Consulting services	1,196.70
GRAINGER	Pump Stations - lube for crane truck cable	200	2359 · Maint- pump sta's & force mains	308.09
JACKSON'S HARDWARE	Pump Stations - concrete mixing tub	200	2359 · Maint- pump sta's & force mains	30.58
JACKSON'S HARDWARE	Pump Stations - cooling jacket repair at Loch Lomond Pump Station	200	2359 · Maint- pump sta's & force mains	34.91
JRL Machine & Driveline, Inc	Pump Stations - West Railroad Pump Station rebuild drive shaft WRR	200	2359 · Maint- pump sta's & force mains	311.66
KIMLEY-HORN AND ASSOCIATES, INC.	2021 Sewer Pipe Repair and Replacement Project - preliminary design services rendered through 3/31/23	300	4349 · 2021 Sewr Pipe Repair/Repl (80)	5,817.50
KIMLEY-HORN AND ASSOCIATES, INC.	Third Street (Fourth Street to Mary) - design and construction related services through 4/30/23	300	4340 · Third St (4th to Mary) (80)	3,387.50
MAHER ACCOUNTANCY	Accounting Services - May 2023	100	2717 · Accounting services	3,600.00
MARIBETH BUSHEY	Director's Fees - Maribeth Bushey on 2/03/23	100	2282 · Director's fees	100.00
MARIBETH BUSHEY	Director's Fees - Maribeth Bushey on 3/17/23	100	2282 · Director's fees	100.00

MARIBETH BUSHEY	Director's Fees - Maribeth Bushey on 4/21/23	100	2282	Director's fees	100.00
MARIN COUNTY TAX COLLECTOR	County Counsel - third quarter Jan/Feb/Mar FY 2022/23	100	2713	Legal services	3,538.25
MARIN MUNICIPAL WATER DIS	Water - 44 Lagoon Road from 2/16/23-4/19/23	200	2536	Water utility costs	86.63
MARIN MUNICIPAL WATER DIS	Water - 1271 Andersen Drive from 2/10/23-4/12/23	200	2536	Water utility costs	86.63
MARIN MUNICIPAL WATER DIS	Water - 3106 Kerner Boulevard from 2/15/23-4/18/23	200	2536	Water utility costs	86.63
MARIN MUNICIPAL WATER DIS	Water - Andersen Drive from 2/10/23-4/12/23	200	2536	Water utility costs	86.63
MARIN MUNICIPAL WATER DIS	Water - Castro Avenue from 2/14/23-4/17/23	200	2536	Water utility costs	190.25
MARIN MUNICIPAL WATER DIS	Water - Catalina Boulevard from 2/14/23-4/17/23	200	2536	Water utility costs	86.63
MARIN MUNICIPAL WATER DIS	Water - E Francisco Boulevard from 2/14/23-4/17/23	200	2536	Water utility costs	86.63
MARIN MUNICIPAL WATER DIS	Water - E Francisco Boulevard from 2/15/23-4/18/23	200	2536	Water utility costs	86.63
MARIN MUNICIPAL WATER DIS	Water - Montecito Road from 2/15/23-4/18/23	200	2536	Water utility costs	86.63
MARIN MUNICIPAL WATER DIS	Water - North San Pedro Road from 2/16/23-4/19/23	200	2536	Water utility costs	86.63
MARIN MUNICIPAL WATER DIS	Water - Peacock Drive from 2/16/23-4/19/23	200	2536	Water utility costs	95.87
MARIN MUNICIPAL WATER DIS	Water - Point San Pedro Road from 2/15/23-4/18/23	200	2536	Water utility costs	86.63
MARIN MUNICIPAL WATER DIS	Water - Riviera Drive LT28 Sewer Pump from 2/16/23-4/19/23	200	2536	Water utility costs	86.63
MARIN MUNICIPAL WATER DIS	Water - Simms Street from 2/10/23-4/12/23	200	2536	Water utility costs	86.63
MARIN MUNICIPAL WATER DIS	Water - Woodland Avenue from 2/10/23-4/12/23	200	2536	Water utility costs	91.25
McMASTER-CARR	Pump Stations - Flygt pump parts	200	2359	Maint- pump sta's & force mains	125.23
MUNICIPAL RESOURCE GROUP, LLC	Consulting Services - compensation study lite services from 3/12/23-4/26/23	100	2325	Consulting services	11,981.25
MUNICIPAL RESOURCE GROUP, LLC	Consulting Services - workplan implementation services through 3/31/23	100	2325	Consulting services	1,012.50
NUTE ENGINEERING INC	Bayside Acres Beach Sewer Improvements Project - engineering services from 4/01/23-4/30/23	300	4338	Rehab Beach Swr Baysid PhABC-	19,472.50
PACE SUPPLY	Isolation Valve Replacement Project - plug valves	300	4345	Isolation Valve Replacement (10	21,569.65
PARK ENGINEERING, INC	Bayside Acres Beach Sewer Improvements Project - repair and replacement project services through 4/30/23	300	4338	Rehab Beach Swr Baysid PhABC-	20,179.43
PARK ENGINEERING, INC	Consulting Services - permit inspection services through 4/30/23	100	2325	Consulting services	1,536.15
PG&E a/c 2480926202-5	Power - electric service for pump stations from 4/10/23-5/10/23	200	2535	Electric utility costs	19,917.94
RAUCH COMMUNICATIONS CONSULTANTS INC	Bayside Acres Beach Sewer Improvements Project - public relations related services through 3/31/23	300	4338	Rehab Beach Swr Baysid PhABC-	112.50
RAUCH COMMUNICATIONS CONSULTANTS INC	Bayside Acres Beach Sewer Improvements Project - public relations related services through 4/30/23	300	4338	Rehab Beach Swr Baysid PhABC-	2,250.00
SCHAAF & WHEELER, INC	2020 Sewer Pipe Repair and Replacement Project - design and construction related services through 3/31/23	300	4342	2020-21 Sewer Improvement (80)	4,620.00
SCHAAF & WHEELER, INC	2020 Sewer Pipe Repair and Replacement Project - professional engineering services through 4/30/23	300	4342	2020-21 Sewer Improvement (80)	2,467.50
TIFCO INDUSTRIES	Pump Stations - glass cleaner and electrical parts	200	2359	Maint- pump sta's & force mains	151.46
TIFCO INDUSTRIES	Pump Stations - SAZ all brush attachment	200	2359	Maint- pump sta's & force mains	56.59
US BANK CORPORATE PAYMENT	Miscellaneous Expenses - staff meeting	100	2389	Miscellaneous expenses	138.66
US BANK CORPORATE PAYMENT	Office Supplies - corded mouse and cord	100	2133	Office & shop supplies	9.72
US BANK CORPORATE PAYMENT	Pump Stations - anodes for reducing corrosion on pumps exposed to sea water	200	2359	Maint- pump sta's & force mains	180.10
US BANK CORPORATE PAYMENT	Pump Stations - eyewash inspection tags	200	2359	Maint- pump sta's & force mains	123.86
VERIZON WIRELESS(242395655)	Telephone Service - private IP addresses for the San Pedro and Peacock Pump Stations from 3/18/23-4/17/23	100	2534	Telephone service	129.25
VERIZON WIRELESS(242395655)	Telephone Service - private IP addresses for the San Pedro and Peacock Pump Stations from 4/18/23-5/17/23	100	2534	Telephone service	129.21
VERIZON WIRELESS(372347623)	Telephone Service - wireless service for laptops from 3/21/23-4/20/23	100	2534	Telephone service	426.11
W. R. FORDE ASSOCIATES (INC)	Bayside Acres Beach Sewer Improvements Project - final progress payment #5	300	4338	Rehab Beach Swr Baysid PhABC-	40,476.75
W. R. FORDE ASSOCIATES (INC)	Bayside Acres Beach Sewer Improvements Project - retention release	300	4338	Rehab Beach Swr Baysid PhABC-	60,078.30
WATER COMPONENTS & BLDG SUPPLY	Collection System - concrete	200	2360	O&M - collection systems	165.24
WATER COMPONENTS & BLDG SUPPLY	Collection System - truck parts	200	2360	O&M - collection systems	6.34
WECO INDUSTRIES LLC	Collection System - manhole hooks	200	2360	O&M - collection systems	1,170.07
WECO INDUSTRIES LLC	Collection System - rod for power rod truck	200	2360	O&M - collection systems	6,548.38

WECO INDUSTRIES LLC	Collection System - rodder cleaning tools	200	2360 · O&M - collection systems	3,360.57
WECO INDUSTRIES LLC	Collection System - vactor nozzle cleaning tool	200	2360 · O&M - collection systems	5,834.92
WOODLAND CTR AUTO SUPPLY	Pump Stations - antifreeze for generators	200	2359 · Maint- pump sta's & force mains	88.43
				1,418,038.53

SAN RAFAEL SANITATION DISTRICT
Agenda Item No. 3.c.

DATE: June 16, 2022

TO: San Rafael Sanitation District Board of Directors

FROM: Doris Toy, District Manager/District Engineer

SUBJECT: **2023-24 Appropriations Limit (Proposition 4)**

Recommendation:

Adopt resolution establishing the Fiscal Year 2023-24 Appropriations Limit.

Background/Summary:

Article XIII B of the California Constitution specifies that appropriations made by State and local governments may increase annually by a factor comprised of the change in population combined with either the change in California per capita personal income or of the change in the local assessment roll due to local non-residential construction.

The Department of Finance is mandated to provide the population and California per capita personal income change data for local jurisdictions to calculate their appropriations limits. District staff has been provided with the new price and population factors for setting the Fiscal Year 2023-24 Appropriations Limit. Using the factors provided, the calculated maximum limit applicable to the Fiscal Year 2023-24 appropriations of tax proceeds is \$1,502,740.

The District receives proceeds of taxes from property taxes and ERAF revenues that may be excluded from the limit as qualified capital outlay under the rules for appropriations subject to limitation. For the Fiscal Year 2023-24, the District anticipates its proceeds of taxes to be excluded from the limit in their entirety or excluded below the limit and the amount subject to refund to be \$0. The calculation of actual proceeds of taxes received and the extent of proceeds of taxes excluded from the limit is included as part of the annual audit.

Attachments: Resolution
2022-23 Appropriation Limit Calculation
Department of Finance Price and Population Information

SAN RAFAEL SANITATION DISTRICT

RESOLUTION NO. 23-1268

**A RESOLUTION OF THE BOARD OF DIRECTORS OF
THE SAN RAFAEL SANITATION DISTRICT
ESTABLISHING THE 2023-24 APPROPRIATIONS LIMIT
(PROPOSITION 4)**

BE IT RESOLVED by the Board of Directors of the San Rafael Sanitation District, County of Marin, State of California, that the calculated maximum limit applicable to the 2023-24 appropriation of tax proceeds is \$1,502,740 in accordance with Article XIII B of the Constitution of the State of California.

PASSED AND ADOPTED at a regular meeting of the San Rafael Sanitation District Board of Directors on the 16th day of June 2023 by the following vote:

AYES:

NOES:

ABSENT/ABSTAIN:

SAN RAFAEL SANITATION DISTRICT

Kate Colin, Chair

ATTEST:

Maribeth Bushey, Secretary

SAN RAFAEL SANITATION DISTRICT
2023-24 APPROPRIATION LIMIT CALCULATION

Per Capita Personal Income Change For FY 2023-24			4.44%
<u>PCPI Ratio:</u>	$\frac{4.44+100}{100}$		<u>1.0444</u>
Population Change For 1/1/22 to 1/1/23			
San Rafael	(0.92)		
Unincorporated	(1.21)		
Population Change Weighted Average:	(a)	(b)	(a) x (b)
San Rafael	(0.92)	0.90	(0.8280)
Unincorporated	(1.21)	0.10	(0.1210)
		<u>1.00</u>	<u>(0.9490)</u>
<u>Population Ratio:</u>	$\frac{(0.9490)+100}{100}$		<u>0.9905</u>
	(a)	(b)	(a) x (b)
Factor for FY 2023-24	1.0444	0.9905	1.0345
FY 2022-23 Appropriation Limit			1,452,640
	(a)	(b)	(a) x (b)
Calculated FY 2023-24 Appropriation Limit	1.0345	1,452,640	<u>1,502,740</u>

Dear Fiscal Officer:

Subject: Price Factor and Population Information

Appropriations Limit

California Revenue and Taxation Code section 2227 requires the Department of Finance (Finance) to transmit an estimate of the percentage change in population to local governments. Each local jurisdiction must use their percentage change in population factor for January 1, 2023, in conjunction with a change in the cost of living, or price factor, to calculate their appropriations limit for fiscal year 2023-24. Attachment A provides the change in California's per capita personal income and an example for utilizing the price factor and population percentage change factor to calculate the 2023-24 appropriations limit. Attachment B provides the city and unincorporated county population percentage change. Attachment C provides the population percentage change for counties and their summed incorporated areas. The population percentage change data excludes federal and state institutionalized populations and military populations.

Population Percent Change for Special Districts

Some special districts must establish an annual appropriations limit. California Revenue and Taxation Code section 2228 provides additional information regarding the appropriations limit. Article XIII B, section 9(C) of the California Constitution exempts certain special districts from the appropriations limit calculation mandate. The code section and the California Constitution can be accessed at the following website: <http://leginfo.legislature.ca.gov/faces/codes.xhtml>.

Special districts required by law to calculate their appropriations limit must present the calculation as part of their annual audit. Any questions special districts have on this requirement should be directed to their county, district legal counsel, or the law itself. No state agency reviews the local appropriations limits.

Population Certification

The population certification program applies only to cities and counties. California Revenue and Taxation Code section 11005.6 mandates Finance to automatically certify any population estimate that exceeds the current certified population with the State Controller's Office. **Finance will certify the higher estimate to the State Controller by June 1, 2023.**

Please Note: The prior year's city population estimates may be revised. The per capita personal income change is based on historical data.

If you have any questions regarding this data, please contact the Demographic Research Unit at (916) 323-4086.

JOE SPEPHENSHAW
Director
By:

Erika Li
Chief Deputy Director

Attachment

- A. **Price Factor:** Article XIII B specifies that local jurisdictions select their cost of living factor to compute their appropriation limit by a vote of their governing body. The cost of living factor provided here is per capita personal income. If the percentage change in per capita personal income is selected, the percentage change to be used in setting the fiscal year 2023-24 appropriation limit is:

Per Capita Personal Income

Fiscal Year (FY)	Percentage change over prior year
2023-24	4.44

- B. Following is an example using sample population change and the change in California per capita personal income as growth factors in computing a 2023-24 appropriation limit.

2023-24:

Per Capita Cost of Living Change = 4.44 percent
Population Change = -0.35 percent

Per Capita Cost of Living converted to a ratio: $\frac{4.44 + 100}{100} = 1.0444$

Population converted to a ratio: $\frac{-0.35 + 100}{100} = 0.9965$

Calculation of factor for FY 2023-24: $1.0444 \times 0.9965 = 1.0407$

Fiscal Year 2023-24

Attachment B
Annual Percent Change in Population Minus Exclusions*
January 1, 2022 to January 1, 2023 and Total Population, January 1, 2023

County City	<u>Percent Change</u>	<u>--- Population Minus Exclusions ---</u>		<u>Total</u>
	2022-2023	1-1-22	1-1-23	1-1-2023
Marin				
Belvedere	-1.59	2,078	2,045	2,045
Corte Madera	-0.82	9,967	9,885	9,885
Fairfax	-0.76	7,410	7,354	7,354
Larkspur	-1.23	12,728	12,571	12,571
Mill Valley	-1.11	13,817	13,664	13,664
Novato	-1.05	51,648	51,104	51,392
Ross	-0.57	2,280	2,267	2,267
San Anselmo	-0.88	12,515	12,405	12,405
San Rafael	-0.92	60,237	59,681	59,681
Sausalito	-1.29	6,955	6,865	6,865
Tiburon	-1.18	8,903	8,798	8,798
Unincorporated	-1.21	63,474	62,709	66,032
County Total	-1.06	252,012	249,348	252,959

*Exclusions include residents on federal military installations and group quarters residents in state mental institutions, state and federal correctional institutions and veteran homes.

SAN RAFAEL SANITATION DISTRICT
Agenda Item No. 3.d.

DATE: June 16, 2023

TO: Board of Directors, San Rafael Sanitation District

FROM: Doris Toy, District Manager/District Engineer

SUBJECT: Adopt Resolution Authorizing the District Manager/District Engineer to Execute a Professional Services Agreement with Kimley-Horn and Associates, Inc., for Design and Construction Related Services for the 2023 Sewer Improvements-Variou Locations Project

RECOMMENDATION:

Adopt resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with Kimley-Horn and Associates, Inc., for design and construction related services for the 2023 Sewer Improvements-Variou Locations Project.

BACKGROUND:

On October 7, 2021, the District entered a Professional Services Agreement with Kimley-Horn and Associates, Inc. to perform a preliminary engineering study, under the project name, "2021 Sewer Repairs Predesign Study." The study was based on the following list of pipes, developed by our sewer maintenance staff, that require immediate attention due to poor access or pipe condition, e.g., offset joints, broken pipe, flat grade, and sags that can collect fats, oils, and grease:

1. Madrona Street, between Greenwood Avenue to Clorinda Avenue
2. Billou Street, south of Bret Avenue
3. Summit Avenue, south of Marina Way
4. Grove Street, south of San Rafael Avenue
5. Edgewood Way, easement area from Valley View Avenue to Edgewood Way
6. Orange Tree easement, north of Sunset Way
7. McCoy Road, southeast of Bungalow Avenue
8. Prospect Drive, MH 1630 to MH 1629
9. Fourth Street & C Street
10. Bayo Vista Way and East Crescent Drive
11. Marin Academy, downstream to Fifth Avenue and Fourth Street
12. Terradillo Avenue Easement
13. Fourth Street and B Street

In April 2022, Kimley-Horn submitted a draft technical memo with cost estimates and exhibits, including repair recommendations. Then in March 2023, staff met with Kimley-Horn and

reviewed its memo and request that they finalize their report and cost estimates. Their cost estimate was approximately \$1.9 million for the entire project (design and construction).

ANALYSIS:

In the final technical report, staff has determined that the pipe at the Marin Academy location is no longer a concern. When the study began, maintenance staff kept finding rock debris in the pipe; however, it is no longer the case. Marin Academy has been performing construction on their campus for several years; and now that it has been completed, maintenance has not been discovering any rock debris. Therefore, the Marin Academy line has been removed from the project. There are now a dozen pipe locations from the above list that require sewer improvements.

Staff has requested that Kimley-Horn provide a proposal to complete the design and develop contract plans and specifications for bidding; and to provide engineering services during the construction phase. The scope of work is described in detail in Kimley-Horn’s proposal, which is attached as Exhibit “A”.

Kimley-Horn proposes to perform the engineering related services for design and construction on a time-and-materials basis not to exceed \$198,508.

FISCAL IMPACT:

The engineering design and construction related services for the 2023 Sewer Improvements-Various Locations Project in the amount of \$198,508 will be funded from the 80-Year Life Cycle Sewer Replacement Program for Fiscal Year 2023-24.

ACTION REQUIRED:

Staff recommends that the Board adopt the resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with Kimley-Horn and Associates, Inc., for engineering design and construction related services for the 2023 Sewer Improvements-Various Locations Project, not to exceed \$198,508.

Attachment: Resolution
Professional Services Agreement
Proposal from Consultant, Exhibit “A”

SAN RAFAEL SANITATION DISTRICT

RESOLUTION NO. 23-1269

A RESOLUTION AUTHORIZING THE DISTRICT MANAGER/DISTRICT ENGINEER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH KIMLEY-HORN AND ASSOCIATIONS INC. FOR DESIGN AND CONSTRUCTION RELATED SERVICES FOR THE 2023 SEWER IMPROVEMENTS-VARIOUS LOCATIONS PROJECT NOT TO EXCEED \$198,508.00

THE BOARD OF DIRECTORS OF THE SAN RAFAEL SANITATION DISTRICT, COUNTY OF MARIN, hereby resolves as follows:

The District Manager/District Engineer is hereby authorized to execute, on behalf of the San Rafael Sanitation District, a Professional Services Agreement with Kimley Horn and Associates, Inc., for design and construction related services for the 2023 Sewer Improvements-Variou Locations Project not to exceed \$198,508.00, as specified by the District, a copy of which is hereby attached and by this reference made a part hereof.

PASSED AND ADOPTED at a Regular Meeting of the San Rafael Sanitation District Board of Directors held on the 16th day of June 2023, by the following vote, to wit:

AYES:

NOES:

ABSENT/ABSTAIN:

SAN RAFAEL SANITATION DISTRICT

Kate Collins, Chair

ATTEST:

Maribeth Bushey, Acting Secretary

**PROFESSIONAL SERVICES AGREEMENT
AUTHORIZING THE DISTRICT MANAGER/DISTRICT ENGINEER
TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH
KIMLEY-HORN AND ASSOCIATIONS INC. FOR DESIGN AND
CONSTRUCTION RELATED SERVICES FOR THE
2023 SEWER IMPROVEMENTS-VARIOUS LOCATIONS
PROJECT NOT TO EXCEED \$198,508.00**

This Agreement is made and entered into this 16th day of June 2023 by and between the SAN RAFAEL SANITATION DISTRICT (hereinafter "DISTRICT"), and KIMLEY-HORN AND ASSOCIATES, INC. (hereinafter "CONSULTANT").

RECITALS

WHEREAS, the DISTRICT has selected *CONSULTANT* to perform the required engineering related services for the "**2023 Sewer Improvements-Variou Locations Project**" (hereinafter PROJECT"); and

WHEREAS, the CONSULTANT has offered to render certain specialized professional services in connection with this Project.

AGREEMENT

NOW, THEREFORE, the parties hereby agree as follows:

1. SCOPE OF SERVICES

DISTRICT and CONSULTANT have outlined the scope of services to be provided, and related expenses as described in Exhibit "A" attached and incorporated herein.

2. PROJECT COORDINATION

A. DISTRICT. The District Manager/District Engineer shall be the representative of the DISTRICT for all purposes under this Agreement. The District Manager/District Engineer is hereby designated as the PROJECT MANAGER for the DISTRICT and said PROJECT MANAGER shall supervise all aspects of the progress and execution of this Agreement.

B. CONSULTANT. CONSULTANT shall assign a single PROJECT DIRECTOR to have overall responsibility for the progress and execution of this Agreement for CONSULTANT. SAM McWHORTER is hereby designated as the PROJECT DIRECTOR for CONSULTANT. Should circumstances or conditions subsequent to the execution of this Agreement require a substitute PROJECT DIRECTOR for any reason, the CONSULTANT shall notify the DISTRICT within ten (10) business days of the substitution.

3. DUTIES OF CONSULTANT

CONSULTANT shall perform the duties and/or provide services as follows; the CONSULTANT agrees to provide professional services as an Engineering Consultant to prepare work outlined in the Proposal from CONSULTANT dated June 14, 2023, marked Exhibit "A", attached hereto, and incorporated herein by this reference. The CONSULTANT agrees to be available and perform the work specified in this agreement in the time frame as specified and as shown in Exhibit "A".

4. DUTIES OF THE DISTRICT

DISTRICT shall perform the duties as described and incorporated herein.

5. COMPENSATION

For the full performance of the services described herein by CONSULTANT, DISTRICT shall pay CONSULTANT on a time-and-materials basis for services rendered in accordance with the rates shown on the current fee schedule as described in Exhibit "A" attached and incorporated herein. The total payment will not exceed \$198,508.00.

Payment will be made monthly upon receipt by PROJECT MANAGER of itemized invoices submitted by CONSULTANT.

6. TERM OF AGREEMENT

The term of this Agreement shall be from the date of execution until the Project is complete.

7. TERMINATION

A. Discretionary. Either party may terminate this Agreement without cause upon thirty (30) days written notice mailed or personally delivered to the other party.

B. Cause. Either party may terminate this Agreement for cause upon ten (10) days written notice mailed or personally delivered to the other party, and the notified party's failure to cure or correct the cause of the termination notice, to the reasonable satisfaction of the party giving such notice, within thirty (30) days of the receipt of said notice.

C. Effect of Termination. Upon receipt of notice of termination, neither party shall incur additional obligations under any provision of this Agreement without the prior written consent of the other. However, CONSULTANT'S duties and obligation in Sections 11 and 12 hereunder shall survive the expiration or termination of this Agreement.

D. Return of Documents. Upon termination, any and all DISTRICT documents or materials provided to CONSULTANT and any and all of CONSULTANT'S documents and materials prepared for or relating to the performance of its duties under this Agreement, shall be delivered to DISTRICT as soon as possible, but not later than thirty (30) days after termination.

8. OWNERSHIP OF DOCUMENTS

The written documents and materials prepared by the CONSULTANT in connection with the performance of its duties under this Agreement shall be the sole property of DISTRICT. DISTRICT may use said property for any purpose, including projects not contemplated by this Agreement. Any modifications made by Client to any of the Consultant's documents, or any use, partial use or reuse of the documents, for purposes other than identified in this Agreement, without written authorization or adaptation by the Consultant will be at the District's sole risk and without liability to the Consultant, and the District shall indemnify, defend and hold the Consultant harmless from all claims, damages, losses and expenses, including but not limited to attorney's fees, resulting therefrom.

9. INSPECTION AND AUDIT

Upon reasonable notice, CONSULTANT shall make available to DISTRICT, or its agent, for inspection and audit, all documents and materials maintained by CONSULTANT in connection with its performance of its duties under this Agreement. CONSULTANT shall fully cooperate with DISTRICT or its agent in any such audit or inspection.

10. ASSIGNABILITY

The parties agree that they shall not assign or transfer any interest in this Agreement nor the performance of any of their respective obligations hereunder, without the prior written consent of the other party, and any attempt to so assign this Agreement or any rights, duties or obligations arising hereunder shall be void and of no effect.

11. INSURANCE

A. During the term of this Agreement, CONSULTANT shall maintain, at no expense to DISTRICT, the following insurance policies:

1. A commercial general liability insurance policy in the minimum amount of one million (\$1,000,000) dollars per occurrence and \$2,000,000 aggregate for death, bodily injury, personal injury, or property damage;

2. An automobile liability (owned, non-owned, and hired vehicles) insurance policy in the minimum amount of one million (\$1,000,000) dollars per occurrence;

3. If any licensed professional performs any of the services required to be performed under this Agreement, a professional liability insurance policy in the minimum amount of one million (\$1,000,000) dollars to cover any claims arising out of the CONSULTANT's performance of services under this Agreement.

B. The insurance coverage required of the CONSULTANT by Section 11. A., shall also meet the following requirements:

1. The insurance shall be primary with respect to any insurance or coverage maintained by DISTRICT and shall not call upon DISTRICT's insurance or coverage for any contribution;

2. Except for professional liability insurance, the insurance policies shall be endorsed for contractual liability and personal injury;

3. Except for professional liability insurance, the insurance policies shall be specifically endorsed to include the DISTRICT, its officers, agents, and employees as additionally named insureds under the policies;

4. CONSULTANT shall provide to PROJECT MANAGER, (a) Certificates of Insurance evidencing the insurance coverage required herein, and (b) specific endorsements naming DISTRICT, its officers, agents and employees, as additional insureds under the policies;

5. The insurance policies shall provide that the insurance carrier shall not cancel or terminate said insurance policies except upon thirty (30) days written notice to DISTRICT's PROJECT MANAGER;

6. If the insurance is written on a Claims Made Form, then, following termination of this Agreement, said insurance coverage shall survive for a period of not less than five years as long as the insurance is reasonably affordable and available;

7. The insurance policies shall provide for a retroactive date of placement coinciding with the effective date of this Agreement;

8. The insurance shall be approved as to form and sufficiency by PROJECT MANAGER and the County Counsel.

C. If it employs any person, CONSULTANT shall maintain Workers' Compensation and Employer's Liability Insurance, as required by the State Labor Code and other applicable laws and regulations, and as necessary to protect both CONSULTANT and DISTRICT against all liability for injuries to CONSULTANT's officers and employees.

D. Any deductibles or self-insured retentions exceeding \$20,000 in CONSULTANT's insurance policies must be declared to and approved by the PROJECT MANAGER and the County Counsel. At DISTRICT's option, the deductibles or self-insured retentions with respect to DISTRICT shall be reduced or eliminated to DISTRICT's satisfaction, or CONSULTANT shall procure a bond guaranteeing payment of losses and related investigations, claims administration, attorney's fees, and defense expenses.

12. INDEMNIFICATION

CONSULTANT shall, to the fullest extent authorized by law including CA Civil Code 2782.8, shall indemnify, release, and hold harmless DISTRICT, its officers, and employees against

any claim, demand, suit, judgment, loss, liability, or expense of any kind, including attorney's fees, to the extent arising out of or resulting in any way from any negligent acts or omissions of CONSULTANT or CONSULTANT's officers, agents, and employees in the performance of their duties and obligations under this Agreement.

13. NONDISCRIMINATION

CONSULTANT shall not discriminate, in any way, against any person on the basis of age, sex, race, color, religion, ancestry, national origin or disability in connection with or related to the performance of its duties and obligations under this Agreement.

14. COMPLIANCE WITH ALL LAWS

CONSULTANT shall use due professional care to observe and comply with all applicable Federal, State and local laws, ordinances, codes, and regulations in the performance of its duties and obligations under this Agreement. CONSULTANT shall perform all services under this Agreement in accordance with these laws, ordinances, codes, and regulations.

15. NO THIRD-PARTY BENEFICIARIES

DISTRICT and CONSULTANT do not intend, by any provision of this Agreement, to create in any third party any benefit or right owed by one party, under the terms and conditions of this Agreement, to the other party.

16. NOTICES

All notices and other communications required or permitted to be given under this Agreement, including any notice of change of address, shall be in writing and given by personal delivery or deposited with the United States Postal Service, postage prepaid, addressed to the parties intended to be notified. Notice shall be deemed given as of the date of personal delivery or, if mailed, upon the date of deposit with the United States Postal Service. Notice shall be given as follows:

TO DISTRICT: Ms. Doris Toy, P.E. (Project Manager)
San Rafael Sanitation District
111 Morphew Street
San Rafael, CA 94901

TO CONSULTANT: Mr. Sam McWhorter, P.E. (Project Director)
Kimley-Horn and Associates, Inc.
4637 Chabot Drive, Suite 300
Pleasanton, CA 94588

17. INDEPENDENT CONSULTANT

For the purposes and for the duration of this Agreement, CONSULTANT, its officers, agents, and employees shall act in the capacity of an Independent Contractor, and not as employees of the DISTRICT. CONSULTANT and DISTRICT expressly intend and agree that the status of CONSULTANT, its officers, agents, and employees be that of an Independent Contractor and not that of an employee of DISTRICT.

18. ENTIRE AGREEMENT -- AMENDMENTS

A. The terms and conditions of this Agreement, all exhibits attached, and all documents expressly incorporated by reference represent the entire Agreement of the parties with respect to the subject matter of this Agreement.

B. This written Agreement shall supersede any and all prior agreements, oral or written, regarding the subject matter between the CONSULTANT and the DISTRICT.

C. No other agreement, promise, or statement, written or oral, relating to the subject matter of this Agreement shall be valid or binding except by way of a written amendment to this Agreement.

D. The terms and conditions of this Agreement shall not be altered or modified except by a written amendment to this Agreement signed by the CONSULTANT and the DISTRICT.

E. If any conflicts arise between the terms and conditions of this Agreement and the terms and conditions of the attached exhibits or the documents expressly incorporated by reference, the terms and conditions of this Agreement shall control.

19. SET-OFF AGAINST DEBTS

CONSULTANT agrees that DISTRICT may deduct from any payment due to CONSULTANT under this Agreement any monies which CONSULTANT owes DISTRICT under any ordinance, agreement, contract, or resolution for any unpaid taxes, fees, licenses, assessments, unpaid checks, or other amounts.

20. WAIVERS

The waiver by either party of any breach or violation of any term, covenant, or condition of this Agreement or of any ordinance, law, or regulation, shall not be deemed to be a waiver of any other term, covenant, condition, ordinance, law, or regulation or of any subsequent breach or violation of the same or other term, covenant, condition, ordinance, law or regulation. The subsequent acceptance by either party of any fee, performance, or other consideration which may become due or owing under this Agreement, shall not be deemed to be a waiver of any preceding breach or violation by the other party of any term, condition, or covenant of this Agreement or any applicable law, ordinance, or regulation.

21. CITY BUSINESS LICENSE/OTHER TAXES

CONSULTANT shall obtain and maintain during the duration of this Agreement a CITY business license as required by the San Rafael Municipal Code. CONSULTANT shall pay any and all State and Federal taxes and any other applicable taxes. CONSULTANT’s taxpayer identification number is 56-0885615, and CONSULTANT certifies under penalty of perjury that said taxpayer identification number is correct.

22. APPLICABLE LAW

The laws of the State of California shall govern this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the 21ST day, of February 2023, first above written.

SAN RAFAEL SANITATION DISTRICT

CONSULTANT

Doris Toy, P.E.
District Manager/District Engineer

KIMLEY-HORN AND ASSOCIATES, INC.

APPROVED AS TO FORM:

By: _____
Sam McWhorter, P.E.

Kerry Laiw Gerchow
Deputy County Counsel

Title: Vice President

June 14, 2023

Ms. Doris Toy
San Rafael Sanitation District
111 Morpew Street, San Rafael, CA 94901

RE: Professional Service Agreement

Dear Ms. Toy:

Kimley-Horn and Associates, Inc. (“Kimley-Horn” or “Consultant”) is pleased to submit this letter agreement (the “Agreement”) to the San Rafael Sanitation District (“Client”) for providing professional services for the rehabilitation of several existing sewer mains.

PROJECT UNDERSTANDING

The project consists of the final design for sewer main rehabilitation and relocations located in the San Rafael Sanitation District. The project locations and approximate length in linear feet (lf) is understood as follows:

1. Madrona Street: Greenwood Avenue to Clorinda Avenue ~442lf
2. Billou Street: south from Bret Avenue ~537lf
3. Summit Avenue: south from Marina Way ~807lf
4. Grove Street: south of San Rafael Avenue ~283lf
5. Edgewood Way: easement area from Valley View Avenue to Edgewood Way ~110lf
6. Orange tree easement: North of Sunset Way ~507lf
7. McCoy Road: southwest of Bungalow Avenue ~323lf
8. Prospect Drive: MH 1630 to MH 1629 ~50lf
9. 4th Street & C Street: ~10lf
10. Bayo Vista & East Crescent: ~50lf
11. Terradillo Easement: ~50lf
12. 4th Street & B Street:~100lf

We understand the existing sewer lines are Vitrified Clay Pipe (VCP) and will be replaced with PVC per District Standards and Specifications.

SCOPE OF SERVICES**Task 1: Project Management and Coordination**

Kimley-Horn will provide contract management and quality control services throughout the duration of the project as part of this task. This task includes weekly meetings with the Sanitation District, City of San Rafael, and other consultants working on the Sewer Repairs project as needed. This task is limited to the design and permitting phase which is assumed to occur over a four-month duration. This task includes a maximum of forty (40) hours of staff time.

Deliverables:

- Project Schedule and updates
- Meeting agendas and minutes for all design and coordination meetings

Task 2: Construction Documents

Kimley-Horn will prepare one construction document package based upon the Client's standards and specifications. We will produce 35%, 65% and 95% submittal packages for review and coordination with the City staff. An engineer's opinion of probable cost will be prepared at each project milestone. One round of consolidated review comments will be addressed for each submittal package. The construction documents package will include:

- Cover Sheet – indicating project location and team data
- Project Notes – Client, governing agency, and engineer's general notes to the contractor
- Project Layout and Horizontal Control – establishing the benchmark and survey controls for the project
- Plan and Profile – the horizontal and vertical detailing of the sewer pipeline will be indicated with relevant construction notes
- Construction Details – project specific details will be included to clarify unique field conditions and modifications from City standards if required

This task includes up to two site visits to the project site by the design team. The initial site visit will be conducted to field check items on the as-built documents and CCTV camera information provided by the District. Additional field visits will be conducted as need to determine project phasing.

We will prepare final bid documents incorporating comments from previous reviews. Final plans will be printed on 24" x 36" paper and will include final signatures ready for reproduction.

Deliverables:

- 35%, 65%, and 95% PS&E submittals in both paper and electronic (PDF) format
- A table summarizing review comments and the resolution of the review comments
- Final Construction Documents in both paper and electronic (PDF) format

Task 3: Bid Phase Support

Kimley-Horn will attend the pre-bid meeting and respond to questions concerning the plans, specifications, and estimates prepared in Task 2. Should a bid addendum be required we assume a maximum of twenty-four (24) hours of effort. We will review construction bids provided by the Client and make a recommendation to the Client for award of the construction contract.

Deliverables:

- Prepare a construction document addendum, if required, for distribution by the Client
- Prepare answers to bidder's questions for distribution by the Client on a weekly basis during bid phase
- Prepare a recommendation to the Client for the award of the construction contract

Task 4: Design Support During Construction

Kimley-Horn will assist the Client during construction, as requested. Kimley-Horn will provide its services on a time and materials basis according to the attached rate schedule. Construction is assumed to occur over a five-month duration and a maximum of one hundred (100) hours will be required of this effort. Services we can provide include the following:

Visits to Site and Observation of Construction. Kimley-Horn will provide on-site construction observation visits during the construction phase. Kimley-Horn will make visits at intervals as directed by Client in order to observe the progress of the Work. Such visits and observations by Kimley-Horn are not intended to be exhaustive or to extend to every aspect of Contractor's work in progress. Observations are to be limited to

spot checking and similar methods of general observation of the Work based on Kimley-Horn's exercise of professional judgment. Based on information obtained during such visits and such observations, Kimley-Horn will evaluate whether Contractor's work is generally proceeding in accordance with the Contract Documents, and Kimley-Horn will keep Client informed of the general progress of the Work.

The purpose of Kimley-Horn's site visits will be to enable Kimley-Horn to better carry out the duties and responsibilities specifically assigned in this Agreement to Kimley-Horn, and to provide the Client a greater degree of confidence that the completed Work will conform in general to the Contract Documents. Kimley-Horn shall not, during such visits or as a result of such observations of Contractor's work in progress, supervise, direct, or have control over Contractor's work, nor shall Kimley-Horn have authority over or responsibility for the means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction selected by Contractor, for safety precautions and programs incident to Contractor's work, nor for any failure of Contractor to comply with laws and regulations applicable to Contractor's furnishing and performing the Work. Accordingly, Kimley-Horn neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform its work in accordance with the Contract Documents.

Clarifications and Interpretations. Kimley-Horn will respond to reasonable and appropriate Contractor requests for information and issue necessary clarifications and interpretations of the Contract Documents to the Client as appropriate to the orderly completion of Contractor's work.

Any orders authorizing variations from the Contract Documents will be made by the Client.

Change Orders. Kimley-Horn may recommend Change Orders to the Client and will review and make recommendations related to Change Orders submitted or proposed by the Contractor.

Shop Drawings and Material Submittals. Kimley-Horn will review and approve or take other appropriate action in respect to Shop Drawings and Material Submittals, but only for conformance with the information given in the Contract Documents. Such review and approvals or other action will not extend to means, methods, techniques, equipment choice and usage, sequences, schedules, or procedures of construction or to related safety precautions and programs.

Substitutes and "or-equal." Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor in accordance with the Contract Documents, but subject to the provisions of applicable standards of state or local government entities.

Disagreements between the Client and Contractor. Kimley-Horn will, if requested by the Client, render written decision on all claims of the Client and Contractor relating to the acceptability of Contractor's work or the interpretation of the requirements of the Contract Documents pertaining to the progress of Contractor's work. In rendering such decisions, Kimley-Horn shall be fair and not show partiality to the Client or Contractor and shall not be liable in connection with any decision rendered in good faith in such capacity.

Applications for Payment. Based on its observations and on review of applications for payment and accompanying supporting documentation, Kimley-Horn will determine the amounts that Kimley-Horn recommends Contractor be paid. Such recommendations of payment will be in writing and will constitute Kimley-Horn's representation to the Client, based on such observations and review, that, to the best of Kimley-Horn's knowledge, information and belief, Contractor's work has progressed to the point indicated and that such work-in-progress is generally in accordance with the Contract Documents subject to any qualifications stated in the recommendation. In the case of unit price work, Kimley-Horn's recommendations of payment will include determinations of quantities and classifications of Contractor's work, based on observations and measurements of quantities provided with pay requests.

By recommending any payment, Kimley-Horn shall not thereby be deemed to have represented that its observations to check Contractor's work have been exhaustive, extended to every aspect of Contractor's work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Kimley-Horn in this Agreement. It will also not impose responsibility on Kimley-Horn to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, nor to determine that title to any portion of the work in progress, materials, or equipment has passed to the Client free and clear of any liens, claims, security interests, or encumbrances, nor that there may not be other matters at issue between the Client and Contractor that might affect the amount that should be paid.

Limitation of Responsibilities. Kimley-Horn shall not be responsible for the acts or omissions of any Contractor, or of any of their subcontractors, suppliers, or of any other individual or entity performing or furnishing the Work. Kimley-Horn shall not have the authority or responsibility to stop the work of any Contractor.

ADDITIONAL SERVICES

Any services not specifically provided for in the above scope will be billed as additional services and performed at our then current hourly rates. Additional services we can provide include, but are not limited to, the following:

- Flow monitoring
- Wastewater generation rate calculations
- Contaminated soil remediation
- Dewatering plans
- Excavation and Shoring Plans
- Any additional sewer line rehabilitation outside of the limits described in the Project Understanding
- Traffic Control Plans
- Construction Phasing and staging plans

INFORMATION PROVIDED BY CLIENT

We shall be entitled to rely on the completeness and accuracy of all information provided by the Client or the Client's consultants or representatives. The Client shall provide all information requested by Kimley-Horn during the project, including but not limited to the following:

- Any project-related utility underground maps and any existing information in the possession of the Client necessary to complete the design.
- All project construction inspection work and contract administration

SCHEDULE

We will provide our services as expeditiously as practicable with the goal of meeting the mutually agreed upon schedule.

FEE AND EXPENSES

Kimley-Horn will perform the services on a labor fee plus expense basis with the maximum labor fee shown below.

A.	Tasks	Task Cost	Fee Type
1	Project Management and Coordination	\$9,100	TM
2	Construction Documents	\$115,300	TM
3	Final Bid Phase and Bid Phase Support	\$6,000	TM
4	Design Support During Construction	\$22,700	TM
Expense: Subconsultant Topographic Survey and Underground locate			\$45,408
Contract Total			\$198,508

Kimley-Horn will not exceed the total maximum labor fee shown without authorization from the Client. Individual task amounts are provided for budgeting purposes only. Kimley-Horn reserves the right to reallocate amounts among tasks as necessary.

Labor fee will be billed on an hourly basis according to our then-current rates. As to these tasks, direct reimbursable expenses such as express delivery services, fees, air travel, and other direct expenses will be billed at 1.15 times cost. A percentage of labor fee will be added to each invoice to cover certain other expenses as to these tasks such as telecommunications, in-house reproduction, postage, supplies, project related computer time, and local mileage. Administrative time related to the project may be billed hourly. All permitting, application, and similar project fees will be paid directly by the Client. Should the Client request Kimley-Horn to advance any such project fees on the Client's behalf, a separate invoice for such fees, with a 15% markup, will be immediately issued to and paid by the Client.

Payment will be due within 30 days of your receipt of the invoice and should include the invoice number and Kimley-Horn project number.

CLOSURE

If you concur in all the foregoing and wish to direct us to proceed with the services, please have authorized persons provide us with the signed Client's standard Professional Services Agreement. We will commence services only after we have received a fully-executed agreement. Fees and times stated in this Agreement are valid for sixty (60) days after the date of this letter.

We appreciate the opportunity to provide these services to you. Please contact me if you have any questions.

Very truly yours,

KIMLEY-HORN AND ASSOCIATES, INC.

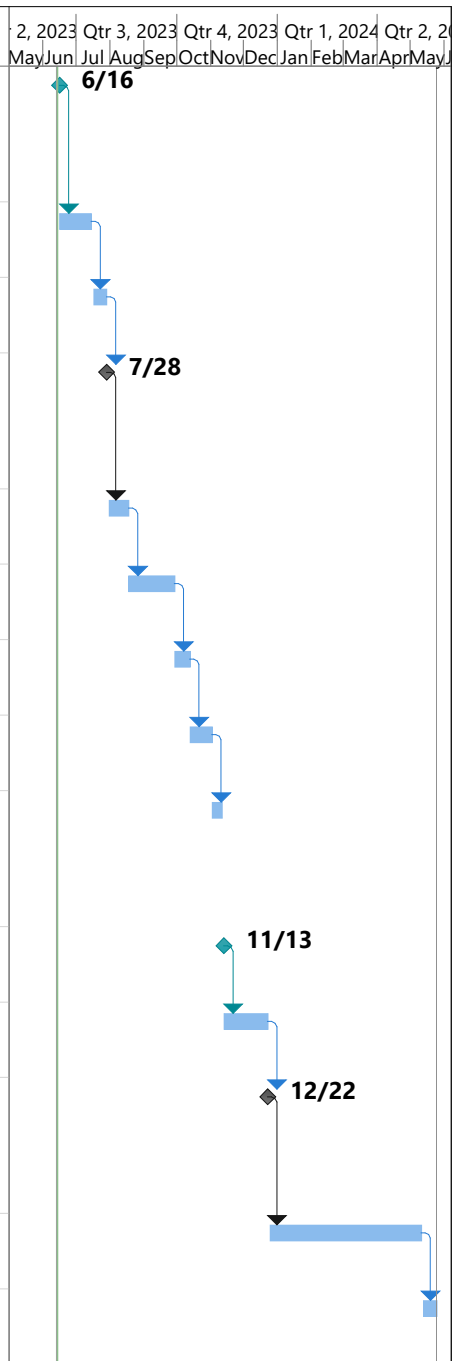


Tyler Whaley
Project Manager
P.E. No. C74848



Sam McWhorter
Vice President
P.E. No. C61788

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	2, 2023	Qtr 3, 2023	Qtr 4, 2023	Qtr 1, 2024	Qtr 2, 2024								
							May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
1		Contract authorization	0 days	Fri 6/16/23	Fri 6/16/23														
2		Field Survey	21 days	Fri 6/16/23	Fri 7/14/23	1													
3		35% Design	10 days	Mon 7/17/23	Fri 7/28/23	2													
4		Design Review meeting	0 days	Fri 7/28/23	Fri 7/28/23	3													
5		65% Design	14 days	Mon 7/31/23	Thu 8/17/23	4													
6		District Review	30 days	Fri 8/18/23	Thu 9/28/23	5													
7		95% Design	10 days	Fri 9/29/23	Thu 10/12/23	6													
8		District Review	14 days	Fri 10/13/23	Wed 11/1/23	7													
9		Final Bid Documents	7 days	Thu 11/2/23	Fri 11/10/23	8													
10		Posted to bid	0 days	Mon 11/13/23	Mon 11/13/23														
11		Bid Duration	30 days	Mon 11/13/23	Fri 12/22/23	10													
12		Construction Award	0 days	Fri 12/22/23	Fri 12/22/23	11													
13		Construction	100 days	Mon 12/25/23	Fri 5/10/24	12													
14		Record Drawings	10 days	Mon 5/13/24	Fri 5/24/24	13													



Project: 2023 SRSD Misc repairs Date: Wed 6/14/23	Task		Manual Summary Rollup	
	Split		Manual Summary	
	Milestone		Start-only	
	Summary		Finish-only	
	Project Summary		External Tasks	
	Inactive Task		External Milestone	
	Inactive Milestone		Deadline	
	Inactive Summary		Progress	
	Manual Task		Manual Progress	
	Duration-only			



Rate Schedule

Rates valid through 6/30/2024

Staff Category	Rate
Admin Support	\$100 - \$130
Sr. Admin Support	\$110 - \$140
Project Support	\$110 - \$140
Sr. Project Support	\$140 - \$160
CADD Technician	\$115 - \$140
Sr. CADD Technician	\$130 - \$160
Technical Support	\$115 - \$135
Sr. Technical Support	\$130 - \$165
Analyst I	\$125 - \$140
Analyst II	\$130 - \$150
Analyst III	\$140 - \$160
Engineer/Planner I	\$150 - \$170
Engineer/Planner II	\$160 - \$185
Engineer/Planner III	\$170 - \$195
Engineer/Planner IV	\$180 - \$220
Engineer/Planner V	\$210 - \$240
Sr. Engineer/Sr. Planner I	\$230 - \$260
Sr. Engineer/Sr. Planner II	\$250 - \$280
Sr. Engineer/Sr. Planner III	\$270 - \$300
Sr. Engineer/Sr. Planner IV	\$280 - \$320
Sr. Engineer/Sr. Planner V	\$310 - \$340
Sr. Engineer/Sr. Planner VI	\$330 - \$360
Sr. Engineer/Sr. Planner VII	\$350 - \$380
PIC/Sr. Tech Advisor	\$360 - \$390

Other Direct Costs: Outside printing/reproduction, delivery services/USPS, misc. field equipment/supplies, tolls and travel expenses will be billed at actual cost. Mileage will be billed at the Federal Rate.

SAN RAFAEL SANITATION DISTRICT
Agenda Item No. 3.e.

DATE: June 16, 2023

TO: Board of Directors, San Rafael Sanitation District

PREPARED BY: Kris Ozaki, Operations & Maintenance Manager

APPROVED BY: Doris Toy, District Manager/District Engineer

SUBJECT: Adopt resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement for pipe assessment related services.

RECOMMENDATION:

Adopt resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with RH Borden and Company LLC for pipe assessment related services for the 2023 Pipe Assessment Survey not to exceed \$250,000.

BACKGROUND:

The Sanitary System Management Plan (SSMP) details having a preventative maintenance program for the gravity collection system. District staff currently utilize mechanical methods of cleaning and inspection of high priority pipes that require frequent cleanings. This amounts to roughly 316,000 linear feet or 60 miles of pipe that is cleaned every 6 months. In the past, the remainder of the gravity collection system would only receive cleaning once every three years. While this is very effective, it is also very costly and can take up to a year or longer to complete.

ANALYSIS:

RH Borden offers a service utilizing sound acoustics to assess sewer line blockages to determine if the pipe requires frequent cleaning or broken pipe. The Sewer Line Rapid Assessment Tool or SL-RAT is setup at one manhole and transmits a series of tones which is then received from the next inline manhole. Depending on strength at which the tones are received, a numerical grade ranging from 0-10 is given. A zero indicates a totally obstructed pipe and 10 equates to no obstructions. This assessment takes 80 seconds to complete.

I have spoken to neighboring Districts that own the SL-RAT to get their perspective. Each have said it is very useful to see your entire system, but it has limitations. Pipes that are not straight lines will give lower scores. It also will not tell you what or where the obstruction is, but you'll be able to see an overall picture of which pipes need more attention than others. One neighboring district really liked the fact that a company can do this work instead of using their own personnel since they only have 2 employees in their sewer department.

The SL-RAT works on pipes ranging from 6 inch through 12 inch in diameter. In San Rafael, that amounts to 680,000 LF or 128 miles of pipe in that range. RH Borden estimates 6 weeks to assess all of this pipe. While this is not all of the gravity collection system, it does include a vast majority. The remainder can either be cleaned/inspected in-house or via contractor. The results

we receive from RH Borden can help us plan future sewer televising and capital improvement projects; and show us which pipes require cleaning on both the preventative maintenance cleaning list and pipes we don't normally touch. This should also help with less frequent sewer overflows.

Since they will be opening each manhole for the pipe assessment, staff has requested that they also assess the condition of each manhole.

After the data has been collected using the SL-RAT, the data will be integrated with the District's GIS, which will assist staff visually to determine which pipes will require more attention.

RH Borden's original proposal was based on 650,000 LF of pipe and 3,000 manholes. After they reviewed our GIS files, they determined that it was 680,000 LF of pipe and 4,382 manholes. Since the District will be billed by the lineal feet and number of manholes, staff has included a contingency and determined a not-to-exceed amount of \$250,000.

FISCAL IMPACT:

RH Borden and Company LLC will perform the work in the amount not to exceed \$250,000 for pipe assessment related services for the 2023 Pipe Assessment Survey Project. This project will be funded under the Maintenance and Operations Fund from the FY 2023/24 Budget.

ACTION REQUIRED:

Staff recommends that the Board adopt the resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with RH Borden and Company LLC for pipe assessment related services for the 2023 Pipe Assessment Survey not to exceed \$250,000.

Attachments:

- Resolution
- Professional Services Agreement
- Proposal (Exhibit A of the Agreement)

SAN RAFAEL SANITATION DISTRICT

RESOLUTION NO. 23-1270

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN RAFAEL
SANITATION DISTRICT AUTHORIZING THE DISTRICT MANAGER/DISTRICT
ENGINEER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT FOR
PIPE ASSESSMENT RELATED SERVICES FOR THE 2023 PIPE ASSESSMENT
SURVEY NOT TO EXCEED \$250,000**

**THE BOARD OF DIRECTORS OF THE SAN RAFAEL SANITATION DISTRICT,
COUNTY OF MARIN**, hereby resolves as follows:

The District Manager/District Engineer is hereby authorized to execute, on behalf of the San Rafael Sanitation District, a Professional Services Agreement with RH Borden and Company LLC, for required pipe assessment related services for the 2023 Pipe Assessment Project not to exceed \$250,000.00 as specified by the District, a copy of which is hereby attached and by this reference made a part hereof.

PASSED AND ADOPTED at a Regular Meeting of the San Rafael Sanitation District Board of Directors held on the 16th day of June 2023, by the following vote, to wit:

AYES:

NOES:

ABSENT/ABSTAIN:

SAN RAFAEL SANITATION DISTRICT

Kate Collins, Chair

ATTEST:

Maribeth Bushey, Acting Secretary

**PROFESSIONAL SERVICES AGREEMENT
FOR PIPE ASSESSMENT RELATED SERVICES FOR THE
2023 PIPE ASSESSMENT SURVEY NOT TO EXCEED \$250,000.00**

This Agreement is made and entered into this 16th day of June 2023 by and between the SAN RAFAEL SANITATION DISTRICT (hereinafter “DISTRICT”), and RH BORDEN AND COMPANY LLC (hereinafter “CONSULTANT”).

RECITALS

WHEREAS, the DISTRICT has selected RH BORDEN AND COMPANY LLC to perform the required pipe assessment related services for the “**2023 PIPE ASSESSMENT SURVEY**” (hereinafter “PROJECT”); and

WHEREAS, the CONSULTANT has offered to render certain specialized professional services in connection with this Project.

AGREEMENT

NOW, THEREFORE, the parties hereby agree as follows:

1. **SCOPE OF SERVICES**

DISTRICT and CONSULTANT have outlined the scope of services to be provided, and related expenses as described in Exhibit “A” attached and incorporated herein.

2. **PROJECT COORDINATION**

A. **DISTRICT.** The District Manager/District Engineer shall be the representative of the DISTRICT for all purposes under this Agreement. The Operations and Maintenance Manager is hereby designated as the PROJECT MANAGER for the DISTRICT and said PROJECT MANAGER shall supervise all aspects of the progress and execution of this Agreement.

B. **CONSULTANT.** CONSULTANT shall assign a single PROJECT DIRECTOR to have overall responsibility for the progress and execution of this Agreement for CONSULTANT. JOSH BARLOW is hereby designated as the PROJECT DIRECTOR for CONSULTANT. Should circumstances or conditions subsequent to the execution of this Agreement require a substitute PROJECT DIRECTOR for any reason, the CONSULTANT shall notify the DISTRICT within ten (10) business days of the substitution.

3. DUTIES OF CONSULTANT

CONSULTANT shall perform the duties and/or provide services as follows; the CONSULTANT agrees to provide professional services as a Consultant to prepare work outlined in the Proposal from CONSULTANT dated February 1, 2023, marked Exhibit “A”, attached hereto, and incorporated herein by this reference. The CONSULTANT agrees to be available and perform the work specified in this agreement in the time frame as specified and as shown in Exhibit “A”.

4. DUTIES OF THE DISTRICT

DISTRICT shall perform the duties as described and incorporated herein.

5. COMPENSATION

For the full performance of the services described herein by CONSULTANT, DISTRICT shall pay CONSULTANT on a time-and-materials basis for services rendered in accordance with the rates shown on the current fee schedule as described in Exhibit “A” attached and incorporated herein. The total payment will not exceed \$250,000.00.

Payment will be made monthly upon receipt by PROJECT MANAGER of itemized invoices submitted by CONSULTANT.

6. TERM OF AGREEMENT

The term of this Agreement shall be from the date of execution until the Project is complete.

7. TERMINATION

A. Discretionary. Either party may terminate this Agreement without cause upon thirty (30) days written notice mailed or personally delivered to the other party.

B. Cause. Either party may terminate this Agreement for cause upon ten (10) days written notice mailed or personally delivered to the other party, and the notified party’s failure to cure or correct the cause of the termination notice, to the reasonable satisfaction of the party giving such notice, within thirty (30) days of the receipt of said notice.

C. Effect of Termination. Upon receipt of notice of termination, neither party shall incur additional obligations under any provision of this Agreement without the prior written consent of the other. However, CONSULTANT’S duties and obligation in Sections 11 and 12 hereunder shall survive the expiration or termination of this Agreement.

D. Return of Documents. Upon termination, any and all DISTRICT documents or materials provided to CONSULTANT and any and all of CONSULTANT’S documents and materials prepared for or relating to the performance of its duties under this Agreement, shall be delivered to DISTRICT as soon as possible, but not later than thirty (30) days after termination.

8. OWNERSHIP OF DOCUMENTS

The written documents and materials prepared by the CONSULTANT in connection with the performance of its duties under this Agreement shall be the sole property of DISTRICT. DISTRICT may use said property for any purpose, including projects not contemplated by this Agreement.

9. INSPECTION AND AUDIT

Upon reasonable notice, CONSULTANT shall make available to DISTRICT, or its agent, for inspection and audit, all documents and materials maintained by CONSULTANT in connection with its performance of its duties under this Agreement. CONSULTANT shall fully cooperate with DISTRICT or its agent in any such audit or inspection.

10. ASSIGNABILITY

The parties agree that they shall not assign or transfer any interest in this Agreement nor the performance of any of their respective obligations hereunder, without the prior written consent of the other party, and any attempt to so assign this Agreement or any rights, duties or obligations arising hereunder shall be void and of no effect.

11. INSURANCE

A. During the term of this Agreement, CONSULTANT shall maintain, at no expense to DISTRICT, the following insurance policies:

1. A commercial general liability insurance policy in the minimum amount of one million (\$1,000,000) dollars per occurrence and \$2,000,000 aggregate for death, bodily injury, personal injury, or property damage;

2. An automobile liability (owned, non-owned, and hired vehicles) insurance policy in the minimum amount of one million (\$1,000,000) dollars per occurrence;

3. If any licensed professional performs any of the services required to be performed under this Agreement, a professional liability insurance policy in the minimum amount of one million (\$1,000,000) dollars to cover any claims arising out of the CONSULTANT's performance of services under this Agreement.

B. The insurance coverage required of the CONSULTANT by Section 11. A., shall also meet the following requirements:

1. The insurance shall be primary with respect to any insurance or coverage maintained by DISTRICT and shall not call upon DISTRICT's insurance or coverage for any contribution;

2. Except for professional liability insurance, the insurance policies shall be endorsed for contractual liability and personal injury;

3. Except for professional liability insurance, the insurance policies shall be specifically endorsed to include the DISTRICT, its officers, agents, and employees as additionally named insureds under the policies;

4. CONSULTANT shall provide to PROJECT MANAGER, (a) Certificates of Insurance evidencing the insurance coverage required herein, and (b) specific endorsements naming DISTRICT, its officers, agents and employees, as additional insureds under the policies;

5. The insurance policies shall provide that the insurance carrier shall not cancel or terminate said insurance policies except upon thirty (30) days written notice to DISTRICT's PROJECT MANAGER;

6. If the insurance is written on a Claims Made Form, then, following termination of this Agreement, said insurance coverage shall survive for a period of not less than five years as long as the insurance is reasonably affordable and available;

7. The insurance policies shall provide for a retroactive date of placement coinciding with the effective date of this Agreement;

8. The insurance shall be approved as to form and sufficiency by PROJECT MANAGER and the County Counsel.

C. If it employs any person, CONSULTANT shall maintain Workers' Compensation and Employer's Liability Insurance, as required by the State Labor Code and other applicable laws and regulations, and as necessary to protect both CONSULTANT and DISTRICT against all liability for injuries to CONSULTANT's officers and employees.

D. Any deductibles or self-insured retentions exceeding \$20,000 in CONSULTANT's insurance policies must be declared to and approved by the PROJECT MANAGER and the County Counsel. At DISTRICT's option, the deductibles or self-insured retentions with respect to DISTRICT shall be reduced or eliminated to DISTRICT's satisfaction, or CONSULTANT shall procure a bond guaranteeing payment of losses and related investigations, claims administration, attorney's fees, and defense expenses.

12. INDEMNIFICATION

CONSULTANT shall indemnify, release, and hold harmless DISTRICT, its officers, and employees against any claim, demand, suit, judgment, loss, liability, or expense of any kind, including attorney's fees, arising out of or resulting in any way from any acts or omissions, negligent or otherwise, of CONSULTANT or CONSULTANT's officers, agents, and employees in the performance of their duties and obligations under this Agreement.

13. NONDISCRIMINATION

CONSULTANT shall not discriminate, in any way, against any person on the basis of age, sex, race, color, religion, ancestry, national origin or disability in connection with or related to the performance of its duties and obligations under this Agreement.

14. COMPLIANCE WITH ALL LAWS

CONSULTANT shall use due professional care to observe and comply with all applicable Federal, State and local laws, ordinances, codes, and regulations in the performance of its duties and obligations under this Agreement. CONSULTANT shall perform all services under this Agreement in accordance with these laws, ordinances, codes, and regulations.

15. NO THIRD-PARTY BENEFICIARIES

DISTRICT and CONSULTANT do not intend, by any provision of this Agreement, to create in any third party any benefit or right owed by one party, under the terms and conditions of this Agreement, to the other party.

16. NOTICES

All notices and other communications required or permitted to be given under this Agreement, including any notice of change of address, shall be in writing and given by personal delivery or deposited with the United States Postal Service, postage prepaid, addressed to the parties intended to be notified. Notice shall be deemed given as of the date of personal delivery or, if mailed, upon the date of deposit with the United States Postal Service. Notice shall be given as follows:

TO DISTRICT: Kris Ozaki (Project Manager)
San Rafael Sanitation District
111 Morpew Street
San Rafael, CA 94901

TO CONSULTANT: Josh Barlow, Operations Director (Project Director)
RH Borden and Company LLC
2961 W Maple Loop Dr Ste 300
Lehi, UT 84043

17. INDEPENDENT CONSULTANT

For the purposes and for the duration of this Agreement, CONSULTANT, its officers, agents, and employees shall act in the capacity of an Independent Contractor, and not as employees of the DISTRICT. CONSULTANT and DISTRICT expressly intend and agree that the status of CONSULTANT, its officers, agents, and employees be that of an Independent Contractor and not that of an employee of DISTRICT.

18. ENTIRE AGREEMENT -- AMENDMENTS

A. The terms and conditions of this Agreement, all exhibits attached, and all documents expressly incorporated by reference represent the entire Agreement of the parties with respect to the subject matter of this Agreement.

B. This written Agreement shall supersede any and all prior agreements, oral or written, regarding the subject matter between the CONSULTANT and the DISTRICT.

C. No other agreement, promise, or statement, written or oral, relating to the subject matter of this Agreement shall be valid or binding except by way of a written amendment to this Agreement.

D. The terms and conditions of this Agreement shall not be altered or modified except by a written amendment to this Agreement signed by the CONSULTANT and the DISTRICT.

E. If any conflicts arise between the terms and conditions of this Agreement and the terms and conditions of the attached exhibits or the documents expressly incorporated by reference, the terms and conditions of this Agreement shall control.

19. SET-OFF AGAINST DEBTS

CONSULTANT agrees that DISTRICT may deduct from any payment due to CONSULTANT under this Agreement any monies which CONSULTANT owes DISTRICT under any ordinance, agreement, contract, or resolution for any unpaid taxes, fees, licenses, assessments, unpaid checks, or other amounts.

20. WAIVERS

The waiver by either party of any breach or violation of any term, covenant, or condition of this Agreement or of any ordinance, law, or regulation, shall not be deemed to be a waiver of any other term, covenant, condition, ordinance, law, or regulation or of any subsequent breach or violation of the same or other term, covenant, condition, ordinance, law or regulation. The subsequent acceptance by either party of any fee, performance, or other consideration which may become due or owing under this Agreement, shall not be deemed to be a waiver of any preceding breach or violation by the other party of any term, condition, or covenant of this Agreement or any applicable law, ordinance, or regulation.

21. CITY BUSINESS LICENSE/OTHER TAXES

CONSULTANT shall obtain and maintain during the duration of this Agreement a CITY business license as required by the San Rafael Municipal Code. CONSULTANT shall pay any and all State and Federal taxes and any other applicable taxes. CONSULTANT’s taxpayer identification number is 27-2531542, and CONSULTANT certifies under penalty of perjury that said taxpayer identification number is correct.

22. APPLICABLE LAW

The laws of the State of California shall govern this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the 16th day, of June 2023, first above written.

SAN RAFAEL SANITATION DISTRICT

CONSULTANT

Doris Toy, P.E.
District Manager/District Engineer

RH BORDEN AND COMPANY LLC

APPROVED AS TO FORM:

By: _____
Jonathan Borden

Kerry Laiw Gerchow
Deputy County Counsel

Title: President

Acoustic Assessment Scope

1. Conduct sewer line inspections using transmissive acoustics as follows:
 - a. Sewer line Acoustic Transmissive Inspection as specified in ASTM F3220 – 17 “Standard Practice for Prioritizing Sewer Pipe Cleaning Operations by Using Transmissive Acoustic Inspection”. These services will be accomplished by using the systems provided by InfoSense, Inc. using equipment known as Sewer Line Rapid Assessment Tools (SL-RAT).
 - b. A detailed summary of each sewer line assessed including the following:
 - i. Unique Measurement Identification Number
 - ii. Time and Date of Measurement
 - iii. Length of pipe segment measured as measured by available Global Positioning Services (GPS).
 - iv. GPS Location of Transmitter and Receiver at the time of measurement
 - v. The Condition of the pipe will be reported on a scale including but not limited to a score of 0-10 as shown below:
 - i. 10 = Good - No significant obstructions within the pipe
 - ii. 7-10 = Good – Minor impediments within the pipe such as joint offsets, partial sags, protruding laterals, debris, minor grease, and/or minor root fibers and/or other obstructions that could affect the score.
 - iii. 4-6 = Impediments within the pipe such as joint offsets, partial sags, protruding laterals, debris, grease, and/or root fibers. Single or multiple occurrences and/or other obstructions that could affect the score.
 - iv. 1-3 = Significant impediments within the pipe such as multiple joint offsets, near full pipe sag, multiple protruding laterals, significant debris, significant grease, significant root fibers and/or root balls. Single or multiple occurrences and/or other obstructions that could affect the score.
 - v. 0 = Full pipe sag, single or multiple obstructions within the pipe reaching or nearly reaching the flow and/or other obstructions that could affect the score.
 - vi. The format of the final report shall be provided electronically as a hosted GIS dashboard.
 - c. Perform a visual manhole inspection for each manhole for Customer as follows:
 - i. Each manhole will be visually inspected and rated as Good, Poor, or Fair for the following attributes:
 - i. Proper seating of manhole lid
 - ii. Condition of manhole collar
 - iii. Condition of overall interior manhole structure
 - iv. Condition of manhole shelf
 - v. Presence of infiltration
 - ii. Data from manhole inspections shall be added as attribute data along with the acoustic assessments in the GIS dashboard.

RH Borden and Company LLC
 2961 W Maple Loop Dr Ste 230
 Lehi, UT 84043 US
 jon.borden@rhborden.com

Quotation

ADDRESS
 Kris Ozaki
 111 Morphew Street
 San Rafael, CA 94901 USA

SHIP TO
 Kris Ozaki
 111 Morphew Street
 San Rafael, CA 94901 USA

QUOTATION # 1881
DATE 02/01/2023
EXPIRATION DATE 08/01/2023

DATE	ACTIVITY	DESCRIPTION	QTY	RATE	AMOUNT
04/03/2023	Acoustic Assessment Service - CA	Acoustic assessment of sewer line pipes utilizing Transmissive Acoustic Inspection Rapid Assessment Technology (SL-RAT). Service includes full assessment of designated pipes and delivery of assessment data in RH Borden Online ArcGIS Dashboard with additional ability to download data in .csv and .shp formats. Final cost based on actual footage assessed.	650,000	0.25	162,500.00
04/03/2023	Level 1 Manhole Inspection - CA	Level 1 Manhole Inspection Manholes will be assessed and prioritized based on manhole condition and incorporated into acoustic assessment data set. Manhole assessments will include a 3-point risk scale (Low, Medium, High) across 5 sections of the manhole (Lid, Collar, Main Body, Trough, Overall Condition). Data will be captured and included in RH Borden Online ArcGIS Dashboard with filtering and reporting capability. Final cost based on actual number of manholes assessed.	3,000	12.00	36,000.00
04/03/2023	Crew Mobilization	Crew Mobilization	7	1,500.00	10,500.00

TOTAL \$209,000.00

Accepted By

Accepted Date

Sewer Line Rapid Assessment Tool



Acoustic Assessment



Time-Based Protocol For Maintaining Sewer Lines

- Time-Based Cleaning Protocol
- Cleaning and Inspection Requirements 12 – 84 Months
- Select Neighborhood and Deploy Resources



Issues with Time Based Cleaning Protocol

- Clean every pipe segment regardless of condition
- Not viewing entire sewer system each year
- Requires a significant amount of water to clean lines
- Data captured in formats that are difficult to use

Transitioning to a New O&M Model

**Time-Based Cleaning
Maintenance Protocol**



**Condition-Based Cleaning
Maintenance Protocol**

New Technology - Acoustic Inspection

SL- Rapid Assessment Tool (RAT)



- Developed by InfoSense in 2008 (Ivan Howitt)
- Uses Acoustics to assesses sewer line blockages
- Recommended by EPA
- Now being used by hundreds of utilities worldwide
- Holds ASTM Standard for use

How it Works



Transmitter



80 Seconds

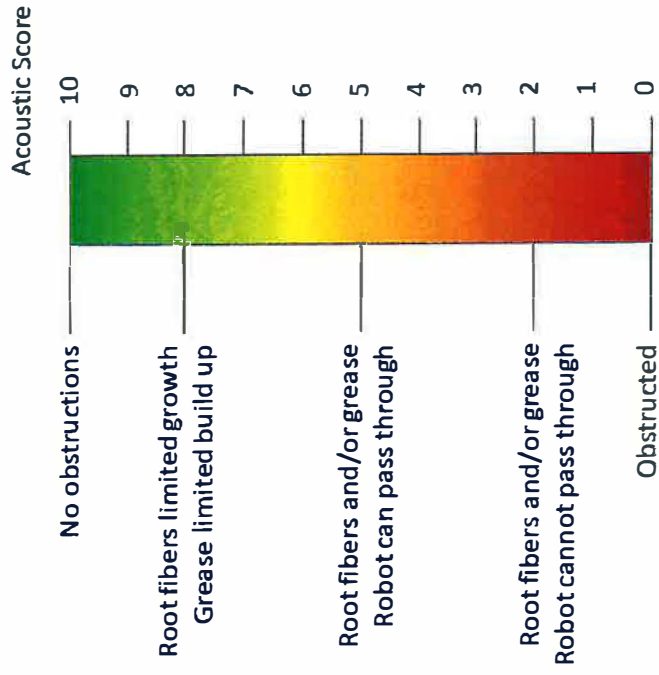
Obstruction
Dissipates acoustic energy



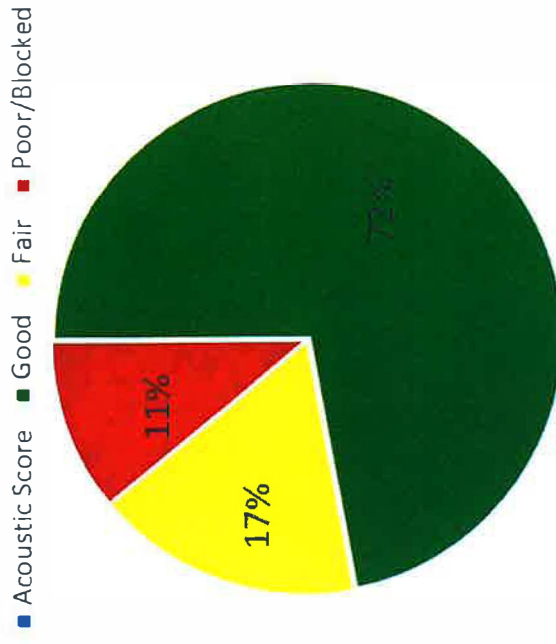
Receiver Analyzes



SL – RAT Assessment Scale – National Trends

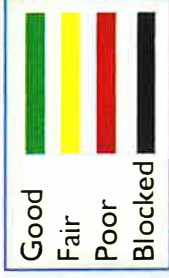
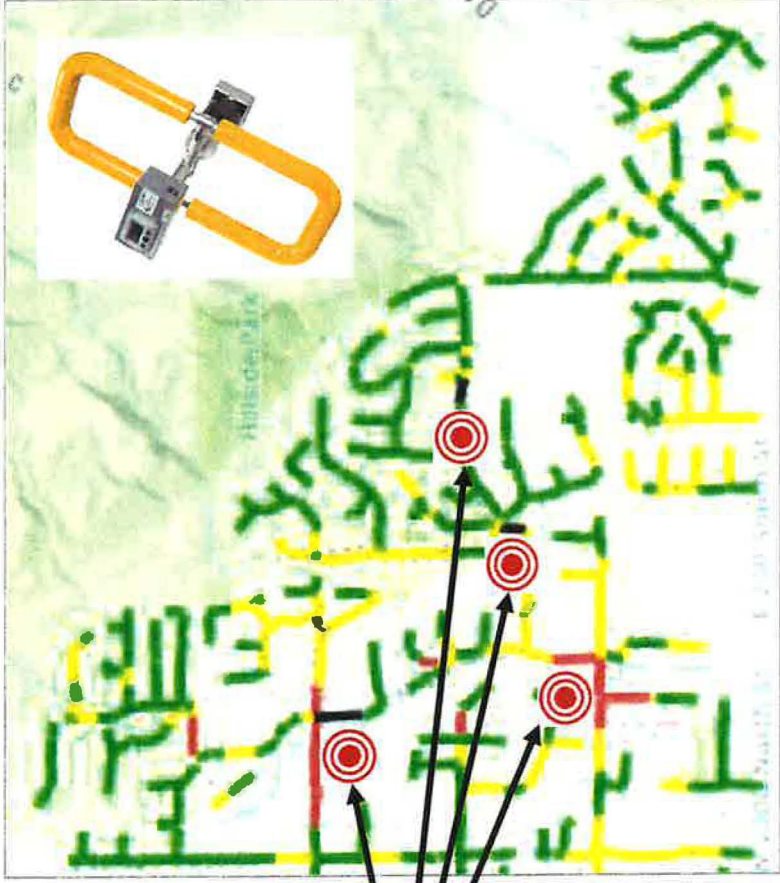


Acoustic Inspection Results
~100 Million Feet of Pipe Inspected



Condition-Based Approach with SL-RAT

Send Trucks
On Demand



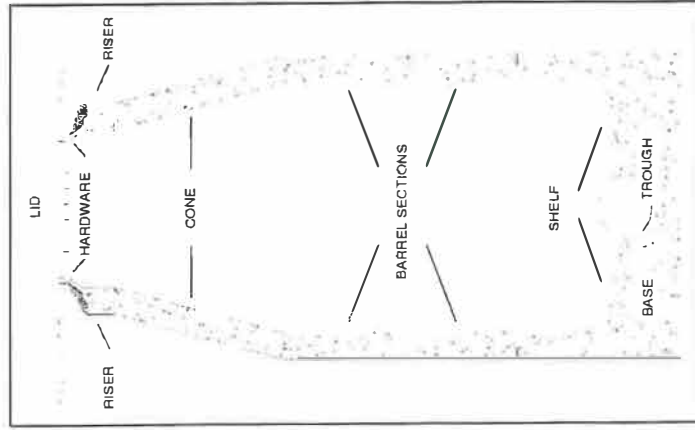
Map interface showing a street map with colored overlays (yellow, red, green) and a legend on the left. The legend includes items like "Improvement Status - 2022", "SL-RAT 2022 Scales", "Sewer Line Cleaned", and "SL-RAT 2021 2022". A "Group Filter" section is visible with a dropdown menu set to "SL-RAT Rating 2021". Below the legend are filter controls including "EQUALS", "OR", and "EQUALS" buttons, along with "Add Criteria" and "Apply" buttons. A "Reset" button is also present. A pie chart is located in the bottom right corner of the map area, showing a distribution of colors (green, yellow, red).



Color	Percentage
Green	~85%
Yellow	~10%
Red	~5%


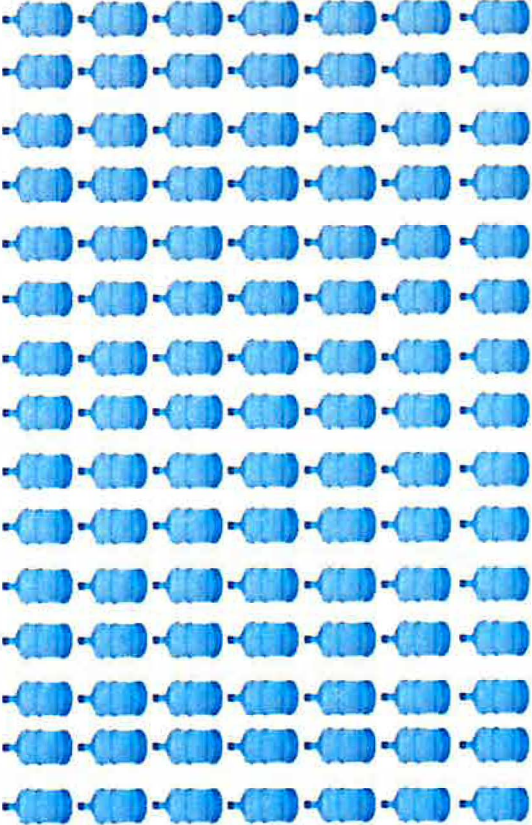




Incorporating Manhole Inspections



<u>No.</u>	<u>Feature to Inspect</u>	<u>Inspection Attribute</u>	<u>Good</u>	<u>Fair</u>	<u>Poor</u>
1	Lid Condition	Lid Condition and Seating	Lid intact and fully seated or sub-flush	Minor lid damage or slightly raised	Major lid damage or significantly unseated
2	Collar Condition	Cracks and weathering	No Cracks or cracks are fully sealed	Moderate weathering and cracks	Major cracking exposing trip hazards
3	Riser Condition	Cracks and Degradation	No or Minor degradation/cracks	Moderate degradation/cracks	Significant degradation/cracks
4	Structural Condition	Cracks and Degradation	No or Minor degradation/cracks	Moderate degradation/cracks	Significant degradation/cracks
5	Shelf / Trough Condition	Surcharge, Roots, Obstructing Objects	Clean shelf and trough	Mild buildup in trough	Surcharge, Roots, Obstructing Objects
5	Infiltration	Infiltration	No signs of infiltration	Mild Infiltration	Significant Infiltration
6	Collar Material	Concrete / Asphalt / Other	-	-	-
7	Structure Material	Concrete / Brick / Lined	-	-	-

Water Use Comparison – Rotational vs Conditional

 <p>Rotational Cleaning Maintenance</p> <p>1,000,000 Gallons / 100 miles</p>	
---	--

 <p>Condition Based Maintenance</p> <p>40,000 Gallons / 100 Miles</p>	
--	---

 = 10,000 Gallons

Acoustic Assessments Benefits

Outcomes

Clean 50-80% less Pipe



\$\$\$

\$



Remove more debris from system



Resources

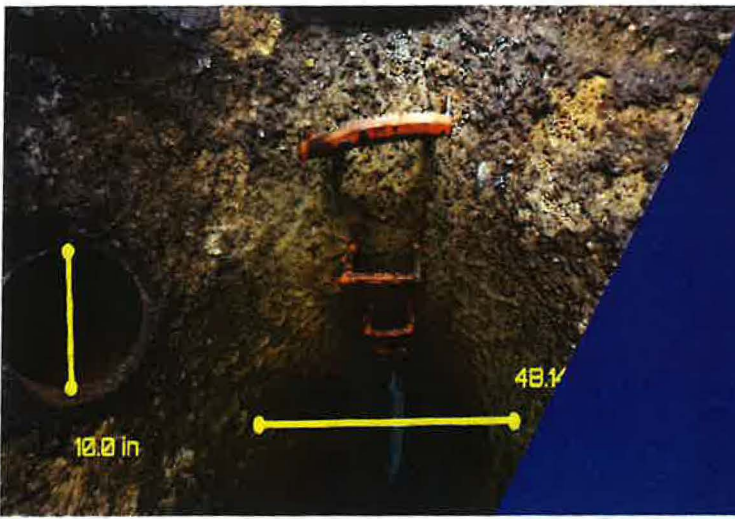
Use 80% - 90% Less Water



Free up Resources



Manhole Virtual Modeling



Virtual Reality Manholes / Wet Wells



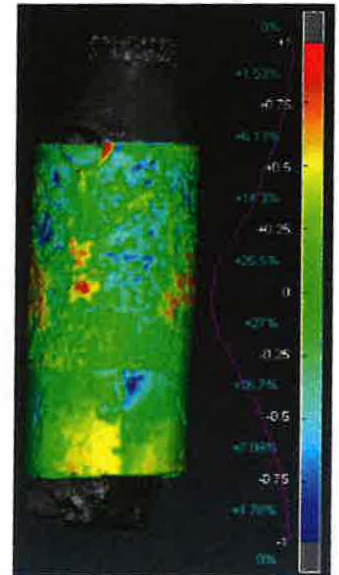
- ▶ Enter manhole *virtually*
- ▶ No confined space hazards
- ▶ Share with stakeholders

High-Density Point Clouds



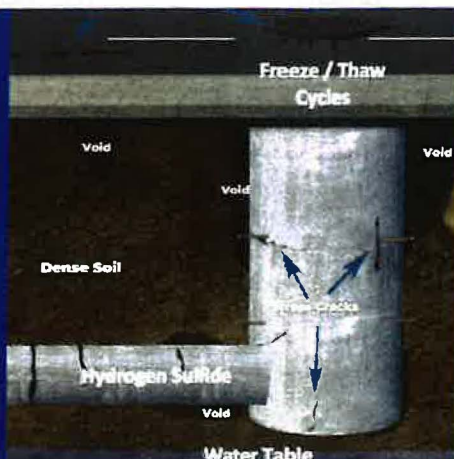
- ▶ Measure any dimension
- ▶ Set as-is baseline
- ▶ Share data with a link

Wall Degradation Analysis



- ▶ Quantify degradation
- ▶ Make data-driven decisions
- ▶ Improve asset management

Stresses on Manholes:



RH BORDEN
DELIVERING DATA TO SMART CITIES

www.rhborden.com

Jon Borden
385-228-5350

jon.borden@rhborden.com

New Technology — Acoustic Inspection

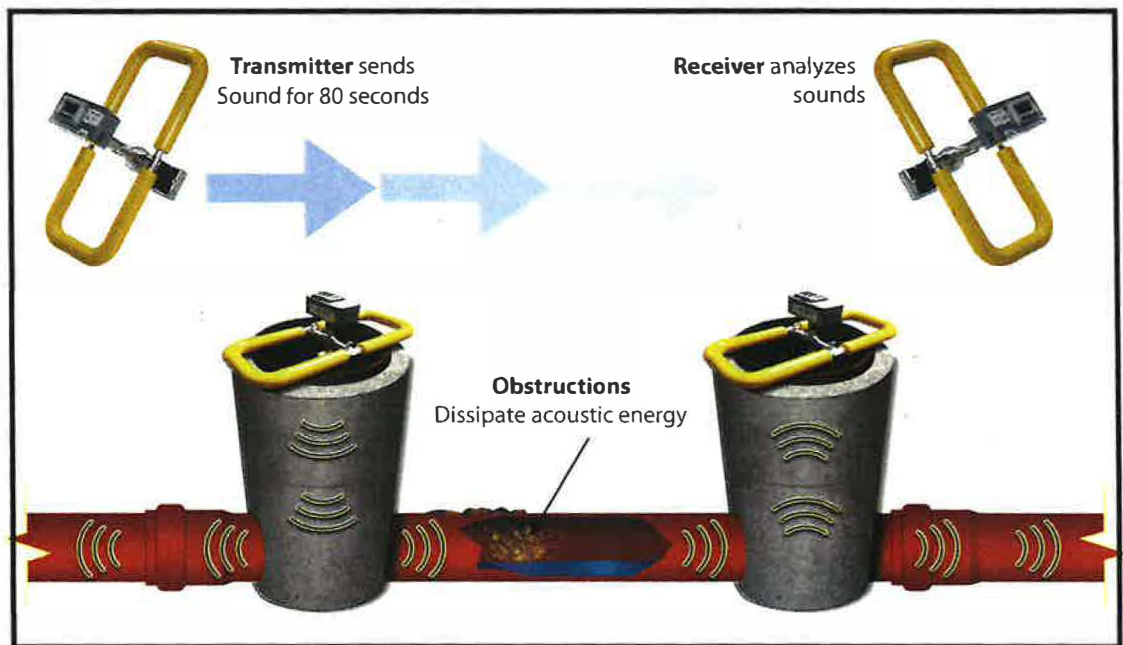


The Sewer Line - Rapid Assessment Tool (SL-RAT)

- Developed by InfoSense in 2008
- Uses acoustics to assess sewer lines
- Recommended by the EPA
- Used by hundreds of utilities worldwide
- Holds ASTM standard for use

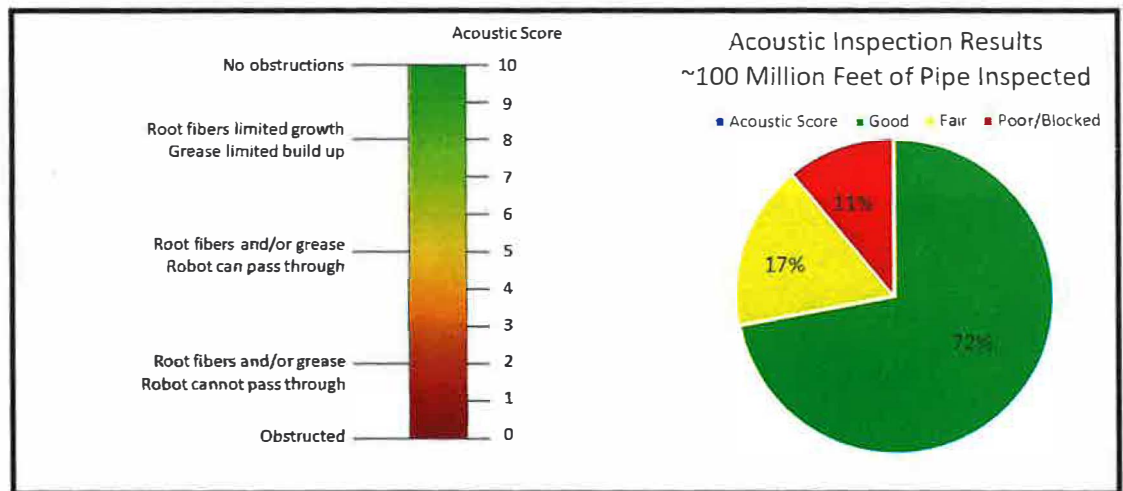
How it works:

The SL-RAT comes in two parts: a transmitter and a receiver that are placed on adjacent manholes. The transmitter sends tones down the pipe and the receiver analyzes those tones for degradation. Based on the quality of the sound, each pipe segment is given a blockage score from 0 to 10.



The Results:

Pipe segments scoring a 7 or above are flowing freely and need no further work. The SL-RAT has been used to inspect over 100 million feet of pipe, and in the average system, 72% had excess flow capacity. That means that more than 72 million feet of pipe did not need to be cleaned.



www.rhborden.com

**SAN RAFAEL SANITATION DISTRICT
BUDGET - FISCAL YEARS ENDING JUNE 30, 2024 AND 2025**

	FY2024	FY2025
OPERATING FUND		
RESOURCES AVAILABLE:		
FUND BALANCE, BEGINNING	\$ 9,148,976	\$ 11,929,077
REVENUES		
Property taxes	2,188,294	2,231,949
User fees	16,645,122	16,645,122
Connection fees	396,359	396,359
Interest income	992,129	992,129
Total revenues	<u>20,221,904</u>	<u>20,265,559</u>
TOTAL RESOURCES AVAILABLE	<u>\$ 29,370,880</u>	<u>\$ 32,194,636</u>
RESOURCES EXPENDED AND REMAINING		
EXPENDITURES		
Operations and maintenance	\$ 5,589,849	\$ 5,257,710
Sewage treatment (CMSA)	8,090,888	8,427,617
Transfers to Capital Funds		
Equipment acquisition fund	211,066	211,066
Capital improvement projects:		
80-year life-cycle sewer replacement	3,300,000	4,300,000
Pump station & force main capital improvements	250,000	250,000
TOTAL EXPENDITURES	<u>17,441,803</u>	<u>18,446,393</u>
ENDING FUND BALANCE		
Assigned:		
Working capital	7,440,000	7,732,000
Pension and other post-retirement benefits	3,400,000	5,000,000
Emergencies	1,000,000	1,000,000
Total assigned	<u>11,840,000</u>	<u>13,732,000</u>
Unassigned	<u>89,077</u>	<u>16,243</u>
Total ending fund balance	<u>11,929,077</u>	<u>13,748,243</u>
TOTAL RESOURCES EXPENDED & REMAINING	<u>\$ 29,370,880</u>	<u>\$ 32,194,636</u>
EQUIPMENT ACQUISITION FUND		
FUND BALANCE, BEGINNING	\$ 2,158,800	\$ 1,926,866
Transfers from Operating Fund	211,066	211,066
Expenditures	(443,000)	(382,000)
FUND BALANCE, ENDING	<u>\$ 1,926,866</u>	<u>\$ 1,755,932</u>
80-YEAR LIFE-CYCLE SEWER REPLACEMENT		
FUND BALANCE, BEGINNING	\$ 21,412,193	\$ 12,872,193
Transfers from Operating Fund	\$3,300,000	\$4,300,000
Expenditures	\$ (11,840,000)	\$ (10,900,000)
FUND BALANCE, ENDING	<u>\$ 12,872,193</u>	<u>\$ 6,272,193</u>
PUMP STATION & FORCE MAIN CAPITAL IMPROVEMENTS		
FUND BALANCE, BEGINNING	\$ 9,873,410	\$ 7,873,410
Transfers from Operating Fund	250,000	250,000
Expenditures	\$ (2,250,000)	\$ (5,800,000)
FUND BALANCE, ENDING	<u>\$ 7,873,410</u>	<u>\$ 2,323,410</u>

SUPPORTING SCHEDULES

SAN RAFAEL SANITATION DISTRICT
 BUDGET - FISCAL YEARS ENDING JUNE 30, 2024 AND 2025
 SUPPORTING SCHEDULE
 EXPENDITURE DETAILS

Acct. Code	Account Title	Description	Actual 2021-22	Budget 2022-23	Projected 2022-23	Proposed 2023-24	Proposed 2024-25	Comments
FUND 74600 - OPERATIONS & MAINTENANCE								
2361	Contractual Costs to City of San Rafael	Salaries, benefits, summer help, technology replacement, utilities	\$ 3,178,383	\$ 3,077,640	\$ 3,365,922	\$ 3,259,000	\$ 3,421,950	City Estimate plus estimated inflation
2388	Staff Training, Education, and Memberships	Registration, tuition, manuals, texts, etc. for District personnel training and certification courses & seminars on confined space, SSMP, management, etc.	\$ 3,924	\$ 3,720	\$ 3,215	\$ 5,000	\$ 5,500	Based on 2022-23 Projection plus estimated inflation
2477	Conferences	Travel, lodging, and related expenses for Board and staff, CASA quarterly meetings, and other misc. conferences	\$ -	\$ 6,180	\$ 1,550	\$ 6,000	\$ 6,300	Based on expected costs
2131	Memberships & Subscriptions	Annual membership dues	\$ 15,375	\$ 17,349	\$ 19,979	\$ 20,978	\$ 22,027	Based on 2022-23 Projection plus estimated inflation
	<i>Details:</i>							
	State WRCB			\$ 3,500	\$ 3,000	\$ 3,000	\$ 3,500	
	CASA			\$ 10,000	\$ 9,000	\$ 9,500	\$ 10,000	
	BACWA			\$ 2,000	\$ 1,500	\$ 1,750	\$ 2,000	
	Other	Marin IJ, Yellow Pages		\$ 1,849	\$ 6,479	\$ 6,728	\$ 6,527	
2534	Telephone Service	District office, District fax, pump stations, cell phones, pagers, dialers for pump stations, laptop connection cards, private IP's	\$ 17,215	\$ 25,750	\$ 21,082	\$ 25,000	\$ 26,250	Based on 2022-23 Projection plus estimated inflation
2282	Director Fees	Payment to Board of Directors for meetings	\$ 3,300	\$ 5,200	\$ 4,000	\$ 5,200	\$ 5,200	Based on meetings expected
2713	Legal Services	Legal services performed by the County Counsel and outside counsel for the District.	\$ 17,978	\$ 23,055	\$ 14,855	\$ 25,000	\$ 25,000	Based on 2022-23 Projection plus estimated inflation
2325	Consulting Services	Engineering, professional and specialized consulting services	\$ 69,984	\$ 64,890	\$ 126,284	\$ 162,000	\$ 80,000	Based on 2022-23 Projection plus estimated inflation
	<i>Details:</i>							
	Nute engineering			\$ 36,864	\$ 5,000	\$ 80,000	\$ 37,000	FM/PS Study for CIP schedule
	California CAD	Sewer service charges		\$ 6,144	\$ 6,500	\$ 6,000	\$ 6,144	
	Audit of financial statement			\$ 16,384	\$ 15,000	\$ 16,000	\$ 16,384	
	Other	Temp staff, Strategic Plan		\$ 5,498	\$ 99,784	\$ 60,000	\$ 20,472	
2717	Accounting Services	Accounting and financial management services	\$ 53,700	\$ 69,277	\$ 69,500	\$ 64,518	\$ 81,313	Based on 2022-23 Projection plus estimated inflation
	<i>Details:</i>							
	Maier Accountancy			\$ 43,200	\$ 43,200	\$ 49,200	\$ 49,200	Based on 2022-23 Projection plus estimated inflation
	Monthly accounting			\$ 26,077	\$ 25,700	\$ 15,318	\$ 32,113	Add budget development in year 2025
6832	Tax collection fees	County Tax collection and sewer service administration fees	\$ 38,194	\$ 43,000	\$ 39,012	\$ 42,000	\$ 43,000	Based on 2022-23 Projection plus estimated inflation
2059	General Insurance	CSRMA - public liability, property, and auto insurance	\$ 163,054	\$ 153,906	\$ 176,368	\$ 185,187	\$ 194,446	Based on 2022-23 Projection plus estimated inflation
2051	Claims and Deductibles	Claims and deductible payments	\$ 55,432	\$ 45,000	\$ 11,196	\$ 45,000	\$ 45,000	
2321	Public Outreach	Informational fliers, website, videos	\$ 10,355	\$ 20,000	\$ 5,425	\$ 20,000	\$ 20,000	
2221	Legal Notices	Publication of notices of hearings, ordinances, etc.	\$ -	\$ 1,500	\$ 400	\$ 1,500	\$ 1,500	
2122	Rebates/Refunds	Refund of sewer user & connection fees	\$ 4,369	\$ 10,300	\$ 2,575	\$ 10,300	\$ 10,300	
2133	Office/Shop Supplies	District office & maintenance	\$ 5,582	\$ 8,500	\$ 7,204	\$ 8,000	\$ 9,000	
2389	Miscellaneous expenses	Recruitment for vacant positions, staff meeting supplies	\$ 35	\$ 1,200	\$ 5,000	\$ 25,000	\$ 8,000	

SAN RAFAEL SANITATION DISTRICT
 BUDGET - FISCAL YEARS ENDING JUNE 30, 2024 AND 2025
 SUPPORTING SCHEDULE
 EXPENDITURE DETAILS

Acct. Code	Account Title	Description	Actual 2021-22	Budget 2022-23	Projected 2022-23	Proposed 2023-24	Proposed 2024-25	Comments
2359	Maintenance and Operations, Pump Stations, Force Mains, Generators	All maintenance, repairs, and supplies for pump stations and force mains, including rebuilding pumps, motors, electrical panels, controls, comminutors, replacing and/or repairing valves, replace motor control centers, etc.	\$ 233,499	\$ 250,000	\$ 240,988	\$ 250,000	\$ 250,000	Based on 2022-23 Projection, allowance for unidentified items, plus estimated inflation
2360	Maintenance and Operations - Collection System	All maintenance, pipe spot repairs, and supplies for collection system, including accessory parts and materials for vactor and power rodder.	\$ 126,216	\$ 206,000	\$ 242,821	\$ 725,000	\$ 300,000	Based on 2022-23 Projection, and FY 23/24 Pipe Assessment Project and Patch Pave project
2535	Power	Cost of electricity and gas for all pump stations	\$ 245,388	\$ 205,615	\$ 300,812	\$ 325,000	\$ 300,000	Based on 2022-23 Projection, plus anticipated utility rate increases
2536	Water	Water purchases	\$ 11,462	\$ 24,000	\$ 9,192	\$ 10,000	\$ 10,000	Based on 2022-23 Projection plus estimated inflation
2363	Standby Services	Cost to respond to sewer emergencies by Roto-Rooter after hours and on weekends and holidays	\$ 21,260	\$ 35,000	\$ 24,288	\$ 30,000	\$ 35,000	Based on 2022-23 Projection, allowance for unidentified items, plus estimated inflation
2083	Vehicle repair & parts	Parts, maintenance, repairs, fuel & oil for District vehicles	\$ 64,913	\$ 77,250	\$ 86,895	\$ 75,000	\$ 78,750	Based on 2022-23 Projection, allowance for unidentified items, plus estimated inflation
2106	Odor Control	Bioxide chemical odor control & equipment for pump stations	\$ 53,975	\$ 84,990	\$ 95,458	\$ 100,230	\$ 105,242	Based on 2022-23 Projection plus estimated inflation
2021	Uniforms	Rental & cleaning of uniforms	\$ 10,656	\$ 9,940	\$ 10,701	\$ 11,236	\$ 11,798	Based on 2022-23 Projection plus estimated inflation
2365	Safety Equipment and Supplies	Equipment and supplies for on-the-job safety gear, safety signing, first aid supplies, gas detectors and confined space training equipment for compliance with OSHA requirements, including servicing fire extinguishers.	\$ 3,752	\$ 7,500	\$ 8,286	\$ 8,700	\$ 9,135	Based on 2022-23 Projection, allowance for unidentified items, plus estimated inflation
4045	Manhole Raising	Reimburse City of San Rafael or Marin County for raising manholes to grade upon completion of City/County street or Right-of-Way improvement projects.	\$ -	\$ 61,800	\$ 14,175	\$ 60,000	\$ 63,000	Based on expectations, allowance for unidentified items, plus estimated inflation
4300	FOG Program	Fats, Oils, and Grease Program administered by CMSA	\$ 21,116	\$ 45,000	\$ 29,511	\$ 40,000	\$ 45,000	Based on 2022-23 Projection, allowance for unidentified items, plus estimated inflation
4188	Facilities Mapping Services	Continuation of Facilities Mapping Program, updating GIS interface, data base structure, activity tracking, locating structures, easement research, mapping, sewer map books.	\$ 45,840	\$ 63,654	\$ 27,865	\$ 45,000	\$ 45,000	Based on 2022-23 Projection, allowance for unidentified items, plus estimated inflation;
TOTAL MAINTENANCE & OPERATIONS			\$ 4,474,955	\$ 4,647,216	\$ 4,964,559	\$ 5,589,849	\$ 5,257,710	
FUND 74604 - CENTRAL MARIN SANITATION AGENCY								
4112	SRSD Share of Operation	District's proportionate share based on flow volume and strength.	\$ 5,511,893	\$ 5,861,950	\$ 5,626,260	\$ 5,957,225	\$ 6,294,323	Estimate from CMSA Budget
4113	SRSD Share of Plant Expansion	District's proportionate share of CMSA bond payments based on the total EDU count for all JPA members per Agency budget	\$ 2,145,805	\$ 2,144,355	\$ 2,144,355	\$ 2,133,663	\$ 2,133,294	Estimate from CMSA Budget
TOTAL CENTRAL MARIN SANITATION AGENCY			\$ 7,657,698	\$ 8,006,305	\$ 7,770,615	\$ 8,090,888	\$ 8,427,617	

SAN RAFAEL SANITATION DISTRICT
 BUDGET - FISCAL YEARS ENDING JUNE 30, 2024 AND 2025
 SUPPORTING SCHEDULE
 EXPENDITURE DETAILS

Acct. Code	Account Title	Description	Actual 2021-22	Budget 2022-23	Projected 2022-23	Proposed 2023-24	Proposed 2024-25	Comments
FUND 74600 - FIXED ASSETS								
4830	Vehicle & equipment acquisition	Acquisition of vehicles, equipment & furniture	\$ -	\$ 34,000	\$ 34,000	\$ 443,000	\$ 382,000	Based on Asset Replacement Schedule
TOTAL FIXED ASSETS			\$ -	\$ 34,000	\$ 34,000	\$ 443,000	\$ 382,000	
FUND 74601 - CAPITAL IMPROVEMENTS								
80-YEAR LIFE-CYCLE PROGRAM								
4316	Second St, Ida to E St	Replace 1,500LF of sewer. Postpone.	\$ -	\$ 100,000	\$ -	\$ -	\$ -	Re-prioritized
4302	Rehabilitation of Gravity Sewer	Replace unscheduled misc. sewer pipes and emergencies	\$ -	\$ 200,000	\$ -	\$ -	\$ -	
4301	2018 Sewer Televising	Develop sewer facilities data; analyze sewer system capacity; CCTV Program	\$ -	\$ -	\$ (270,000)	\$ -	\$ -	
4334	2019 Sewer Televising	Develop sewer facilities data; analyze sewer system capacity; CCTV Program	\$ 39,408	\$ -	\$ 270,000	\$ -	\$ -	
4348	2023 Sewer Televising	Develop sewer facilities data; analyze sewer system capacity; CCTV Program	\$ -	\$ 400,000	\$ 10,000	\$ 390,000	\$ -	Postponed to FY23/24
4353	2024 Sewer Televising	Develop sewer facilities data; analyze sewer system capacity; CCTV Program	\$ -	\$ -	\$ -	\$ 100,000	\$ 300,000	
4354	2025 Sewer Televising	Develop sewer facilities data; analyze sewer system capacity; CCTV Program	\$ -	\$ -	\$ -	\$ -	\$ 100,000	
4336	Francisco Blvd East at Medway & Vivian	Replace 950 LF of corrugated metal pipe. Included in City's sidewalk widening project.	\$ 25,076	\$ -	\$ -	\$ -	\$ -	
4337	Sewer Repl for Richmond-SR Bridge Impt	Replace 875LF of sewer between Grange and Bay Park Center for State's project.	\$ 721,653	\$ -	\$ -	\$ -	\$ -	
4338	Rehab. of Beach Sewers- Bayside Acres Ph A/B/C	Replace 2,800LF of sewer in beach community	\$ 189,768	\$ 1,250,000	\$ 1,560,000	\$ 725,000	\$ 1,000,000	PhA-completed in FY22/23; PhB-construct in FY23/24 and FY24/25; PhC-construct in FY 24/25
4339	Woodland Pl/Ave & Octavia	Replace 1,760LF of sewer; reroute Woodland Place.	\$ 1,279,316	\$ -	\$ -	\$ -	\$ -	
4340	Third St (4th to Mary)	Replace 1,790LF of sewer prior to City's Third Street Improvement Project.	\$ 119,909	\$ -	\$ 3,130,000	\$ 275,000	\$ -	
4327	Bret Harte Easement Wall Improvements	Replace/repair retaining wall in sewer easement.	\$ -	\$ 1,000,000	\$ 5,000	\$ 2,000,000	\$ 1,000,000	Begin design FY 22/23; Construct in FY 23/24 & FY24/25
4342	2020 Sewer Pipe Repair/Repl, ph 1/2/3	Replace 12,400 LF (2.3 mi) of sewer	\$ 450,162	\$ 500,000	\$ 1,500,000	\$ 4,750,000	\$ -	Ph 1 - FY 21/22; Ph 2 - FY22/23 & FY23/24 and no Ph3
4349	2021 Sewer Pipe Repair/Repl	Replace 7,000 LF of sewer	\$ 20,993	\$ 3,500,000	\$ 10,000	\$ -	\$ -	Revised to a Preliminary Design Study
4350	2022 Sewer Pipe Repair/Repl	Replace 7,000 LF of sewer	\$ -	\$ 500,000	\$ -	\$ -	\$ -	
4351	2023 Sewer Rehabilitation	Replace 13,000 LF (2.5 mi) of sewer	\$ -	\$ -	\$ 10,000	\$ 500,000	\$ 7,000,000	
4352	2024 Sewer Rehabilitation	Replace 13,000 LF (2.5 mi) of sewer	\$ -	\$ -	\$ -	\$ -	\$ 500,000	
4343	Fifth Ave, Ray Ct to Sirard Ln	Replace 1,450LF of sewer. Consider relocating from front yards to street.	\$ -	\$ 300,000	\$ -	\$ -	\$ -	Re-prioritized
4356	2023 Sewer Improvements- Various Locations	Sewer main improvements at 12 locations	\$ -	\$ -	\$ 10,000	\$ 1,900,000	\$ -	
4355	2023 Sewer Pipeburst	Replace 2,100 LF of sewer by pipe burst	\$ -	\$ -	\$ -	\$ 1,000,000	\$ -	
TBD	Miscellaneous Gravity Sewer	Replace unscheduled misc. sewer pipes and emergencies	\$ -	\$ 200,000	\$ 60,000	\$ 200,000	\$ 1,000,000	
TOTAL 80-YEAR LIFE-CYCLE PROGRAM			\$ 2,846,285	\$ 7,950,000	\$ 6,295,000	\$ 11,840,000	\$ 10,900,000	

SAN RAFAEL SANITATION DISTRICT
 BUDGET - FISCAL YEARS ENDING JUNE 30, 2024 AND 2025
 SUPPORTING SCHEDULE
 EXPENDITURE DETAILS

Acct. Code	Account Title	Description	Actual 2021-22	Budget 2022-23	Projected 2022-23	Proposed 2023-24	Proposed 2024-25	Comments
10-YEAR CAPITAL IMPROVEMENT PROGRAM								
4151	Force Main Condition Assessment	Develop data and analyze the condition of force mains	\$ -	\$ 100,000	\$ 100,000	\$ -	\$ -	
4148	South Francisco Pump Station	Upgrade pump station	\$ 6,873	\$ -	\$ -	\$ -	\$ -	
4154	Third Street & Fiberglass Pump Station	Upgrade pump station	\$ 155,548	\$ 1,000,000	\$ -	\$ 400,000	\$ 800,000	Split into 2 projects. This account is for Third St P.S. Fiberglass PS is Acct #4158 below
4155	N. Francisco & WRR Pump Station	Upgrade pump station	\$ 48,070	\$ 1,500,000	\$ 8,000	\$ 400,000	\$ 3,000,000	FY21/22 & FY22/23- Prelim Study for both PS. Starting FY23/24, split into 2 separate projects. This Account will become N. Francisco PS only. WRR PS is Acct#4157 below
4158	Fiberglass Pump Station	Upgrade pump station	\$ -	\$ -	\$ -	\$ 700,000	\$ 300,000	
4157	WRR Pump Station	Upgrade pump station	\$ -	\$ -	\$ -	\$ 200,000	\$ 1,500,000	
4345	Isolation Valve Replacement	Replace valves at 3 sites, i.e N. Fran PS, Pt San Pedro near Yacht Club and Glenwood PS	\$ 55,063	\$ -	\$ 80,000	\$ 350,000	\$ -	
4200	Miscellaneous projects		\$ 99,985	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	
TOTAL PUMP STATION & FORCE MAIN CAPITAL IMPROVEMENTS			\$ 365,539	\$ 2,800,000	\$ 388,000	\$ 2,250,000	\$ 5,800,000	
TOTAL CAPITAL IMPROVEMENTS			\$ 3,211,824	\$ 10,750,000	\$ 6,683,000	\$ 14,090,000	\$ 16,700,000	

SAN RAFAEL SANITATION DISTRICT
 BUDGET - FISCAL YEARS ENDING JUNE 30, 2024 AND 2025
 SUPPORTING SCHEDULE
 CENTRAL MARIN SANITATION AGENCY

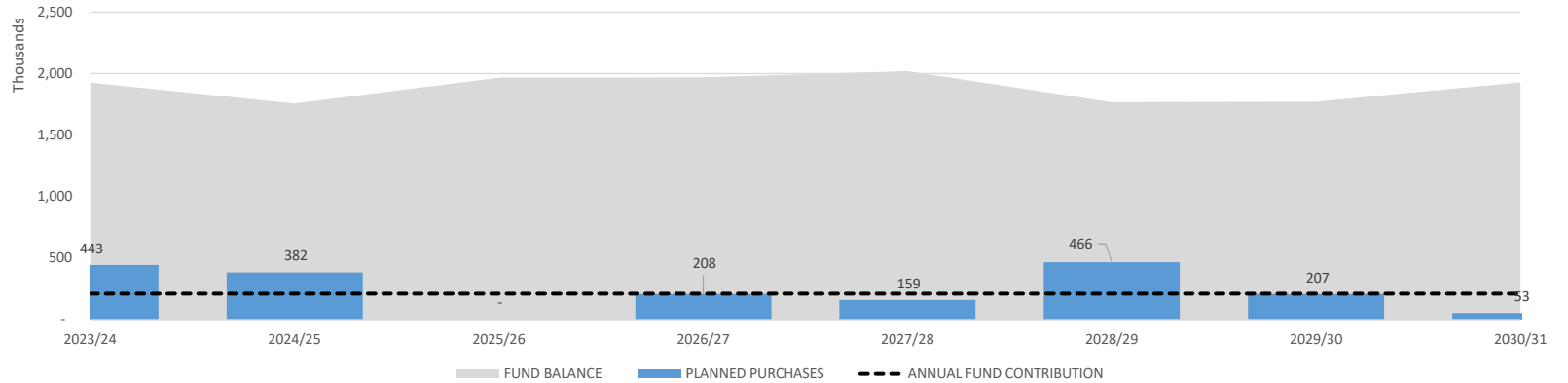
	Projected 2022-23	Proposed 2023-24	Proposed 2024-25
Sewer Treatment - Maintenance & Operations	\$ 5,626,260	\$ 5,957,225	\$ 6,294,323
Sewer Treatment - Debt Service	\$ 2,144,355	\$ 2,133,663	\$ 2,133,294
Total	\$ 7,770,615	\$ 8,090,888	\$ 8,427,617

SAN RAFAEL SANITATION DISTRICT
 BUDGET - FISCAL YEARS ENDING JUNE 30, 2024 AND 2025
 SUPPORTING SCHEDULE
 EQUIPMENT RESERVE AND EQUIPMENT ACQUISITION PLAN

EQUIPMENT ACQUISITION FUND & EXPENSE

METHODOLOGY

In order to stabilize the general fund, equipment purchases are estimated base on a 10-year projection, and 1/10th of that amount is reserved each budget year. Actual expenditures will draw from the reserve account.



Equipment description	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	10 Year Total	10 Year Avg
2011 Ford Escape Hybrid (from City)	47,000	-	-	-	-	-	-	-	-	-	47,000	4,700
Ford Truck F-250	48,000	-	-	-	-	-	-	-	-	-	48,000	4,800
Mobile Pump Godwin 4-inch	-	74,000	-	-	-	-	-	-	-	-	74,000	7,400
Godwin DRI-Prime CD225M Diesel Pump	-	-	-	92,000	-	-	-	-	-	-	92,000	9,200
Ingersoll-Rand Doosan G70 Trailer Mounted Diesel	-	-	-	52,000	-	-	-	-	-	-	52,000	5,200
I.R. Doosan G70 Trailer Mounted Diesel (PG Pump Stn)	-	-	-	52,000	-	-	-	-	-	-	52,000	5,200
Haulmark Emergency repair trailer	-	-	-	12,000	-	-	-	-	-	-	12,000	1,200
OK Champion Rodder Truck	-	-	-	-	-	329,000	-	-	-	-	329,000	32,900
Ford F250 2014	42,000	-	-	-	-	-	-	-	-	-	42,000	4,200
Doosan Generator G70	-	81,000	-	-	-	-	-	-	-	-	81,000	8,100
Doosan Generator G325-T4F	-	185,000	-	-	-	-	-	-	-	-	185,000	18,500
Chevy Silverado 2015	-	42,000	-	-	-	-	-	-	-	-	42,000	4,200
Emergency repair trailer	-	-	-	-	-	-	-	11,000	-	-	11,000	1,100
Ford F550 2017 with crane assembly install	-	-	-	-	89,000	-	-	-	-	-	89,000	8,900
Ford F350 2017 with radio	-	-	-	-	70,000	-	-	-	-	-	70,000	7,000
Closed circuit televised camera	69,000	-	-	-	-	-	-	-	-	-	69,000	6,900
Replace Odor Scrubber at West Railroad Pump Station	49,000	-	-	-	-	-	-	-	-	-	49,000	4,900
Water Truck	-	-	-	-	-	-	-	-	147,000	-	147,000	14,700
2021 Ford Escape Hybrid	-	-	-	-	-	-	-	42,000	-	-	42,000	4,200
PLANNED FIRST-TIME ACQUISITIONS												
Chassis replacement for 2011 OK Champion Rodder Truck	75,000	-	-	-	-	-	-	-	-	-	75,000	7,500
Equipment from 2011 OK Champion Rodder transferred to 2024 Chassis	65,000	-	-	-	-	-	-	-	-	-	65,000	6,500
REPLACEMENT OF FUTURE ACQUISITIONS												
Second Replacement of Chevy 3/4-ton pickup	-	-	-	-	-	-	52,413	-	-	-	52,413	5,241
Second Replacement of Chevy 1 1/2-ton pickup with equip	-	-	-	-	-	-	154,550	-	-	-	154,550	15,455
Second Replacement of Ford Truck F-250	48,000	-	-	-	-	-	-	-	-	-	48,000	4,800
PLANNED BEYOND BUDGET (anything with Year Replaced between 3-10 years out)												
REPLACEMENT of 2008 Ford Escape Hybrid	-	-	-	-	-	-	-	-	-	45,693	45,693	4,569
REPLACEMENT of Closed circuit televised camera	-	-	-	-	-	80,000	-	-	-	-	80,000	8,000
REPLACEMENT of Replace Odor Scrubber at West Railroad Pump Station	-	-	-	-	-	57,000	-	-	-	-	57,000	5,700
PLANNED PURCHASES	443,000	382,000	-	208,000	159,000	466,000	206,963	53,000	147,000	45,693	2,110,656	211,066
ANNUAL FUND CONTRIBUTION	211,066	211,066	211,066	211,066	211,066	211,066	211,066	211,066	211,066	211,066	2,110,656	211,066
FUND BALANCE	1,926,866	1,755,932	1,966,997	1,970,063	2,022,128	1,767,194	1,771,297	1,929,362	1,993,428	2,158,800		

SAN RAFAEL SANITATION DISTRICT
 BUDGET - FISCAL YEARS ENDING JUNE 30, 2024 AND 2025
 SUPPORTING SCHEDULE
 80-YEAR LIFE-CYCLE PROGRAM (GRAVITY SEWERS)

Project	Est. Cost	Projected	Projected	Projected	Projected
		2022-23	2023-24	2024-25	2025-26
2023 Sewer Televising	\$400,000	\$10,000	\$390,000		
2024 Sewer Televising	\$400,000		\$100,000	\$300,000	
2025 Sewer Televising	\$400,000			\$100,000	\$300,000
2020 Sewer Pipe Repair/Repl, ph 1/2/3	\$6,700,162	\$1,500,000	\$4,750,000		
2021 Sewer Pipe Repair/Repl	\$30,993	\$10,000			
2023 Sewer Rehabilitation	\$7,510,000	\$10,000	\$500,000	\$7,000,000	
2024 Sewer Rehabilitation	\$7,500,000			\$500,000	\$7,000,000
Rehab.of Beach Sewers-Bayside Acres Ph A/B/C	\$3,474,768	\$1,560,000	\$725,000	\$1,000,000	
Third St (4th to Mary)	\$3,524,909	\$3,130,000	\$275,000		
Bret Harte Easement Wall Improvements	\$3,005,000	\$5,000	\$2,000,000	\$1,000,000	
2023 Sewer Improvements-Various Locations	\$1,910,000	\$10,000	\$1,900,000		
2023 Sewer Pipeburst	\$1,000,000		\$1,000,000		
Miscellaneous Gravity Sewer	\$3,260,000	\$60,000	\$200,000	\$1,000,000	\$2,000,000
TOTAL EXPENDITURES (hide for rounding)		\$6,295,000	\$11,840,000	\$10,900,000	\$9,300,000
Rounding		\$0	\$0	\$0	\$0
TOTAL EXPENDITURES		\$6,295,000	\$11,840,000	\$10,900,000	\$9,300,000

Beginning Fund Balance	\$22,607,193	\$21,412,193	\$12,872,193	\$6,272,193
Transfers In from Operation	\$5,100,000	3,300,000	4,300,000	5,100,000
Estimated Expense	(\$6,295,000)	(\$11,840,000)	(\$10,900,000)	(\$9,300,000)
Ending Balance	\$21,412,193	\$12,872,193	\$6,272,193	\$2,072,193

SAN RAFAEL SANITATION DISTRICT
 BUDGET - FISCAL YEARS ENDING JUNE 30, 2024 AND 2025
 SUPPORTING SCHEDULE
 PUMP STATION & FORCE MAIN CAPITAL IMPROVEMENT PROGRAM

Project	Est. Cost	Estimated	Projected	Projected
		2022-23	2023-24	2024-25
CAPITAL IMPROVEMENT PROJECTS				
Force Main Condition Assessment	\$100,000	\$100,000		
N. Francisco & WRR Pump Station	\$3,456,070	\$8,000	\$400,000	\$3,000,000
WRR Pump Station	\$1,700,000		\$200,000	\$1,500,000
South Francisco Pump Station	\$6,873			
Third Street & Fiberglass Pump Station	\$1,355,548		\$400,000	\$800,000
Fiberglass Pump Station	\$1,000,000		\$700,000	\$300,000
Isolation Valve Replacement	\$485,063	\$80,000	\$350,000	
Miscellaneous projects	\$699,985	\$200,000	\$200,000	\$200,000
TOTAL CAPITAL EXPENDITURES		\$388,000	\$2,250,000	\$5,800,000

Beginning Fund Balance	\$8,211,410	9,823,410	\$7,823,410
Transfers In from Operation	\$2,000,000	\$250,000	\$250,000
Estimated Expense	(\$388,000)	(\$2,250,000)	(\$5,800,000)
Ending Balance	\$9,823,410	\$7,823,410	\$2,273,410

SAN RAFAEL SANITATION DISTRICT
 BUDGET - FISCAL YEARS ENDING JUNE 30, 2024 AND 2025
 SUPPORTING SCHEDULE
 NET POSITION DESIGNATED FOR WORKING CAPITAL

	2023-24		2024-25	
	Year	July - Dec	Year	July - Dec
Budgeted Expenditures for subsequent period				
Supplies and services	\$ 5,257,710	\$ 2,629,000	\$ 5,468,000	\$ 2,734,000
CMSA Treatment	6,294,323	3,147,000	6,515,000	3,258,000
CMSA Debt Service	2,133,294	1,664,000	2,208,000	1,740,000
Total designation for subsequent year expenditures to be made before December apportionment		<u>\$ 7,440,000</u>		<u>\$ 7,732,000</u>

SAN RAFAEL SANITATION DISTRICT
Agenda Item No. 4.b.

DATE: June 16, 2023

TO: Board of Directors, San Rafael Sanitation District

FROM: Doris Toy, District Manager/District Engineer

SUBJECT: Adopt Resolution Authorizing the District Manager/District Engineer to Execute a Professional Services Agreement with Park Engineering for Engineering and Inspection related services

RECOMMENDATION:

Adopt resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with Park Engineering for Engineering and Inspection related services not to exceed \$993,568.36.

BACKGROUND:

Since last year, District staffing has been unstable, due to various reasons, such as retirement, medical leave, paternity leave, and other employment. The following table is the current staffing status:

POSITIONS	STATUS	COMMENT
Administrative Analyst	Filled	Filled since December 2022
Administrative Assistant	Vacant	Interview Phase, Fill in Aug/Sept 2023
Senior Civil Engineer	Vacant	Vacant since Apr 2022, Recruiting
Associate Civil Engineer	Filled	Filled since Sept 2021
Junior/Assistant Engineer	Vacant	Vacant since May 2023, Begin recruit June 26
Construction Inspector	Vacant	Vacant since Jan 2023, Interviews, Fill in Aug/Sept 2023
	Consultant	At present, Park Engineering is filling-in
O&M Manager	Filled	
Sewer Maintenance Supervisor	Vacant	Vacant since Sept 2022; 1 sewer maintenance worker vacant Sept 2022-Feb 2023; at present unresolved union issue
Sewer Maintenance Worker (8 FTE)	Filled	Filled since Feb 2023

ANALYSIS:

At present, the District does not have sufficient staffing to cover the capital improvement projects (CIP). Only the District Manager, Associate Civil Engineer, and the Operations & Maintenance Manager are working on CIP's. Fortunately, most of the projects are in the design phase. Please see the attached, "Capital Improvement Projects/Staff Schedule," which shows the staffing level for each of the projects until June 2025. Park Engineering has provided a full-time inspector (and part-time inspector as needed) for the 2020 Sewer Pipe Repair and Replacement, Phase 2, and sewer permit inspections. However, District will need assistance for constructability plan review during the design of some of the projects and construction management and inspection during construction.

Staff have explored assistance from consultants and found Park Engineering is able to provide some of its staff. Jaemin Park, who has 29 years of civil engineering experience and owner of Park Engineering, can provide part-time assistance with constructability (plan) reviews and construction management; and its current inspector, Rhea Bernardo, will continue to work on District projects along with another inspector, Paul Kelly, who retired from Central Contra Costa Sanitary District. Thus, there will be one part-time engineer and two full-time inspectors from July 2023 to December 2024. Park Engineering is also flexible in the workload and projects due to District's future staffing. The scope of work is described in detail in Park Engineering's proposal, which is attached as Exhibit "A".

Park Engineering proposes to perform the engineering and inspection related services on a time-and-materials basis from July 2023 to December 2024, with a not to exceed \$993,568.36.

FISCAL IMPACT:

Park Engineering's one part-time engineer and two full-time inspectors will cost up to \$993,568.36 and will be funded from the 80-Year Life Cycle Sewer Replacement Program for Fiscal Years 2023-24 and 2024-25.

ACTION REQUIRED:

Staff recommends that the Board adopt the resolution authorizing the District Manager/District Engineer to execute a Professional Services Agreement with Park Engineering for engineering and inspection related services, not to exceed \$993,568.36.

Attachments: Capital Improvement Projects/Staff Schedule
Resolution
Professional Services Agreement
Proposal from Consultant, Exhibit "A"

**CAPITAL IMPROVEMENT PROJECTS/STAFF SCHEDULE
MAY 2023 TO JUNE 2025**

CIP PROJECTS	STAFF	CONSULTANT	2022-23		2023-24												2024-25											
			MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN 2024	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN2025	FEB	MAR	APR	MAY	JUN
Third St Sewer Improvement	Doris, Kris, Tim	CSW/KimleyHorn																										
Miramar/Miraflores	Doris, Kris, Tim	CSW		Bid		Need inspection only																						
2020 Sewer Pipe Repair/Replac, PH2	David, Kris, Tim	Schaaf & Wheeler				Park Eng Inspector @ present																						
Bret Harte Easement Retaining Wall	Doris, Kris, TBD	Miller Pacific Eng				Constructability Review					Bid		CM & Inspection															
2023 Sewer Improvements-Variou Location	Doris, Kris, TBD	Kimley-Horn				Constructability Review					Bid		CM & Inspection															
Sewer Televising 2023	Doris, TBD	CalCAD		Bid																								
Bayside Acres Beach Sewer Relocation, PhB	Doris, Kris, TBD	Nute			Bid-PhB1		CM & Inspection				Bid-PhB2			Bid-PhB3		CM & Inspection		Bid-Ph4		CM & Inspection								
2022 Sewer Pipe Burst	Doris, Kris, TBD	Tim (in-house design)		Bid			CM & Inspection																					
2022 Spot Paving	Doris, Kris, TBD	Tim (in-house design)		Bid			CM & Inspection																					
2023 Sewer Rehabilitation*	Doris, Kris, TBD	Schaaf & Wheeler												Bid														
Isolation Valves Replacement	Doris, Kris, TBD	Ewers			Bid		CM & Inspection																					
Third St Pump Station Impts	Doris, Kris, Tim	Nute									Bid		Equip Procurement															
Fiberglass Pump Station Impts	Doris, Kris, Tim	Nute					Bid						Equip Procurement															
N Fran/W Railroad PS PreDesign Study	Doris, Kris	Nute																										
N. Francisco PS Impts	Doris, Kris	Nute						Bid					Equip Procurement															
W Railroad PS Impts	Doris, Kris	Nute													Bid													
Pump Station & Force Main CIP Plan Study	Doris, Kris	Nute																										

CM & Inspection/ Inspection only - propose consultant assistance

Design & % Submittal dates
Bid
Construction
Construction & Inspection by consultant

SAN RAFAEL SANITATION DISTRICT

RESOLUTION NO. 23-1271

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN RAFAEL SANITATION DISTRICT AUTHORIZING THE DISTRICT MANAGER/DISTRICT ENGINEER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH PARK ENGINEERING, INC., FOR ENGINEERING AND CONSTRUCTION INSPECTION RELATED SERVICES FOR VARIOUS PROJECTS AS SPECIFIED BY THE DISTRICT NOT TO EXCEED \$993,568.36

THE BOARD OF DIRECTORS OF THE SAN RAFAEL SANITATION DISTRICT, COUNTY OF MARIN, hereby resolves as follows:

The District Manager/District Engineer is hereby authorized to execute, on behalf of the San Rafael Sanitation District, a Professional Services Agreement with Park Engineering, Inc., for Engineering and construction Inspection related services for Various Permit Compliance Projects as specified by the District, a copy of which is hereby attached and by this reference made a part hereof.

PASSED AND ADOPTED at a Special Meeting of the San Rafael Sanitation District Board of Directors held on the 16th day of June 2023 by the following vote, to wit:

AYES:

NOES:

ABSENT/ABSTAIN:

SAN RAFAEL SANITATION DISTRICT

Kate Collins, Chair

ATTEST:

Maribeth Bushey, Acting Secretary

PROFESSIONAL SERVICES AGREEMENT
WITH PARK ENGINEERING, INC., FOR ENGINEERING AND CONSTRUCTION
INSPECTION RELATED SERVICES FOR VARIOUS PROJECTS AS SPECIFIED BY THE
DISTRICT NOT TO EXCEED \$993,568.36

This Agreement is made and entered into this 16TH day of June 2023 by and between the SAN RAFAEL SANITATION DISTRICT (hereinafter "DISTRICT"), and PARK ENGINEERING, INC. (hereinafter "CONSULTANT").

RECITALS

WHEREAS, the DISTRICT has selected PARK ENGINEERING, INC., to perform the required construction inspection related services for various projects (hereinafter "PROJECT"); and

WHEREAS, the CONSULTANT has offered to render certain specialized professional services in connection with this Project.

AGREEMENT

NOW, THEREFORE, the parties hereby agree as follows:

1. DEFINITIONS.

DISTRICT and CONSULTANT have outlined the scope of services to be provided, and related expenses as described in Exhibit "A" attached and incorporated herein.

2. PROJECT COORDINATION

A. DISTRICT. The District Manager/District Engineer shall be the representative of the DISTRICT for all purposes under this Agreement. The District Manager/District Engineer is hereby designated as the PROJECT MANAGER for the DISTRICT and said PROJECT MANAGER shall supervise all aspects of the progress and execution of this Agreement.

B. CONSULTANT. CONSULTANT shall assign a single PROJECT DIRECTOR to have overall responsibility for the progress and execution of this Agreement for CONSULTANT. JAEMIN PARK is hereby designated as the PROJECT DIRECTOR for CONSULTANT. Should circumstances or conditions subsequent to the execution of this Agreement require a substitute PROJECT DIRECTOR for any reason, the CONSULTANT shall notify the DISTRICT within ten (10) business days of the substitution.

3. DUTIES OF CONSULTANT

CONSULTANT shall perform the duties and/or provide services as follows; the CONSULTANT agrees to provide professional services as a Construction Inspection Consultant to provide services outlined in the Proposal from CONSULTANT dated June 13, 2023, marked Exhibit "A", attached hereto, and incorporated herein by this reference. The CONSULTANT agrees to be available and perform the work as required by the District.

4. DUTIES OF THE DISTRICT

DISTRICT shall perform the duties as described and incorporated herein.

5. COMPENSATION

For the full performance of the services described herein by CONSULTANT, DISTRICT shall pay CONSULTANT on a time and materials basis for services rendered in accordance with the rates shown on the current fee schedule as described in Exhibit "A" attached and incorporated herein. The total payment will not exceed the \$18,588.00 as shown on the Proposal Budget, set out in Exhibit "A".

Payment will be made monthly upon receipt by PROJECT MANAGER of itemized invoices submitted by CONSULTANT.

6. TERM OF AGREEMENT

The term of this Agreement shall be from the date of execution until the Project is complete.

7. TERMINATION

A. Discretionary. Either party may terminate this Agreement without cause upon thirty (30) days written notice mailed or personally delivered to the other party.

B. Cause. Either party may terminate this Agreement for cause upon ten (10) days written notice mailed or personally delivered to the other party, and the notified party's failure to cure or correct the cause of the termination notice, to the reasonable satisfaction of the party giving such notice, within thirty (30) days of the receipt of said notice.

C. Effect of Termination. Upon receipt of notice of termination, neither party shall incur additional obligations under any provision of this Agreement without the prior written consent of the other.

D. Return of Documents. Upon termination, any and all DISTRICT documents or materials provided to CONSULTANT and any and all of CONSULTANT's documents and materials prepared for or relating to the performance of its duties under this Agreement, shall be delivered to DISTRICT as soon as possible, but not later than thirty (30) days after termination.

8. OWNERSHIP OF DOCUMENTS

The written documents and materials prepared by the CONSULTANT in connection with the performance of its duties under this Agreement shall be the sole property of DISTRICT. DISTRICT may use said property for any purpose, including projects not contemplated by this Agreement.

9. INSPECTION AND AUDIT

Upon reasonable notice, CONSULTANT shall make available to DISTRICT, or its agent, for inspection and audit, all documents and materials maintained by CONSULTANT in connection with its performance of its duties under this Agreement. CONSULTANT shall fully cooperate with DISTRICT or its agent in any such audit or inspection.

10. ASSIGNABILITY

The parties agree that they shall not assign or transfer any interest in this Agreement nor the performance of any of their respective obligations hereunder, without the prior written consent of the other party, and any attempt to so assign this Agreement or any rights, duties or obligations arising hereunder shall be void and of no effect.

11. INSURANCE

A. During the term of this Agreement, CONSULTANT shall maintain, at no expense to DISTRICT, the following insurance policies:

1. A commercial general liability insurance policy in the minimum amount of one million (\$1,000,000) dollars per occurrence and \$2,000,000 aggregate for death, bodily injury, personal injury, or property damage;

2. An automobile liability (owned, non-owned, and hired vehicles) insurance policy in the minimum amount of one million (\$1,000,000) dollars per occurrence;

3. If any licensed professional performs any of the services required to be performed under this Agreement, a professional liability insurance policy in the minimum amount of one million (\$1,000,000) dollars to cover any claims arising out of the CONSULTANT's performance of services under this Agreement.

B. The insurance coverage required of the CONSULTANT by Section 11. A., shall also meet the following requirements:

1. The insurance shall be primary with respect to any insurance or coverage maintained by DISTRICT and shall not call upon DISTRICT's insurance or coverage for any contribution;

2. Except for professional liability insurance, the insurance policies shall be endorsed for contractual liability and personal injury;

3. Except for professional liability insurance, the insurance policies shall be specifically endorsed to include the DISTRICT, its officers, agents, and employees as additionally named insureds under the policies;

4. CONSULTANT shall provide to PROJECT MANAGER, (a) Certificates of Insurance evidencing the insurance coverage required herein, and (b) specific endorsements naming DISTRICT, its officers, agents and employees, as additional insureds under the policies;

5. The insurance policies shall provide that the insurance carrier shall not cancel or terminate said insurance policies except upon thirty (30) days written notice to DISTRICT's PROJECT MANAGER;

6. If the insurance is written on a Claims Made Form, then, following termination of this Agreement, said insurance coverage shall survive for a period of not less than five years as long as the insurance is reasonably affordable and available;

7. The insurance policies shall provide for a retroactive date of placement coinciding with the effective date of this Agreement;

8. The insurance shall be approved as to form and sufficiency by PROJECT MANAGER and the County Counsel.

C. If it employs any person, CONSULTANT shall maintain Workers' Compensation and Employer's Liability Insurance, as required by the State Labor Code and other applicable laws and regulations, and as necessary to protect both CONSULTANT and DISTRICT against all liability for injuries to CONSULTANT's officers and employees.

D. Any deductibles or self-insured retentions exceeding \$20,000 in CONSULTANT's insurance policies must be declared to and approved by the PROJECT MANAGER and the County Counsel. At District's option, the deductibles or self-insured retentions with respect to DISTRICT shall be reduced or eliminated to DISTRICT's satisfaction, or CONSULTANT shall procure a bond guaranteeing payment of losses and related investigations, claims administration, attorney's fees, and defense expenses.

12. INDEMNIFICATION

CONSULTANT shall indemnify, release, and hold harmless DISTRICT, its officers, and employees against any claim, demand, suit, judgment, loss, liability, or expense of any kind, including attorney's fees, arising out of or resulting in any way from any negligent acts or omissions or negligence of CONSULTANT or CONSULTANT's officers, agents, and employees in the performance of their duties and obligations under this Agreement.

13. NONDISCRIMINATION

CONSULTANT shall not discriminate, in any way, against any person on the basis of age, sex, race, color, religion, ancestry, national origin or disability in connection with or related to the performance of its duties and obligations under this Agreement.

14. COMPLIANCE WITH ALL LAWS

CONSULTANT shall use due professional care to observe and comply with all applicable Federal, State and local laws, ordinances, codes, and regulations in the performance of its duties and obligations under this Agreement. CONSULTANT shall perform all services under this Agreement in accordance with these laws, ordinances, codes, and regulations.

15. NO THIRD PARTY BENEFICIARIES

DISTRICT and CONSULTANT do not intend, by any provision of this Agreement, to create in any third party any benefit or right owed by one party, under the terms and conditions of this Agreement, to the other party.

16. NOTICES

All notices and other communications required or permitted to be given under this Agreement, including any notice of change of address, shall be in writing and given by personal delivery or deposited with the United States Postal Service, postage prepaid, addressed to the parties intended to be notified. Notice shall be deemed given as of the date of personal delivery or, if mailed, upon the date of deposit with the United States Postal Service. Notice shall be given as follows:

TO DISTRICT: Ms. Doris Toy, P.E. (Project Manager)
San Rafael Sanitation District
111 Morpew Street
San Rafael, CA 94901

TO CONSULTANT: Mr. Jaemin Park, P.E. (Project Director)
Park Engineering, Inc.
372 Village Square
Orinda, CA 94563

17. INDEPENDENT CONSULTANT

For the purposes and for the duration of this Agreement, CONSULTANT, its officers, agents, and employees shall act in the capacity of an Independent Contractor, and not as employees of the DISTRICT. CONSULTANT and DISTRICT expressly intend and agree that the status of CONSULTANT, its officers, agents, and employees be that of an Independent Contractor and not that of an employee of DISTRICT.

18. ENTIRE AGREEMENT -- AMENDMENTS

A. The terms and conditions of this Agreement, all exhibits attached, and all documents expressly incorporated by reference represent the entire Agreement of the parties with respect to the subject matter of this Agreement.

B. This written Agreement shall supersede any and all prior agreements, oral or written, regarding the subject matter between the CONSULTANT and the DISTRICT.

C. No other agreement, promise, or statement, written or oral, relating to the subject matter of this Agreement shall be valid or binding except by way of a written amendment to this Agreement.

D. The terms and conditions of this Agreement shall not be altered or modified except by a written amendment to this Agreement signed by the CONSULTANT and the DISTRICT.

E. If any conflicts arise between the terms and conditions of this Agreement and the terms and conditions of the attached exhibits or the documents expressly incorporated by reference, the terms and conditions of this Agreement shall control.

19. SET-OFF AGAINST DEBTS

CONSULTANT agrees that DISTRICT may deduct from any payment due to CONSULTANT under this Agreement any monies which CONSULTANT owes DISTRICT under any ordinance, agreement, contract, or resolution for any unpaid taxes, fees, licenses, assessments, unpaid checks, or other amounts.

20. WAIVERS

The waiver by either party of any breach or violation of any term, covenant, or condition of this Agreement or of any ordinance, law, or regulation, shall not be deemed to be a waiver of any other term, covenant, condition, ordinance, law, or regulation or of any subsequent breach or violation of the same or other term, covenant, condition, ordinance, law or regulation. The subsequent acceptance by either party of any fee, performance, or other consideration which may become due or owing under this Agreement, shall not be deemed to be a waiver of any preceding breach or violation by the other party of any term, condition, or covenant of this Agreement or any applicable law, ordinance, or regulation.

21. CITY BUSINESS LICENSE/OTHER TAXES

CONSULTANT shall obtain and maintain during the duration of this Agreement a CITY business license as required by the San Rafael Municipal Code. CONSULTANT shall pay any and all State and Federal taxes and any other applicable taxes. CONSULTANT's taxpayer identification number is 46-3675877, and CONSULTANT certifies under penalty of perjury that said taxpayer identification number is correct.

22. APPLICABLE LAW

The laws of the State of California shall govern this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day, month and year first above written.

SAN RAFAEL SANITATION DISTRICT

CONTRACTOR

Doris Toy, P.E.
District Manager/District Engineer

PARK ENGINEERING, INC.

APPROVED AS TO FORM:

By: _____
Jaemin Park, P.E.

Kerry Laiw Gerchow
Deputy County Counsel

Title: President



June 13, 2023

Doris Toy
District Manager / District Engineer
San Rafael Sanitation District
111 Morphew Street
San Rafael, CA 94901

RE: Proposal for Construction Management & Inspection Services for
Multiple CIP and Maintenance Projects

Dear Doris,

Park Engineering, Inc. is pleased to submit personnel qualifications and a related cost proposal to provide construction management and inspection services for multiple CIP and maintenance projects as specified by the District. We appreciate the opportunity to continue working with the Sanitation District.

As discussed through various conversations, the District is in need of a part-time construction manager and 2 full-time construction inspectors to assist in sewer-related capital improvement projects and limited part time inspection for permit compliance. The various projects will share a part-time construction manager with the full-time inspectors monitoring multiple projects for contract compliance and documentation of activities. I am proposing **Jaemin Park**, PE, as the part-time construction manager and **Rhea Bernardo and Paul Kelly** as the construction inspectors. Jaemin will manage some of the various projects as the construction manager, working closely with District personnel, and also assist with upcoming District projects with Constructability Reviews and other various project manager services prior to construction. Rhea and Paul will work on multiple projects for contract compliance and work closely with Jaemin and/or District personnel throughout each of the various project efforts.

Our team can meet the challenges anticipated for the varied scope of work of the multiple projects detailed by the District. We will ensure that the work is successfully completed and documented in accordance with the District's and all local requirements and regulations. Our team has the necessary technical expertise, as well as the soft skills required to complete this assignment successfully and efficiently. Team resumes and a proposed cost estimate are included for your information and review. Hours can be adjusted as needed to fit the needs of the assignments and the District.

Orinda Office
372 Village Square
Orinda, CA 94563
Tel: 925-257-2508
Fax: 925-401-7030

Should you have any questions or need additional information, please do not hesitate to contact me. I can be reached at 372 Village Square, Orinda, CA 94563, E-mail: spatterson@park-eng.com and Cell: (510) 701-0319.

Emeryville Office
3960 Adeline Street, #3
Emeryville, CA 94608
Tel: 925-257-2508
Fax: 925-401-7030

Sincerely,

A handwritten signature in blue ink that reads "Steve Patterson".

Steve Patterson, P.E.
Vice President

3. PROFESSIONAL EXPERIENCE

SUMMARY OF EXPERIENCE and CAPABILITIES

Company Profile

Park Engineering, Inc. was founded in 2013 with the vision of providing high quality construction management, construction inspection, program/project management, project controls, and contract administration services to public agencies on transportation and infrastructure projects.

The firm's guiding principle is to add value to public agencies by furnishing high level technical resources and expertise. Our approach combines highly developed engineering and management capabilities with proven problem solving and relationship building skills.

Park Engineering specializes in providing construction management, construction inspection, program/project management and contract administration services on projects with federal, state, bond, grant and other specialty funding requiring coordination with and audits by, Caltrans, FHWA and other oversight agencies.

Certifications

State of California CUCP DBE (No. 41711)

State of California DGS SBE (No. 1757722)

State of California PUC MBE (No. 17000825)

Services

- Construction management
- Construction Inspection
- Project management / program management
- Resident engineering
- SWPPP implementation and inspection
- Scheduling and schedule control
- Cost estimating and cost control
- Utility coordination
- Claims analysis, negotiation and resolution support
- Value engineering
- Permit compliance
- Constructability and bid-ability review
- Bid advertisement and award process
- Staff augmentation
- Federal and state audit support
- Federal fund reimbursement and project closeout

Year Founded	2013
Form of Organization	Corporation
Location of Offices	Headquarters: Orinda, CA Additional Office: Emeryville, CA
Number of Employees	4 Project Managers/ Resident Engineers 18 Construction Inspectors
Terminated Contracts	None

Our key personnel have experience delivering projects of this nature for transportation and local agencies that include new roadway and existing street improvements for public agency and private development projects. In addition, we have extensive experience with administering construction projects that receive funding from multiple sources, including FHWA funds. We have the skills necessary to ensure thorough reporting and strict adherence to federal guidelines.



JAEMIN PARK, P.E., PROJECT MANAGER/RESIDENT ENGINEER**Years of Experience**

29

Education

B.S. Civil Engineering, Cal Poly Pomona 1992

Licenses and Registrations

Professional Engineer: California, #C54476, 1995

Licensed General Contractor #770073, California 1999

Key Qualifications

Jaemin has 29 years of experience providing project management, construction management, construction administration, and design of highway, bridge, building and public works infrastructure projects throughout California. He has worked with state, regional and local agencies in the capacity of project principal, project manager, resident engineer, structures representative, construction inspector, project engineer, and design engineer. He has contributed to numerous constructability/bidability reviews and value engineering studies. He has provided claims analysis, mitigation and resolution support to state, regional and local agencies. Jaemin is an expert in federally funded projects including HBP, HBRR, ARRA, SRTS, NTPP, and TIGER funds.

Representative Project Experience

- **2013/2014 and 2014/2015 Sanitary Sewer Rehabilitation Project, City of Emeryville, CA**
Jaemin is the Project Manager and Resident Engineer for this \$2 million project that consists of rehabilitation of existing sewer mains and laterals on major roads throughout the City. Specific items of work include locating and potholing utilities, traffic control, excavation, sewer pipe installation, pipebursting, manhole construction, manhole rehabilitation, sewer lateral abandonment, video inspection, sewer flow diversion, dewatering, soil disposal, trench shoring, pavement restoration, and pavement delineation. Pipe bursting work involves replacing existing 4" and 6" laterals and 8" and 12" mains with HDPE pipe with butt fusion welded joints. Additional work includes open cut excavation and installation of 14" and 22" mains with butt fusion welded HDPE pipe. The project also involves jacking and boring a 36" steel casing, using a micro tunneling method and installing a 22" HDPE main under an existing bridge on Powell Street, which is the busiest street in Emeryville.
- **Sanitary Sewer Rehabilitation on Shellmound Street, 62nd Street, 63rd Street, and Overland Avenue, City of Emeryville, CA**
Jaemin was the Project Manager and Resident Engineer for this \$1.2 million project that consisted of rehabilitation of existing sewer mains and manholes on four streets in the City. Specific items of work include locating and potholing utilities, traffic control, excavation and shoring, sewer pipe installation manhole construction and rehabilitation, pipe bursting, sewer lateral abandonment, video inspection, sewer flow diversion, dewatering, soil disposal, pavement restoration, and pavement delineation. Pipe replacement work included 4", 6" and 8" pipe bursting with HDPE pipe, 12", 15", 21" and 24" VCP installation by open cut, and 4", 8", 12", 18" and 24" HDPE pipe installation by open cut. Additional work included point repairs of existing sewer mains, rehabilitation of existing manholes and installation of new manholes.
- **San Pablo Avenue Complete Streets Project (Federally Funded), City of San Pablo, CA**
Jaemin is the Project Manager and Resident Engineer for this \$5.3 million federally funded project complete streets project, which is a roadway improvement project including streetscape and pavement rehabilitation. The Project is located along San Pablo Avenue between Rivers Street and Hilltop Drive. The project is to improve San Pablo Avenue for all roadway users by adding Class 2

bike lanes in both directions of travel, constructing sidewalk along the western side of San Pablo (southbound direction) from Rivers Street to Hilltop Drive and from Rivers Street to Lancaster Drive along the eastern side (northbound direction). Existing traffic signals at all intersections will be replaced or modified and a new signalized intersection at La Puerta will be constructed. Two new retaining walls will be constructed from Rivers to Lancaster and a new soil nail wall will be constructed just north of Robert Miller Drive to allow the roadway to be widened sufficiently to accommodate the new facilities for non-motorized roadway use. Additional improvements include storm drains, new electrical, standard and decorative street lighting, new trees and landscaping, and grinding and HMA overlay of majority of the roadway. The project limits are in both the City of San Pablo and City of Richmond, requiring coordination with both cities.

- **John Daly Boulevard Streetscape Improvements Project (federally funded), City of Daly City, CA**
Jaemin was the Resident Engineer/Project Manager for this \$3.3 million federally funded streetscape improvements project that includes roadway modifications, installation of a concrete walkway, ADA compliant ramps, landscaping, irrigation using recycled water, bioswales, Class II bicycle lanes, and pedestrian amenities such as benches and trash/recycling receptacles. The project narrowed the center median, installed streetlights on the outside medians, installed new decorative street lights for the pedestrian walkway, modified traffic signals at three intersections, repaired base sections of roadway with deep lift HMA, resurfaced the entire length of the project with HMA, installed new striping and decorative stamped AC crosswalks. The project required coordination with Caltrans, Samtrans, SF MUNI, utility companies, and various departments within the City.
- **Contra Costa Boulevard Improvements and Pavement Rehabilitation Project (Federally Funded), City of Pleasant Hill, CA**
Jaemin was the Project Manager and Resident Engineer for this \$4.7 million project funded through three federal HSIP and STP grant funds and CCTA measure J grant fund. The project constructs traffic safety, roadway and other “Complete Street” improvements, including full depth pavement restoration, intersection and traffic signal upgrades, bike lanes, enhanced sidewalks and crosswalks, new irrigation and landscaping, and decorative street median and pedestrian lighting along a mile long section of the main arterial through a commercial district. The project required administration in accordance with Caltrans Local Assistance Procedures Manual and was subject to both Caltrans FHWA audits.
- **Golf Club Road Bridge Replacement (Federally funded), City of Pleasant Hill, CA**
Jaemin is the Project Manager and Resident Engineer for this \$4.5 million project that consists of replacing Golf Club Road Bridge over Grayson Creek, a multi-span concrete bridge on wood supports, with a new concrete slab bridge on concrete pile extensions. The project also includes street improvements with full depth structural section replacement with new base and AC paving, decorative street lighting, enhanced architectural features, color concrete for bridge, curb & gutter, sidewalk and median island. The project funded by federally HBP program and CCTA measure J grant fund, requiring contract administration in accordance with Caltrans Local Assistance Procedures Manual and subject to Caltrans audits.
- **Kirker Pass Road Northbound Truck Climbing Lane Project (Federally Funded), Contra Costa County**
Jaemin was the Structure Representative for this \$14 million federally funded project that constructed a truck climbing lane in the northbound direction. The project is approximately 1 mile in length, beginning at the Concord Pavilion and ending at the northern Hess Road intersection. Road widening required multiple retaining walls due to the existing slopes and drainage adjacent to the roadway. The project also included pavement rehabilitation on the north and south bound lanes between the City of Concord/ County limits to approximately 4,200 feet north of North Hess Road for a total of about 1.6 miles. The total project length is about 2 miles. The project was funded by Federal grants, State SB1 funds, and local County funds.

RHEA BERNARDO, CONSTRUCTION ENGINEER/CONSTRUCTION INSPECTOR**Years of Experience**

20

Education

B.S. Civil Engineering, Mapua Institute of Technology, 2000

Certifications and Training

Registered Professional Civil Engineer, Philippines

Key Qualifications

Rhea Bernardo has spent over 20 years in the engineering and construction industry working as design engineer, construction manager, and construction inspector for building and roadway construction projects for private entities and public agencies. She has extensive knowledge and experience with building codes as well as Caltrans standards. She is proficient in the execution of construction contracts, at the city, state, and federal levels. Her experience includes oversight for projects that include roadway reconstruction and rehabilitation, new and existing city intersection and streetscape construction/rehabilitation, underground utilities, structural components of large office buildings, condominiums, hotels and apartments. She can work independently with the contractor and as a member of a team to get the project to a successful completion.

Project Experience

- **Dublin Blvd Pavement Rehabilitation Project (federally funded), City of Dublin, CA**

Rhea was the Construction Inspector for this \$3.5M federally funded project which included street resurfacing of approximately 1 mile of Dublin Boulevard between Scarlett Drive and Hacienda Drive. Work included curb ramp replacements, cold planning and overlay, dig-out repair, pavement markings, adjusting utilities to grade, and modifications to traffic signals, including adding traffic cameras. Dublin Blvd is one of the City's main commute corridors, with three lanes in each direction with left and right turn lanes and bike lanes and is heavily congested. Ensuring the contractor was following approved traffic control plans was extremely important.
- **Dublin Citywide Energy Upgrades Project, City of Dublin, CA**

Rhea was the construction inspector on this \$25M design/build project that involves the design/builder to perform an Investment Grade Audit and develop and implement approved energy projects throughout the City. The individual projects to improve energy efficiency in the City included: Solar panels at ten sites plus battery storage at four locations

 - Replacement of aging generators for emergency back-up power
 - Back-up power for 22 traffic signals using either hydrogen fuel cells or lithium-ion batteries
 - Building energy efficiency upgrades, including replacement of older heating and air conditioning systems at eight sites to more efficient models combined with smart controls
 - LED lighting replacements at 15 locations
 - New electric vehicle charging stations at the Dublin Sports Grounds and Public Safety Complex.
- **Imola Ave/SR-29 Bus Improvements, Napa Valley Transportation Authority, CA**

Rhea was the construction inspector on the Imola Ave Bus Improvements project. The project is a \$2.2M locally funded project that included widening of the northbound off ramp and southbound SR-29 on ramp to construct new bus/transit stops. Improvements included new concrete curb, gutter & sidewalk, HMA paving of the ramps and the parking area, pedestrian lighting, landscaping & irrigation, and traffic signal upgrades.

- **Building Blocks Enterprise (111 successful projects) – Binangonan, Rizal, Philippines**
Rhea was the president of Building Blocks Enterprise overall in-charge of construction process, from planning, design, construction, and project closeout.
 - Supervised construction of real estate land developments and renovation projects such as: 4-story commercial-residential building (2.5 acres), private vacation resort (1.5 acres), various residential projects, condominium unit upgrades and interior design, landscaping with swimming pools, fountains, man-made pond and other water features, commercial kiosk fabrication, and woodworking.
 - Managed eight teams of full-time and part-time professionals and skilled workers - engineers, architect, and interior designer.
 - Resolved issues and recommended actions based on production and compliance reports.
 - Achieved under-budget and on-time project management to adhere to project goals.
- **Megaworld Corporation (Commercial Division), Mandaluyong City, Philippines**
Rhea was Building Administrator of Megaworld managed property: California Garden Square (249.6 acres mixed-use development complex)
 - Established effective operations management and technical engineering systems for the property.
 - Kept properties in compliance with local, state and federal regulations.
 - Discussed property projects and developments, leasing status, and marketing strategies as well as property and engineering concerns with the Megaworld Corporation Commercial Division president and committee members, and developed strategic resolutions.
 - Developed annual operating budgets and forecasts, as well as sales and marketing plans.
 - Conducted inspections of property grounds, buildings and equipment to identify maintenance concerns and direct timely repairs.
 - Maximized rental income while minimizing expenses through effective planning and control.
 - Communicated effectively with owners, tenants, and on-site associates.
 - Introduced and monitored effective lease renewal programs to maintain high occupancy rates.
 - Collected and maintained careful records of rental payments and payment dates.
 - Generated professional networks by engaging in professional, industry and government organizations.
 - Managed property documents for permanent records and regulatory requirements.
 - Responded to Common Area Maintenance (CAM) inquiries.
 - Delivered emergency 24-hour on-call service for tenants on building issues.

PAUL KELLY, SENIOR CONSTRUCTION INSPECTOR**Years of Experience**

39

Education

High School Diploma, Alhambra High School, 1985

Certifications and Training

Confined Space Certified

First Aid/CPR

Competent Person Training

Key Qualifications

Paul Kelly has 39 years of experience working on sanitary infrastructure projects with extensive experience working for Central Contra Costa Sanitary District (CCCSD). He spent over 24 years with construction inspection for development and capital projects and over 15 years on maintenance and service of sanitary systems. Paul has experience in installation and inspection of residential and commercial projects including sewer, storm drain, pump stations, bridges, creek crossings, hospitals, recycled water treatment and roadway construction. He is proficient in the execution of construction plans and contracts, as well as construction inspection at the county and state level. Paul is experience with Inspection of sewer lines from 4" to 120", pump stations, residential and commercial lines, forced pumped main line multiple-user, lower pressure sewer systems, manhole installation, pipe bursting, installation of reclaimed water lines ¾" to 10 "and meter installations. He also has extensive experience with concrete work including cast in place and precast manholes, grease interceptors, traps, sand-oil interceptors, and concrete mix designs. Paul has experience with earth work and pavement renovation including grading, backfill and compactions, curb, gutter and sidewalk, and HMA paving. He has performed inspections for acceptance including air and hydrostatic testing, video inspections of sewer and storm drain lines. He has expertise with directional boring and micro tunneling, jack and bore installations, pipe bursting, slip lining, and CIPP for sewer lines.

Representative Project Experience:

- **Broadway Plaza - Walnut Creek, CA.**

Paul worked on a very challenging design/ build and rebuild of the whole sewer system for Broadway Plaza corridor. He coordinated with all agencies to ensure proper installation of all new utilities and rehabilitation of existing infrastructure. He was able to facilitate the redesign of several mainline and commercial laterals to meet the design of the entire plaza itself, including installation of several grease interceptors and had to run laterals under the podium of the Walnut Creek channel for kiosks. Installed a 23' deep pump station for the Apple Store in very challenging circumstances.

- **Dougherty Valley Planned Community – San Ramon, CA.**

Paul was the Development Service Supervisor inspecting and overseeing the installation of all the sewers for the planned community with the 15,000 homes, commercial, schools, Junior College and all parks. Started with the backbone, approximately 18,000 LF of 18" and 24 "mainline approx. 25' deep to the portal tunneled to Alcosta Rd and then to the Central Sanitation pump station. Multiple subdivisions, approximately 400,000 LF 8"PVC and all tie-ins to the public main, several bridge crossings the bypass of Dougherty Creek and new Dougherty corridor, temp pump stations, collaborated with multiple agencies in coordination of each phase to keep all utilities in the road working together and worked with environmental groups to protect open spaces trees ETC. Extensive design review of each phase of a very fasted paced project. Maintained all reports, As-

Built compaction testing to completion and coordinated with City of San Ramon and developers to bring mains online and protect Central Sanitation system as subdivision were becoming occupied. The project included 1949 Manholes, 79 Rodding Inlets, 6"- 13,668 LF (12,993 LF private, 675 LF Central San), 8"- 404,020 LF (21,371 LF private, 382,649 LF Central San), 16" - 5,556 LF (all Central San), 18" - 13,278 LF (all Central San), 24" - 4,100 LF (all Central San).

- **Alhambra Valley Project – Martinez, CA.**

Paul worked as the Development Services Supervisor inspected and overseeing the project to provide sewer to portions of the Alhambra Valley and surrounding areas. The project got homeowners off of septic and on public sewer which included buildings and a syphon under Alhambra Creek in. Installed 14,600 LF 8" and 10 "sewer and 80 + MHS. At completion, work with paving contractor to grind and repave and reconstruct all streets to city and county specifications. Paul dealt with homeowners on lateral placement, shot grade to correct slope to main, and worked with several agencies to ensure protection of all other infrastructure. The project brought 161 homeowners off of septic and on to public sewer.

- **John Muir Hospital - Walnut Creek, CA.**

Paul was the Development Services Supervisor on all three phases of the remodel of the existing hospital for a new parking garage/Cancer Treatment Facility. Paul managed and oversaw the inspection of all re-route of district sewer mains and installation of several private mains, extensive design build through existing infrastructure to sewer throughout all phases. High pressure PG&E gas main lent to challenging design constraints and was able to remedy by extending main and add 120 LF to get away from gas main enough to install manhole to accept on site sewer system. All work had to have careful coordination with the General contractor and all Agencies to include PG&E, EBMUD and City of Walnut Creek, to perform sewer work and keep the hospital free of any downtime. Very tight working conditions with grease interceptors working around live high-pressure streamlines. Paul facilitated key redesign changes to keep the project moving and came away with a great product.

- **Wilder Road New Home Development Orinda, CA.**

Paul was the Development Services Supervisor and oversaw, inspected, and managed the Wilder Road Project, a developer funded project for 500 homes. The project was 25,000 LF of 8" PVC, 1200 LF 8" DIP, 151 manhole, 2180 LF 4" C900 Force main, two City owned CCCSD maintained pump stations and 1400 LF 8" private main and 9 manholes to serve the new sports fields and the new Orinda city corporate yard. Worked with the city, county and CCCSD on all mitigation constraints for offsite sewer to protect wildlife and trees. Oversaw and inspected two CCCSD pump stations built with stand-by power generators and tested all pumps and alarms to bring pump stations on line.

- **Rheem Blvd Moraga, CA**

Paul was the Development Service Supervisor inspecting and overseeing the inspectors on the installation of all public and private sewers of a large subdivision broke into two parts, tie-ins on Rheem Blvd and on the EBRPD Pedestrian Trail, and worked with EBMUD and EBRPD to rework trail as to set up directional drilling equipment. The project included directional drilling 675 LF of 8" HDPE DR11 up a 18% slope to a manhole at the top of the subdivision. Reestablished and re-paved the existing pedestrian trail. Project consisted of 35 + homes 21,000 LF 8" PVC, 900 LF of private C900, 20 manholes. The work also included a very large slide area. Coordinated with county and Town of Moraga to remove and replace 600 LF of existing main while grade walls and tie backs were installed. Reinstalled existing sewer to original grade with manhole installed to feed subdivision.



San Rafael Sanitation District
COST PROPOSAL
Construction Management & Inspection Services
Multiple CIP & Maintenance Projects, 2023-24

Position	Regular Rate	Overtime Rate	Various Project Hours	Overtime Hours	Cost
<i>July 2023 through December 2023</i>					
Jaemin Park, P.E. Construction / Project Manager	\$214.50	\$214.50	200	0	\$ 42,900.57
Rhea Bernardo Inspector	\$138.21	\$207.32	1000	20	\$ 142,356.92
Paul Kelly Inspector	\$165.85	\$248.78	800	20	\$ 137,657.76
				Sub-Total =	\$ 322,915.25
<i>January 2024 through June 2024</i>					
Jaemin Park, P.E. Construction / Project Manager	\$214.50	\$214.50	200	0	\$ 42,900.57
Rhea Bernardo Inspector	\$142.82	\$214.23	800	20	\$ 118,538.62
Paul Kelly Inspector	\$165.85	\$248.78	800	20	\$ 137,657.76
				Sub-Total =	\$ 299,096.95
<i>July 2024 through December 2024</i>					
Jaemin Park, P.E. Construction / Project Manager	\$214.50	\$214.50	250	0	\$ 53,625.71
Rhea Bernardo Inspector	\$142.82	\$214.23	1000	20	\$ 147,102.15
Paul Kelly Inspector	\$165.85	\$248.78	1000	20	\$ 170,828.30
				Sub-Total =	\$ 371,556.16
				18-Month Total:	\$ 993,568.36

1. Rate includes vehicle, mobile phone, laptop and all equipment required to perform required duties.
2. Based on part-time construction manager and 2 full-time inspectors from July 2023 through December 2024

SAN RAFAEL SANITATION DISTRICT
Agenda Item No. 4.c.

DATE: June 16, 2023

TO: Board of Directors, San Rafael Sanitation District

FROM: Doris Toy, District Manager/District Engineer

SUBJECT: Approve the updated Sanitary Sewer System Management Plan

RECOMMENDATION:

Approve the updated Sanitary Sewer System Management Plan.

BACKGROUND:

Per Statewide Waste Discharge Requirements (Order No. 2006-0003-DWQ), the District is required to develop a Sanitary Sewer System Management Plan, which is a comprehensive plan that details the activities and strategies that the District would use to manage its sewer collection system effectively.

On December 6, 2022, the State Water Resources Control Board reissued the Waste Discharge Requirements and became effective on June 5, 2023. As part of the new requirements, the District is required to post its Sanitary Sewer System Management Plan (SSMP) on the State's online California Integrated Water Quality System (CIWQS) Sanitary Sewer System Database and update its Spill Emergency Response Plan (SERP). Please see attached for both SSMP and SERP.

Since the SERP required many hours of staff time, the District hired Paul Causey, Causey Consulting, to assist the District in developing the SERP. The District was able to complete both documents by June 5, 2023. The SSMP was posted online on June 5, 2023.

ANALYSIS:

Staff updated the following information on the existing SSMP.

- Element 1 – Goals – update language to include new Waste Discharge Requirements.
- Element 2 – Organization – update positions, personnel information, and organization chart.
- Element 3 – Legal Authority – indicated an updated FOG Agreement with CMSA.
- Element 4 – Operations and Maintenance Program –
 - Indicated the existing GIS system, MapServer has been changed to DashGIS.
 - Per MRG's recommendation, the District transitioned from a once-every-three-year gravity line cleaning to a risk-based field driven condition cleaning schedule.
 - Increased the sewer televising from 10 miles to 13-15 miles per year.

- Element 5 – Design and Performance Provisions – no changes.
- Element 6 – Overflow Emergency Response Plan – changed title to Sewer Spill Emergency Response Plan. Revised this section and indicated the SERP is a separate reference document with a Sewer Spill/Backup Response Workbook, which includes all the forms necessary to document the event.
- Element 7 – Fats, Oils, and Grease (FOG) Control Program – updated info regarding revised Agreement with CMSA.
- Element 8 – System Evaluation and Capacity Assurance Plan – no changes
- Element 9 – Monitoring, Measurement, and Program Modifications – update Sanitary Sewer Overflow table.
- Element 10 – SSMP Audits – update audit requirements
- Element 11 – Communication Program – update budget of \$20,000.

FISCAL IMPACT:

None.

ACTION REQUIRED:

Staff recommends that the Board approve the updated Sanitary Sewer Management Plan.

Attachments: Sanitary Sewer Management Plan (redacted)
Sewer Spill Emergency Response Plan

SAN RAFAEL SANITATION DISTRICT

111 Morphew Street
San Rafael, CA 94901



SEWER SYSTEM MANAGEMENT PLAN

Latest Update by SRSD: June 2023

THIS PAGE LEFT BLANK INTENTIONALLY

Table of Contents

SYSTEM OVERVIEW	4
ELEMENT 1 - GOALS	6
ELEMENT 2 - ORGANIZATION	8
ELEMENT 3 - LEGAL AUTHORITY.....	11
ELEMENT 4 - OPERATION AND MAINTENANCE PROGRAM.....	13
ELEMENT 5 - DESIGN AND PERFORMANCE PROVISIONS	23
ELEMENT 6 - SEWER SPILL EMERGENCY RESPONSE PLAN	25
ELEMENT 7 - FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM.....	27
ELEMENT 8 - SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN	31
ELEMENT 9 - MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS.....	33
ELEMENT 10 - SSMP AUDITS	37
ELEMENT 11 - COMMUNICATION PROGRAM	39

Appendices

Appendix A	Emergency Vendor Contact Information
Appendix B	Insurance Claims and Cleaning Services
Appendix C	FOG Ordinances
Appendix D	SSMP Audit Form
Appendix E	Capital Improvements Program Schedule
Appendix F	Summary of SSOs from 2017 to 2022
Appendix G	Mutual Aid and Assistance Agreement between Marin County Wastewater Agencies

THIS PAGE LEFT BLANK INTENTIONALLY

SYSTEM OVERVIEW

The San Rafael Sanitation District (SRSD or District) is a sanitation district of the County of Marin formed in 1947 under Division 5 of the California Health & Safety Code. It serves the southern two-thirds of the City of San Rafael, in the Central San Rafael area south from the top of Puerto Suello Hill, and the adjacent unincorporated areas. The District is administered by a three-person Board of Directors comprising two members of the San Rafael City Council and one member from the Marin County Board of Supervisors.

The District provides wastewater collection and transportation service over its entire collection system area, which is 12.75 square miles consisting of 134 miles of gravity sanitary sewer piping, 32 wastewater pump stations, and 13 miles of force main piping. The District's flows are ultimately conveyed to the Central Marin Sanitation Agency (CMSA) wastewater treatment plant, located at 1301 Anderson Drive in San Rafael, CA. SRSD, the Ross Valley Sanitary District, and Sanitary District No. 2 of Marin County have a joint powers agreement in place with CMSA for the treatment of their wastewater.

SRSD's mission is to responsibly collect and transport wastewater from its customers to CMSA for treatment, utilizing cost effective, environmentally sound, and safe practices. It has implemented numerous processes, as described herein, in order to better maintain its collection system and accomplish this mission.

THIS PAGE LEFT BLANK INTENTIONALLY

ELEMENT 1 - GOALS

SRSD has assembled this Sewer System Management Plan (SSMP) pursuant to the State Water Resources Control Board (State Water Board) Order No 2006-0003-DWQ and the San Francisco Bay Regional Water Quality Control Board's (RWQCB) development guide dated July 2005. On December 6, 2022, the State Water Resources Control Board adopted Order WQ 2022-0103-DWQ, which became effective on June 5, 2023. Per new Order, SRSD has update and implement its Spill Emergency Response Plan, Element 6, by June 5, 2023; and all other requirements will be updated by the required due date of August 2, 2025. The goals of the SSMP are to accomplish the following:

- Properly manage, operate, and maintain all parts of the wastewater collection system.
- Provide adequate capacity to convey peak flows.
- Minimize the frequency of Sanitary Sewer Overflows (SSOs).
- Mitigate the impact of SSOs.
- Meet all RWQCB and all State Water Board requirements for SSMP development, auditing, and updating, as well as requirements for SSO reporting.
- Implement recurring, proactive maintenance of the collection system to remove roots, debris, and fats, oil, and grease (FOG) in areas prone to blockages that may cause sewer backups or SSOs.
- Exceed citizen expectations when responding to their calls regarding sewer problems.
- Work cooperatively with local, state, and federal agencies to reduce, mitigate impacts of, and properly report SSOs.

THIS PAGE LEFT BLANK INTENTIONALLY

ELEMENT 2 - ORGANIZATION

This element identifies SRSD staff responsible for implementing, managing, and updating the SSMP, and the chain of communication for responding to and reporting SSOs. The following are current District staff positions with a brief description of their general responsibilities. Phone numbers are listed for District staff that are directly responsible for implementing, managing, and updating the SSMP:

- District Manager/District Engineer (1 full time employee (FTE), 415-485-3484): Manages District activities, establishes policy, develops budget, directs and supervises staff, allocates resources, oversees programs and procedures, and delegates responsibility.
- Senior Civil Engineer (1 FTE, 415-458-5369): Plans, organizes, directs and oversees capital projects, and programs, provides engineering and technical services. This position replaced the previous part time Deputy District Administrator in February 2007. This person is responsible in updating the SSMP, knowledgeable in current laws and regulations, and provides support to all parts of operations.
- Associate Civil Engineer (1 FTE): Performs design and construction management of capital improvement projects. Provides field inspection as needed.
- Junior Engineer (1 FTE): Performs entry level design and construction management of capital improvement projects. Provides field inspections as needed.
- SRSD Inspector (1 FTE): Provides technical work in field inspection of construction of capital improvement projects, sewer permits and utility repairs. Responds to Under Ground Service alert request.
- Sewer Operations and Maintenance Manager (1 FTE, 415-485-3374): Plans, organizes, directs and reviews the maintenance programs and activities of the gravity sewer system, sewer pump stations and force mains.
- Sewer Maintenance Supervisor (1 FTE, 415-485-3374): Provides day to day supervision of the work crews engaged in the maintenance of the gravity sewer system, sewer pump stations and force mains. Prepares and implements contingency plans, leads emergency response, investigates and reports SSO's and trains field crews.
- Sewer Maintenance Workers (8 FTE, 2-Sewer Lead Maintenance Workers, 3-Maint.II, 3-Maint.I, 415-485-3374): Perform a variety of manual and semi-skilled tasks involved in the maintenance, improvement and operation of the sewer pumping stations and gravity sewer lines. Mobilize and respond to notification of stoppages and SSO's.
- Administrative Analyst (1 FTE, 415-485-3132): Prepares agendas for Board meetings, drafts minutes, provides sewer rate information and programs to the public, develops office procedures, provides administrative support to staff, personal secretary to the District Manager, and calculates rate fees.

- Administrative Assistant (1 FTE): Performs daily administrative office work and support to staff.

SRSD’s organization chart, updated June 2023, is shown in the following Figure 1-1.

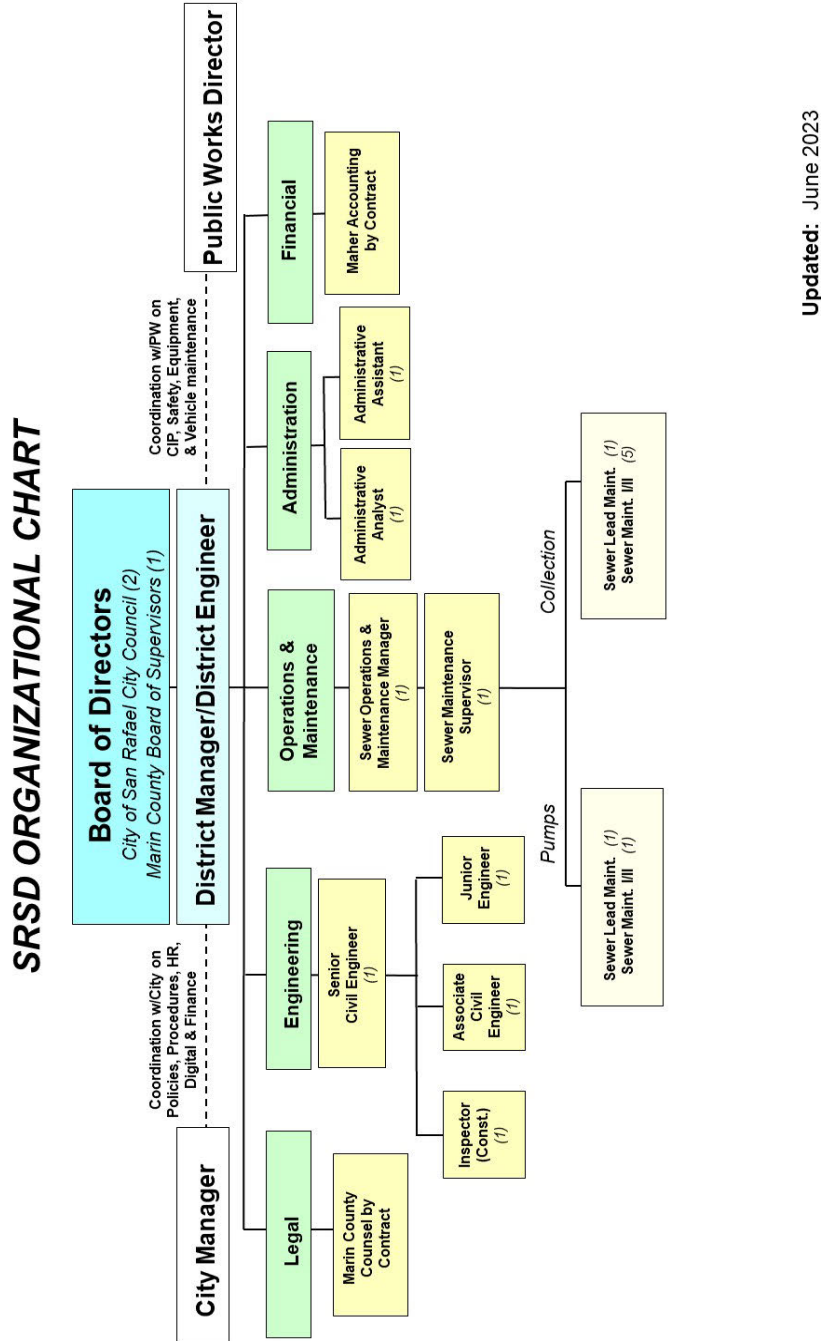


Figure 1-1 – SRSD Organization Chart

2.1 Chain of Communication for Reporting SSOs

The District’s Sewer Maintenance Staff are responsible for responding to SSOs. When a potential or actual SSO is observed, notify SRSD at the following telephone numbers:

During normal business hours (6:30 am to 2:30 pm), SSOs are to be reported to the following:

- Corporation Yard (415) 485-3372
- Sewer P.S. Maintenance (415) 485-3374

After hours (2:30 pm to 6:30 am), and during weekends and holidays, calls are to be reported to a stand-by cell phone that alerts the on-call SRSD employee:

- Stand-By Cell Phone (415) 720-5242

If unable to reach stand-by cell phone, notify District staff in the following order:

- | | | | |
|----|------------------|------|----------------------|
| 1. | Kris Ozaki | Home | ██████████ |
| | | Cell | (415) 725-9338 |
| 2. | Allan Lee | Home | ████████████████████ |
| | | Cell | (415) 725-9342 |
| 3. | Hector Rodriguez | Home | ██████████ |
| | | Cell | (415) 725-9431 |

If unable to contact any of the persons listed above, then call:

- | | | |
|-----------|------|----------------|
| Doris Toy | Home | ██████████ |
| | Cell | (415) 725-9237 |

The Sewer Maintenance Supervisor is responsible for providing SSO notification and reporting to the appropriate regulatory agencies.

The Sewer Maintenance Staff that respond to the SSO will assess, record, and document conditions using the forms provided in the Sewer Spill/Backup Response Workbook and provide the necessary information to the Maintenance Supervisor for notification and reporting. The responding Maintenance Staff will notify the Sewer Maintenance Supervisor after assessing the site, as required.

In the Sewer Maintenance Supervisor’s absence, the Operations and Maintenance Manager or another District Staff member as determined by the District Manager/District Engineer will perform the required notifications and reporting to the appropriate regulatory agencies.

Notifications and reporting for SSOs will be performed as indicated in the Sewer Spill Emergency Response Plan, see Element 6.

ELEMENT 3 - LEGAL AUTHORITY

SRSD was formed in 1947 under the California Health and Safety Code, Section 4700, Division 5, Part 3, Chapter 3, County Sanitation Districts. With this legal authority, the District Board of Directors passes ordinances and resolutions to govern all aspects of the District’s collection system from the point of connection with the side sewers (laterals) to the headworks of the CMSA treatment plant.

Laterals between the main sewer and the building are privately owned and maintained, the District has no ownership or maintenance responsibility therefor, per District Ordinance No. 54.

3.1 Prevention of Illicit Discharges

Regulations preventing illicit discharges into the District’s sanitary sewer system are included in the Standard Specifications 2007, Part B, Section 4-02, as well as the Districts Standard Specifications for Side Sewers and Laterals 2007 Section 1-09. These sections list wastes that are prohibited from entering into the system. They also have requirements to control inflow and infiltration (I/I) by prohibited roof leaders, surface drains, rainwater, storm water, seepage, cooling water, or unpolluted industrial process waters from entering the system.

The District’s Standard Specifications were adopted in Resolution 07-940 on June 11, 2007.

3.2 Design and Construction of New and Rehabilitated Sewers and Connections

The San Rafael Sanitation District Standard Specifications and Drawings 2007 provide requirements for proper design and construction of new and rehabilitated sewers and connections. Design requirements are included in Part B of the Standards, Construction requirements are included in Part C and Part D of the Standard Specifications.

District Ordinance No. 56, adopted March 1, 2006, provides the manner and charges for connection to District facilities and penalties for violation thereof.

3.3 District Access

The District’s Standard Specifications 2007 include an annexation policy, a right of way policy, and a condemnation policy, Section 1-03, 1-05, and 1-06 respectively. These sections provide the District with legal authority to obtain easements and maintain access for maintenance, inspection, or repairs of the public sewers in its service area.

Laterals are owned and maintained by the property owners, as previously stated.

3.4 Limit FOG and Other Debris

To limit the discharge of FOG into its system, on October 4, 2006 the District adopted the provision of CMSA’s FOG Program with SRSD Resolution No 06-930. The District and CMSA have entered into a written agreement; the “Fats, Oils & Grease (FOG) Control Program Agreement” dated May 10, 2006. The agreement provides for CMSA to develop, implement, manage, and administer a FOG source control program within the District’s service area. In

May 2021, the District and CMSA updated the agreement to reflect the current state of the FOG Program and its ongoing administration, since the FOG Program has been fully developed and the food service establishments are complying with the FOG ordinance. A copy of CMSA’s Fog Ordinance No. 2021-1, SRSD Resolution No 21-1226, and the 2021 updated agreement between the District and CMSA is included in Appendix C.

The District’s Standard Specifications 2007, Part B Section 4-02 and the Standard Specifications for Side Sewers and Laterals 2007 Section 1-09 list prohibited wastes and limit discharge of FOG and/or debris that may cause blockages, such as sludge, rags, garbage, and any other solid or viscous substance capable of causing obstruction to the flow in sewers or causing other interference with the proper operation of the sewage works.

3.5 Enforcement of Violations

California Health and Safety Code, Section 4700, Division 5, Part 3, Chapter 3, County Sanitation Districts provides SRSD with the legal authority to enforce any violation of its sewer ordinances. Also, under the Joint Powers Agreement between CMSA and the District, CMSA issues Wastewater Discharge Permits and has the legal authority to enforce violations.

Laterals are owned and maintained by the property owners and the District relies on the County of Marin, Environmental Health and Services to enforce private lateral SSO’s and septic tank violations.

3.6 Installation, Testing, and Inspection of New and Rehabilitated Sewers

Requirements for proper installation, testing, and inspection of new and rehabilitated sewers are included in the San Rafael Sanitation District Standard Specifications and Drawings 2007.

ELEMENT 4 - OPERATION AND MAINTENANCE PROGRAM

4.1 Collection System Map

The District maintains geographic information system (GIS) maps, using DashGIS from CalCAD. DashGIS displays streets, contours and elevations, wastewater pump stations, sewer pipes, sewer force mains, sewer manholes and rod holes, air release valves, building footprints, parcels, easements, orthophotos, scanned construction plans, and other City and District facilities. SRSD contracts with CalCAD to support and provide mapping, GIS, and database support for the District.

DashGIS allows features, such as manholes and pipe segments, to accept linking of additional data, such as inspection logs, pictures, CCTV videos, etc. Figure 4-1 below shows a typical District DashGIS screen display.

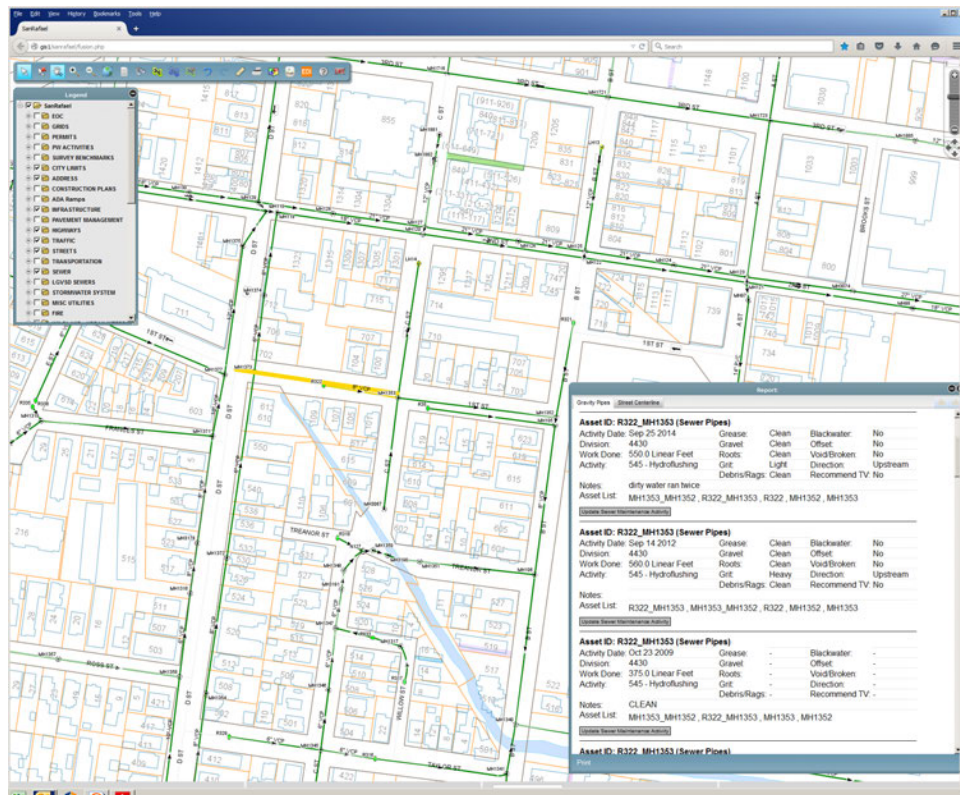


Figure 4-1 DashGIS Screen Display

The District has included a sewer maintenance management application in DashGIS, where it enables the District to track its daily maintenance activities and sewer overflows. The District uses DashGIS to schedule, track, and adjust its maintenance operations as well as to identify any “hot spots” in the system. Figure 4-2 shows a closer look at the type of maintenance reports that DashGIS allows the District to generate and utilize.

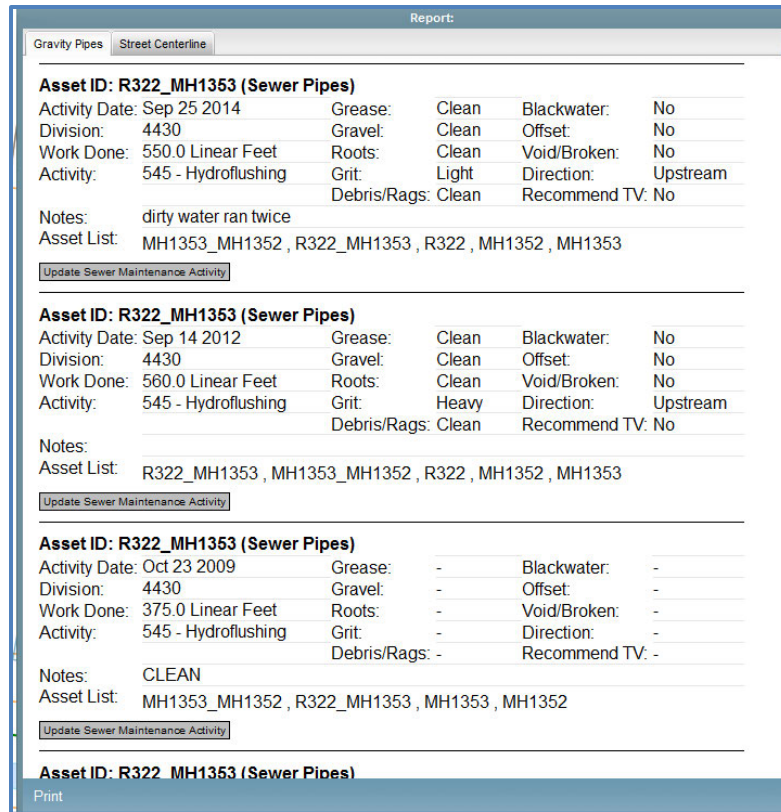


Figure 4-2 DashGIS Sewer Maintenance Report

The District updates the GIS map data based on routine maintenance performed throughout the year and any new construction or rehabilitation work performed.

4.2 Preventative Operation and Maintenance Activities

In 2023, upon the recommendation from an Organizational Review and Analysis Study performed by Municipal Resources Group, the District transitioned from a once-every-three-year gravity line cleaning goal to a risk-based, field condition driven cleaning schedule. Scheduled cleaning of the gravity sewers is based on a District maintained list of sewer lines, with some lines established as needing more frequent cleaning than others to minimize the possibility of an SSO.

Gravity sewer lines with FOG related issues, or “hot spots”, are cleaned more regularly with a hydro flusher. SRSD schedules cleaning of “hot spots” a minimum of twice per year.

The gravity sewer lines that have had a history of stoppages due to roots, rags and debris are maintained with a power rodder. A hand rodder is used on sewer lines where little or no mechanical equipment access is available.

In addition, the District’s goal is to maintain the following schedule with its preventative maintenance:

- All force main valves to be exercised annually.

- All pump station valves to be exercised quarterly.
- Annual preventive maintenance to be performed on all pump station pumps, motors, and control cabinets.
- Annual preventive maintenance and load bank testing to be performed on all pump station emergency generators, and mobile generators.
- Pump station wet wells to be inspected and cleaned annually.
- Air relief valves to be inspected and cleaned twice per year.
- Chemical injection systems to combat odor and corrosion to be inspected and calibrated weekly. Samples to be taken to monitor hydrogen sulfide levels twice weekly.
- All pump stations to be checked three (3) times per week

The pump station inspections are typically performed on Monday, Wednesday, and Friday to verify that all control panels, pumps, and motors are functioning properly. In addition to obvious and/or immediate issues that may be observed, maintenance crews check pump run times excessive pump wear, wet well debris accumulation, and an increase in utility bills. These issues will typically indicate that higher flows are entering the station, or that further assessment and repair or maintenance may be required at the station.

SRSD uses its sewer maintenance application in DashGIS for tracking maintenance activities, as previously mentioned. DashGIS allows crews to log the maintenance they perform for all their daily activities. Each structure has its own identifiable tag, and is mapped on the GIS based platform. Tracking routine maintenance with its sewer maintenance application helps the District to prioritize pipelines that may require inspection or repair. Routine maintenance can often reveal evidence of collection system deficiencies. Crews may notice an increased difficulty maintaining a pipeline, which would indicate a high priority to perform inspection.

4.3 Rehabilitation and Replacement Plan

The District identify and prioritize its capital improvement projects by the following methods:

1. The District assess the condition of pipes by CCTV inspections, using the Pipeline Assessment & Certification program (PACP) rating system.
2. Through tracking of maintenance activities with its sewer maintenance application, including frequency of calls and types of calls from the public, and routine inspection of its facilities.
3. Replacement project driven by other agencies, such as State of California, City of San Rafael, Sonoma-Marin Area Transit, and other utility agencies.

The District prioritizes system deficiencies to implement short-term and long-term rehabilitation actions in order to address them. The District's short term goal is to address pipes at risk of

collapse or prone to more frequent blockages due to pipe defects and capacity and PACP ratings of 4 and 5; and pump stations with frequent maintenance issues or capacity issues.

The District’s long term goal for preventative maintenance is to replace all of its gravity sewers on an 80 year cycle.

A. Inspections

CCTV inspection is performed for the District’s sewer mains that have had backup or overflow history. Locations with multiple incidents are given first priority. The inspections are used to generate a list of priority spot repairs, or sewer main rehabilitation projects.

SRSD contracts most CCTV work. However, the District has a small lateral camera for shorter sections of pipeline and a pipe locator to identify gravity sewer problems and locate structural deficiencies, such as broken pipe, offset joints, etc.

The District plans to perform 13-15 miles of CCTV inspection per year beginning with areas in proximity of surface water then moving outwards to the District’s boundaries. Based on the PACP ratings, the District plans to replace at a minimum 1.6 miles per year for the 80-year replacement program. The District’s long term goal is a complete survey of all gravity sewers within its service area.

The District also plans to include all of the CCTV survey information including audio and video digital data and PACP rating to each pipe or manhole segment in the GIS database using DashGIS, as previously described within the next few years. Each manhole and pipe segment is individually located and can accept linking of additional data, such as the CCTV survey. The District and CalCAD (DashGIS developer) is coordinating with City of San Rafael, Digital Services Dept. in providing data storage space. Once the storage is established, the District should be able to start linking the CCTV survey.

The District has plans to develop an ongoing smoke test procedure to determine illegal connections to sewer mains.

The Districts criteria for linking inspection data to pipes and manholes in DashGIS include the following:

1. Pipes:

All pipe segment inspection data will be linked to the appropriate pipe segment on the District’s GIS.

All pipe segments will be individual digital files, with no continuous files through manholes or structures.

All pipe surveys to be performed in the direction of flow, where feasible.

Condition survey rating is determined for each separate pipe segment in accordance with PACP standard evaluating procedures, and linked to GIS segment.

2. Manholes:

All manhole inspection data will be linked to the appropriate manhole on the District's GIS.

Inspected manhole X, Y, Z coordinates in the State Plane coordinate system, and latitude and longitude will be recorded.

A sketch of each inspected manhole showing location of all pipes using a clock face with north facing at 12 o'clock will be created. The depth, size, and material type of all pipes will be indicated.

Digital photographs of inspected manholes will be taken above and below ground with condition survey and condition assessment.

B. Force Main Condition Assessment

In 2016, the District implemented the Force Main Condition Assessment Program and developed a Risk Model Assessment based on various factors, such as pipe material, size, age, rail crossing, waterway crossing, etc. The Risk Model is also integrated with the GIS. Based on the highest risk ratings, the District proceeded in testing the sections of force main with the SmartBall inspection, which is the first phase of inspection. The SmartBall uses an acoustic method to identify and locate leaks and pockets of trapped gas along a pipeline. The next phase of inspection is investigating those locations detected of having leaks or trapped gas by a more aggressive approach, i.e. removing a section of pipe for testing. After the second phase of inspection is completed, the District will develop rehabilitation projects for the Capital Improvement Program.

C. Capital Improvements Plan

SRSD is a special District with fiscal and administrative autonomy. The District invoices its customers and obtains revenue to fund its operations utilizing property tax statements. Sewer service fees and property taxes appear on Marin County Property Tax Statements. The District also obtains revenue from connection fees and interest generated from its savings.

The user fees charged for residential dwellings and businesses are calculated differently. Residential properties are assigned an Equivalent Dwelling Unit (EDU) based upon the actual dwelling units (units) permitted on the property, regardless of occupancy, as determined by the Marin County Assessor Office records. Business fees are calculated individually based on the volume and strength (cost to treat) of the sewage measured in EDUs. In the fiscal year 2013/2014, SRSD increased its rates for a period of five (5) years to accelerate the replacement of sewer pipelines and the rehabilitation of the pump stations.

The District allocates adequate resources for the operation, maintenance, and repair of its collection system. In general, the District plans and budgets for the following expenses:

- Maintenance and Operation

- Sewage Treatment (Paid to Central Marin Sanitation Agency)
- Capital Improvements
- Rehabilitation and Repairs
- Emergency Expenses
- Reserves

The District operates under a fiscal year budget cycle beginning July 1 and ending June 30. District's Capital Improvement Program Schedule through 2023/2024 for gravity sewers and pump stations and force mains are summarized in Appendix E. This Capital Improvements Program Schedule includes a time schedule for implementing the short and long term capital improvement projects, as well as estimated costs.

SRSD contracts with the City of San Rafael for its employees, as previously shown in Element 2. District staff are responsible for administration, engineering, planning, and sewer system operations and maintenance. The District currently contracts with Maher Accountancy for financial management and accounting. The District also has agreements in place and pays CMSA for treatment of its wastewater, as well as source control and regulation of the FOG program, which is further described in Element 7.

4.4 Training

SRSD has a safety training program that complies with OSHA mandates and established work safety procedures developed by the Department of Public Works (DPW) for the City of San Rafael. The DPW/SRSD Safety Committee identifies appropriate safety trainings needed per job classification.

On the job training and mentoring by experienced workers has been the main source of occupational education for the operations and maintenance staff. Seminars, classes, and equipment demos also help staff stay current with the best available practices and equipment in the wastewater industry.

SRSD encourages the pursuit of occupational education such as California Water Environment Association (CWEA) memberships, classes, seminars, and certifications. The District provides funding to interested personnel for obtaining this training.

It is the goal of SRSD to have well-educated and competent staff that are able to serve the public, eliminate SSO's and provide a safe, well maintained and efficient sanitary sewer system.

4.5 Contingency Equipment and Replacement Inventories

The District maintains a number of contingency vehicles and equipment for emergency use, as indicated in the following Tables 4-1.

Table 4-1 – Contingency Equipment

Equipment	Manufacturer	Fuel type/ Power source	Description
Trailer Mounted Generator	Doosan	Diesel	260 KW 480 V, 3 PH
Trailer Mounted Generator	Aggreko	Diesel	175 KW 480 V, 3 PH
Trailer Mounted Generator (3)	Doosan	Diesel	60 KW 120/240 3 PH
Trailer Mounted Generator	Kohler	Diesel	60 KW 120/240 V, 3 PH 277/480 V, 3 PH
Portable Generator	Makita	Gasoline	5,700 W
Portable Generator (2)	Honda 2000i	Gasoline	Bridgeable to provide 4,000 W
Power Rodder (2)	Champion	Diesel	Truck Mounted
Combination Cleaner Truck	Vactor	Diesel	Truck Mounted 12 yard 3 axle
Combination Cleaner Truck	Vactor	Diesel	Truck Mounted 10-yard 1 axle
TV Van	Ford	Gas	For CCTV and locating
Maintenance Truck	Ford Super Duty F-550	Gas	Utility Body IMT 3820 Crane 7,500 lbs. Air Compressor Complete Set of Tools 100-gal auxiliary diesel tank/pump Assorted Slings Assorted control panel parts and relays Pneumatic Impact wrench Pneumatic Ratchet Pneumatic Grinder Electric Drill Electric Roto-Hammer drill 2,000-watt AC to DC Power Inverter
Maintenance Truck	Ford Super Duty F-350	Gas	Utility Body
Backhoe/Loader	Case, 580 Super L 4x4	Diesel	DPW owned but usable by SRSD
Loader	Caterpillar 924 G	Diesel	DPW owned but usable by SRSD

Equipment	Manufacturer	Fuel type/ Power source	Description
Fork Lift	Clark, model CGP-25	Diesel	4,600 lb lifting capacity DPW owned but usable by SRSD
Knuckle Boom Truck/Flat Bed	Chevrolet	Diesel	5,070 lb lifting capacity DPW owned but usable by SRSD
Emergency 20 ft Box Trailer	NA	NA	Loaded with Contingency pumps and hoses
8" Dry-Prime Pump	Godwin	Diesel	Trailer Mounted 40' Suction Hose Bauer 40' Discharge Hose Bauer
4" Dry-Prime Pump	Godwin	Diesel	Trailer Mounted, sound attenuated 40' 6" Suction Hose Bauer fitting 40' 4" Discharge Hose Bauer fitting 4" Bauer to Cam-lock coupler
3" Trash pump		Gasoline	Portable 60' Suction Hose 1600' Discharge Hose
2" Trash Pump		Gasoline	Portable 30' Suction Hose 800' Discharge Hose
2" Trash Pump (2)	Flygt, Ready 8	110V	Submersible 800' Discharge Hose
Above ground fuel tanks (4)		Red dye Diesel	Extra fuel for generators (900 gallons) each
Grinder Pump	Liberty Pro-Vore	110V	Submersible
Power Snake	Duracable	110V	2-150 ft spools of 3/4" cable
CCTV Push Camera	Cues MP-2020	110V	Push camera with 300' of cable
Chain Saw	Stihl	2-Stroke Gasoline	
Gas Driven Welder	Miller	Gasoline	500-watt, 115/220 volt
4 Gas Air Detector (3)	RKI GX-2012		With bump test and calibration station
Davit Arm w/ Winch/SLR	Fall Tech	NA	310 lb. max, 50 ft line
Tripod w/ hoist	DBI/Sala		350 lb. max, 120 ft line
Portable Air Blower (2)	Allegro	110v	
Portable Air Blower (2)	Western Progress	12V	
Force Main Repair Clamps			Assorted, various sizes.

The District’s spare parts and replacement equipment is listed in Table 4-2 below.

Table 4-2 – Spare Parts and Replacement Equipment

Equipment	Manufacturer	Description/ Comments
3 Hp Pump (5)	Flygt	
7.5 Hp Pump (2)	Flygt	
10 Hp Pump	Flygt	
20 HP Pump	Flygt	At South Fran pump station
30 Hp Pump	Flygt	At Bret Harte Pump Station
30 Hp Pump	Flygt	At Simms Pump Station
88 Hp Pump	Flygt	At Rivera Pump Station
85 HP Pumps (3)	Flygt	At Glenwood Pump Station
Programmable Logic Controller (PLC)	Allen Bradley	
Controllers	DigiGage	Formerly Micro-Mac
Controllers	Miltronics	
Hydroranger controller	Hydroranger	Ultrasonic level control
Auto-Dialers (SCADA)	Verbatim	Data from pump stations
Drive Lines and U-joints		For each dry pit house station
CCTV camera and locating equipment	Cues	CCTV and locating
Inflatable Plugs		Various Sizes
Tractor Camera (Main line)	Subsite (RST) Track star II	CCTV and locating

In addition, the District became a party to the Mutual Aid and Assistance Agreement in 2019 with other Marin County wastewater treatment agencies (Sausalito-Marin City Sanitary District, Central Marin Sanitation Agency, Novato Sanitary District, Sewerage Agency of Southern Marin, Las Gallinas Valley Sanitary District, and Sanitary District No. 5) and collection agencies (Ross Valley Sanitary District and Sanitary District No. 2). The Agreement’s purpose is for the agencies to provide mutual aid and assistance to each other in times of need and to provide for a method of reimbursement for equipment, materials and supplies, and personnel. A copy of the Mutual Aid Agreement and Lists of Equipment is in Appendix G.

4.6 Outreach to Plumbers and Building Contractors

SRSD has made available its Standard Specifications and Drawings and its Standard Specifications for Side Sewer Laterals to plumbers, building contractors, and the public. These Standards provide plumbers and contractors with guidelines and requirements for construction, as well as testing requirements. Much of the District’s outreach program consists of on-site interaction between District inspectors and plumbers and Contractors, where District staff can educate them, in multiple languages, on the District Standards, requirements, and acceptable practices.

The District provides information about the proper practices for preventing blockages in private laterals to the public via postcards, which are mailed to its customers periodically and are available on the Internet. Recent postcards addressed issues with FOG and “flushable” wipes that may cause maintenance issues and SSOs. The District has encountered issues with rags and wipes creating blockages in the sewer pipelines and pump stations in 2020 during the COVID-19 pandemic. It appears there was an increase in rags and wipes from the customers using them for cleaning and disinfecting. The District mailed informational postcards on “flushable” wipes to its customers and also joined other Marin sewer agencies in funding a video that were shown on television and the Internet. Staff was also on the local news regarding “flushable” wipes. In addition, for the past four winter seasons, the District and other Marin sewer agencies also developed a video on FOG, i.e. informing the customers not to pour grease down the drain; and it was shown on television and the internet.

The District has developed its webpage under the City of San Rafael website, which encourage the use of proper practices for preventing blockages. The District also distributes magnets encouraging residents of proper disposal of cooking oils and grease in the trash.

In 2019, the District joined the Public Works Department in an “open-house” for two days, where both agencies had informational exhibits and hand-outs to educate the public on various topics and staff was available for answering questions.

ELEMENT 5 - DESIGN AND PERFORMANCE PROVISIONS

The District has developed the following Design and Construction Standards:

- San Rafael Sanitation District Standard Specifications and Drawings, 2007
- San Rafael Sanitation District Specifications for Side Sewers and Laterals, 2007

These Specifications for Side Sewers and Laterals are available to the public at:
<https://www.cityofsanrafael.org/documents/srsd-sewer-laterals-2007/>

5.1 Standards for Installation, Rehabilitation, and Repair

The District's minimum design and construction standards and specifications for the installation of new sewer systems and for the rehabilitation and repair for existing sewer systems are included in the above referenced Standard Specifications and Drawings and Specifications for Side Sewers and Laterals. These Standard Specifications and Drawings are appropriate and relatively up to date.

5.2 Standards for Inspection and Testing of New and Rehabilitated Facilities

The District's procedures and standards for inspecting and testing the installation of new sewers, pump station, and other appurtenances; and for rehabilitation and repair projects are included in the above referenced Standard Specifications and Drawings and Specifications for Side Sewers and Laterals.

THIS PAGE LEFT BLANK INTENTIONALLY

ELEMENT 6 - SEWER SPILL EMERGENCY RESPONSE PLAN

The District has developed the following procedures for responding to SSOs. The purpose of the Sewer Spill Emergency Response Plan (SERP) is to provide guidance to maintenance crew personnel when responding to an SSO, and to ensure that all SSO responses are handled efficiently, effectively, and in accordance with regulatory requirements. This procedure is applicable to all overflows of the sewage collection system.

The SERP is a separate reference document with a Sewer Spill/Backup Response Workbook, which includes various forms for reporting. The SERP has been completed per the reissued WDR, Order WQ 2022-0103-DWQ, and is effective for District emergency response personnel starting on June 5, 2023.

THIS PAGE LEFT BLANK INTENTIONALLY

ELEMENT 7 - FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM

The District has adopted the provision of CMSA’s FOG Program. The District and CMSA have entered into a written agreement; the “Fats, Oils & Grease (FOG) Control Program Agreement” dated May 10, 2006. This agreement provides for CMSA to develop implement, manage, and administer a FOG source control program with the District’s service area. In May 2021, the District and CMSA updated the agreement to reflect the current state of the FOG Program and its ongoing administration, since the FOG Program has been fully developed and the food service establishments are complying with the FOG ordinance. A copy of CMSA’s Fog Ordinance No. 2021-1, SRSD Resolution No 21-1226, and the 2021 updated agreement between the District and CMSA is included in Appendix C..

The goal of the FOG Control Program is to reduce FOG discharged into the sewer collection system, which will in turn reduce the cost of maintenance associated with FOG and reduce the number of blockages and SSOs caused by FOG in the sewer system.

The District has identified areas within its collection system that require routine maintenance and cleaning (i.e. “hot spots”). The District routinely cleans and maintains these lines at least twice per year.

CMSA employs source control to regulate and enforce the regional pretreatment and pollution prevention programs within its service area. CMSA has designed and implements a customized computer database program that assists the FOG Control Program. It records and reports Food Service Establishment (FSE) inspection and compliance, history, generating FSE permits, generating routine invoices related to the Program, and generating reports as needed to the District.

With the District’s additional effort cleaning hot spots and CMSA’s source control, FOG related SSOs per year have decreased on average since the time of the FOG Program implementation.

7.1 Public Education and Outreach

The District has made Fats, Oil, and Grease (FOG) refrigerator magnets in both English and Spanish, and a newsletter in English, Spanish, and Vietnamese, which it has distributed at the Marin County Fair in recent years. District has also mailed out FOG postcards during the winter/holiday season and in areas when maintenance staff sees an increase. The newsletter, postcards and magnets provide information on how to keep FOG and other materials out of the sewer system to reduce maintenance issues and SSOs. The District has also joined other Marin local sewer agencies in providing an ad campaign on television and internet during the winter/holiday season in recent years. District has distributed the above information at a joint two-day “open house” with City of San Rafael, Public Works Dept. in 2019.

CMSA also often provides information to the District’s rate payers on ways to prevent FOG from entering the sewer system in its monthly newsletter, as well as methods and locations where fats, oils, and grease can be properly disposed of.

7.2 FOG Disposal

CMSA accepts deliveries of FOG from grease traps and interceptors from restaurants, markets, and similar types of food service establishments. CMSA accepts FOG loads from qualified haulers with the completion of a simple permit application process, or by special arrangement. CMSA uses the FOG and turn them into energy. More information can be found within at CMSA’s website, <http://www.cmsa.us>.

A multi-agency workgroup called CalFog also maintains a list of all agencies within the various service areas that will accept FOG wastes. This list is available at the following webpage: <http://www.calfog.org/GreaseFacilities.html>

7.3 Legal Authority

As previously stated, the District adopted the provision of CMSA’s FOG Program with SRSD Resolution No 06-930. The District and CMSA have entered into a written agreement; the “Fats, Oils & Grease (FOG) Control Program Agreement” dated May 10, 2006. The agreement provides for CMSA to develop implement, manage, and administer a FOG source control program within the District’s service area. And then in May 2021, the District and CMSA updated the agreement and adopted Resolution No. 21-1226 to reflect the current state of the FOG Program and its ongoing administration, since the FOG Program has been fully developed and the food service establishments are complying with the FOG ordinance. Also, as previously stated, the District’s adopted Standard Specifications 2007, Part B Section 4-02 and the Standard Specifications for Side Sewers and Laterals 2007 Section 1-09 prohibit discharge or cause to be discharge of any waters or wastes which contains more than 100 parts per million, by weight, of fat, oil or grease into its sewer system.

7.4 Grease Removal Device (GRD) Requirements

The District has identified FOG related “hot spots” at locations in the sewer system where a FOG related SSO has occurred, where there is significant potential for FOG related SSOs, or where extra FOG related maintenance is required.

Existing FSEs upstream of “hot spots” are required to obtain a permit with the District and install and maintain grease removal devices. CMSA regularly inspects and regulates these FSEs.

Existing FSEs upstream of “hot spots” must have grease traps on at least the utensil sink and dishwasher pre-sink. Drains without traps must be protected by signage and employee training. Where FOG continues to be an issue downstream of an FSE, the District may require that a grease interceptor be installed.

The District requires that grease interceptors be installed in all new FSEs. In addition, grease interceptors are required in all major remodels upstream of “hot spots”. The District considers a “major remodel” to be significant change to the kitchen and a building permit evaluation of at least \$100,000 (not including grease removal devices). The District requires that grease removal devices be installed in accordance with Chapter 10 of the Uniform Plumbing Code.

Regulated FSEs are required to clean and legally dispose of FOG in interceptors and large traps at least every three months, or more frequently if the permit requires. The FSEs are required to

mail cleaning/pumping receipts to CMSA. They are also required to maintain a copy of pumping receipts onsite in a CMSA provided folder.

Regulated FSEs are required to clean smaller traps (30 gallons or less) every 15 days. FSE staff may clean and store FOG in a dedicated drum or tank, to be off-hauled by a registered hauler monthly.

7.5 Inspection and Enforcement

SRSD Resolutions No 06-930 and No. 21-1226 adopting CMSAs FOG Program, and the District and CMSA written agreement; the “Fats, Oils & Grease (FOG) Control Program Agreement” dated May 10, 2006 and May 6, 2021 updated agreement gives CMSA authority to inspect FSEs for FOG related issues and enforce violations.

CMSA’s FOG inspections check and verify the following:

- GRD maintenance
- GRD condition
- Grease recycling bins
- No prohibited compounds to GRDs
- No FOG discharged to drains not connected to GRD
- No storm water pollution issues

A. GRD Maintenance

The CMSA inspector reviews the FSE’s documentation, such as cleaning/pumping logs, and receipts. The inspector physically inspects grease removal devices to verify that the combined depth of FOG and solids does not exceed 25 percent of the total depth.

B. GRD in Working Condition

The inspector checks traps to verify that flow control devices, vents, baffles, and inlet and outlet devices are working properly. Interceptors are checked to verify that baffles, inlet and outlet devices are working properly.

C. Grease Recycling Bins in Use

The inspection verifies that the recycling bin is being used for cooking oil, griddle drainage, etc, and not for FOG waste from grease traps. The “grey grease” from grease traps should not be stored in the recycling bins because it is much harder to recycle and costs more to off haul.

D. No Prohibited Compounds to GRD

CMSA will attempt to verify that no enzymes, solvents, emulsifiers or drain cleaners are allowed to enter into GRDs. Necessary products may be allowed if authorized in the permit and with proper documentation.

E. No FOG Discharge to Drain not connected to GRD

Inspection will check for evidence of dumping into peripheral drains (i.e. floor drains, hand wash sinks). Drains without GRDs should have signs indicating that FOGs should not be poured down them. Employees should be trained to ensure that dumping of FOG does not occur into these drains.

Pots and pans should be wiped prior to washing. Food waste should be disposed of into the trash, not into a garbage disposal. Waste oil should be recycled. Floor mats should be cleaned over a utility sink with a GRD, wash water should not enter floor drains or into the storm drain system.

F. No Storm Water Pollution Issues

During inspection, the outside of the restaurant will be checked for potential storm water pollution issues. If an FSE has potential storm water pollution issues, then a written warning will be provided. If the FSE fails to resolve the issues, then an administrative citation and \$500 fine will be issued.

If CMSA’s inspection determines that a regulated FSE is not in compliance, then the FSE is issued a Notice of Violation (a “fix-it ticket”). The FSE is required to pay a re-inspection fee to CMSA. The re-inspection fee shall be a standard charge equal to 1.5 times the weighted hourly salary for the CMSA staff plus 60% overhead.

The frequency of inspections depends on a facility’s location and compliance history. CMSA will inspect facilities that are out of compliance or upstream of areas that continue to have issues with FOG more frequently than facilities that are in compliance and with little or no issues downstream.

7.6 Identification of FOG Hot Spots

SRSD uses its sewer maintenance application for tracking maintenance activities and linking them to locations in its GIS system. The District has identified FOG related “hot spots” at locations in the sewer system where a FOG related SSO has occurred, where there is significant potential for FOG related SSOs, or where extra FOG related maintenance is required. The District schedules to clean these areas at least twice per year.

7.7 Development and Implementation of Source Control Measures

The agreement between CMSA and SRSD provides for CMSA to develop implement, manage, and administer a FOG source control program with the District’s service area.

ELEMENT 8 - SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

One of the goals of the District’s CIP, that it has prepared and is implementing, is to provide hydraulic capacity of key sanitary sewer system elements in order to prevent future SSOs. The District continues to make upgrades to ensure adequate hydraulic capacity in key areas and from SSOs.

8.1 Evaluation

The District performed a capacity assessment for four key trunk sewer lines to determine potential capacity related issues. The Capacity Assessment Report was prepared by Nute Engineering in April 2010.

The capacity assessment was undertaken using the District’s sewer mapping with surveys of the rim and invert elevations of trunk manholes, and hydraulic modeling to identify potential capacity restrictions. The Environmental Protection Agency (EPA) Stormwater Management Model (PCSWMM) was used to estimate peak flows in these key system components and hydraulic deficiencies.

8.2 Design Criteria

Design criteria for improvements, including design criteria related to capacity, are included in the District’s 2007 Standards Specifications.

8.3 Capacity Enhancement Measures & Schedule

The District has incorporated the prioritized recommendations from the Capacity Assessment Report into its CIP and has already completed many of the high priority and medium priority projects.

The District’s CIP includes the schedule for its specific capital improvement projects. The source for funding for these capital improvement projects has been and will continue to be the service fees and connection fees charged to its users.

THIS PAGE LEFT BLANK INTENTIONALLY

ELEMENT 9 - MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

9.1 Maintenance of Relevant Data

The District uses its sewer maintenance application in DashGIS to track maintenance activities and performance measures. It also tracks and records information pertaining to SSOs and reports the information to the State Water Board and the Regional Water Board. The District maintains this data and uses it to prioritize appropriate SSMP actions.

9.2 Monitoring of Implementation and Assessing Success of Preventative Maintenance

The District monitors and measures the effectiveness of the SSMP elements in reducing SSO’s by developing and tracking performance indicators. The following Table 9-1 lists each SSMP element, the overall purpose of the SSMP element, and the specific performance indicator that the District plans to track that will assist in evaluating the effectiveness of the SSMP.

Table 9-1 - SSMP Monitoring Performance Indicators, by SSMP Element

SSMP Element	Summary of Element Purpose	Performance Indicators for Tracking Effectiveness
Goals	Establish priorities of District and provide focus for District staff	Annual audit results for this element (see Element 10)
Organization	Document organization of City staff and chain of communication for SSO response	Annual audit results for this element (see Element 10)
Overflow Emergency Response	Provide timely and effective response to SSO emergencies and comply with regulatory reporting requirements	<ul style="list-style-type: none"> ▪ Average response time ▪ Percent of total SSO volume contained or returned to sewer
Fats, Oils & Grease Control	Minimize blockages and overflows due to FOG	<ul style="list-style-type: none"> ▪ Number of blockages due to FOG ▪ Number of overflows due to FOG ▪ Number of FOG producing facilities inspected
Legal Authority	Ensure the District has sufficient legal authority to properly maintain the system	Annual audit results for this element (see Element 10)
Measures and Activities	Minimize blockages and SSOs by properly maintaining the system and keeping the system in good condition	<ul style="list-style-type: none"> ▪ Total number and volume of SSOs ▪ Number of repeat SSOs (same location as any previous SSO) ▪ Total number of sewer lateral SSOs ▪ Total number of sewer main SSOs ▪ Number of pipe failures ▪ Total length of pipe CCTV'd ▪ Total length of pipe hydro cleaned
Design & Construction Standards	Ensure new facilities area properly designed and constructed	Annual audit results for this element (see Element 10)
Capacity Management	Minimize SSOs due to insufficient capacity by evaluating system capacity and implementing necessary projects	<ul style="list-style-type: none"> ▪ Number of SSOs due to capacity limitations or wet weather ▪ Date of completion of most recent capacity evaluation ▪ Backlog of capacity improvement

SSMP Element	Summary of Element Purpose	Performance Indicators for Tracking Effectiveness
		projects
Monitoring, Measurement, & Program Modifications	Evaluate effectiveness of SSMP, keep SSMP up-to-date, and identify necessary changes	Annual audit results for this element (see Element 10)
Program Audits	Formally identify SSMP effectiveness, limitations, and necessary changes on an annual basis	<ul style="list-style-type: none"> ▪ Date of completion of last annual audit
Communication Plan	Communicate with the public and satellite agencies.	Annual audit results for this element (see Element 10)

9.3 Updating Program Elements

The District will evaluate elements of the SSMP based on the performance indicators noted in Section 9.2. Necessary improvements to the SSMP will be documented in the SSMP Audit (see Element 10). The SSMP and its elements will be periodically updated in accordance with the results of the District’s Audit.

9.4 Identifying SSO Trends

The data that the District records and reports to the State Water Resources Control Board during an SSO is used to identify SSO trends. The District also enters the SSO data into its sewer maintenance application in order to record and track the location of the SSO and other valuable information. The data that the District monitors and records includes the following:

- Number of SSO’s over the past 12 months
- Volume distribution of SSO’s (e.g. number of SSO’s greater than 1,000 gallons, 100 to 999 gallons, 10 to 99 gallons, less than 10)
- Volume of SSO’s that was contained in relation to total volume of SSO’s
- Total volume reaching waters of the State
- Total volume not contained but not reaching waters of the State
- Cause of SSOs (by percentage of total)
- Location of SSOs
- Number of SSOs at specific locations

Table 9-2 summarizes the causes of the District’s recorded SSOs from 2015 to 2020.

Table 9-2 – Summary of SSO Causes

	2017	2018	2019	2020	2021	2022
Cause of SSO	# SSOs	# SSOs	# SSOs	# SSOs	# SSOs	# SSOs
Blockage:						
Roots	1	6	8	0	4	2
Grease	0	0	5	1	1	5
Debris	1	1	2	0	3	1
Debris from Laterals	2	3	0	1	0	0
Rags/Wipes	0	0	2	3	8	3
CS Maintenance cause spill	0	1	0	0	0	0
Pipe Structural Problem/ Failure	0	2	6	1	1	1
Vandalism	1	0	0	0	0	0
Pump Station - others	0	0	3	0	0	1
Operation Error	0	0	1	0	1	1
Animal Carcass	0	0	0	0	0	0
Construction Failure	1	0	1	0	0	0
Construction Debris	1	1	0	0	0	1
Multiple Causes	14	8	5	1	0	0
Subtotal for Blockage	21	22	33	7	18	15
Infrastructure Failure	0	0	0	0	0	1
Inflow & Infiltration	0	0	0	0	1	0
Electrical Power Failure	0	0	0	0	0	0
Flow Capacity Deficiency	0	0	0	0	0	0
Natural Disaster	1	0	0	0	0	0
Bypass	0	0	1	0	0	0
Cause Unknown	1	0	0	0	0	0
Total	23	22	34	7	19	16

Roots and multiple causes were the primary causes for SSOs in prior years; however, in 2020 and 2021 the predominate cause of SSOs were rags/wipes. District staff believe the rags/wipes were due to the COVID-19 pandemic, where many customers were increasing the usage of wipes/rags for disinfecting in their household. A summary of additional data that the District has collected for its SSOs from 2017 to 2022 is included in Appendix F.

THIS PAGE LEFT BLANK INTENTIONALLY

ELEMENT 10 - SSMP AUDITS

The District will perform an internal audit evaluating the SSMP at least once every three years. The audit will include any deficiencies and steps to correct them. The form included in Appendix D will be used for the audit, which is based on the format developed by the Bay Area Clean Water Agencies (BACWA). Upon completion of the audit, the District will keep a copy of the audit on file to fulfill the Regional Water Board audit requirement.

Within six months after the end of the required 3-year audit period (August 2, 2024), 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).

THIS PAGE LEFT BLANK INTENTIONALLY

ELEMENT 11 - COMMUNICATION PROGRAM

SRSD has developed a webpage under the City of San Rafael website, which provides a communication link between the District and its rate payers. The District has budgeted \$20,000 per year for the public outreach program. As previously stated, the District has made newsletters and postcards available to its users concerning the potential issues caused by FOG and wipes, as well as video campaign for television and internet. The District has made FOG refrigerator magnets in both English and Spanish, and newsletters and postcards in English, Spanish, and Vietnamese, which it has distributed at the Marin County Fair and to customers in recent years. The District has also distributed them in a joint “open house” with the City of San Rafael, Public Works Department in 2019 and hopes to continue this program in the future.

Appendix A
Emergency Vendor
Contact Information

THIS PAGE LEFT BLANK INTENTIONALLY

SRSD Emergency Vendor Contact List

Last Updated:
6/5/2023

Service	Vendor	Contact	Home Number	Work Number	Cell Number
Equipment Rental	Doheny Supplies	Jack Doheny		800-336-4369	
	Hertz Equipment Rental			415-924-4444	415-596-1402
	WECO	Tom Johnson		707-446-6661	
	DW Pumps	David Lang		510-633-2040	510-774-7642
	Pac Machine	David Kesich		707-746-4940	707-732-4068
	Rain for Rent	Zach Smith		530-662-1024	707-310-9077
	Peerson Power	Brian Wilson		707-576-1546	
	CD&Power			925-229-2700	
Excavation	Maggiora & Ghilotti	Gary Ghilotti		415-459-8640	
	Linscott Engineering	Kate Linscott		415-492-1755	
	Michael Paul			707-769-1006	
		Johan			707-782-8990
		Kevin			707-318-3433
	Trenchless Titan	Gery Hardiman		415-924-2555	415-847-0010
		Liam Hardiman			415-847-5694
		Sean Hardiman			415-847-4925
Plumbing	Roy's Sewer	Kevin Berry		415-456-2320	415-308-1200
	Roto-Rooter			415-898-2700	
		Stan Stansfield			415-328-9749
		Jarrod Stuckenboker			415-559-1175
	Leak Detection Pro	Mark Mengarelli		415-578-4733	707-364-6896
Pump/Motor Repair	Pump Repair	Wayne Archer		415-467-2150	415716-5461
	Koffler			510-567-0630	510-701-9776
	Dahl-Beck Electric	Kevin Sams		510-237-2325	
	Shape Inc.	Jim Merritt		925-485-9720	925-699-8865
Tanker	Clean Harbors	Sandy		707-7476699	707-310-4445
	NRC Environmental			510-749-1390	
Electrical	Fowler	Tom Fowler	415-459-3282	707-658-1491	707-696-9959
	CalCon Systems	Branden Powell		925-277-0665	925-570-4323
	WorkSmart Automation	Dan Jones		916-454-1718	916-240-4782
		Joey Tran			530-979-1158

Service	Vendor	Contact	Home Number	Work Number	Cell Number
Truck Towing/Repair	Diego Truck Repair			415-924-3335	
Misc. Parts	Water Components & Building Supply			415-451-1780	
	Pace Supply			415-454-8282	
	Bay Area Baracade			925-686-1089	
	Cal-Steam			415-459-2009	
Fuel - Diesel	Royal Petroleum			707-540-0054	
	Flyers			510-741-5456	
Tree Service	Treemasters			415-455-9933	
Crane Service/Cert	CraneTech Inc.	Jeff Lambeth		866-994-6478	209-244-3877

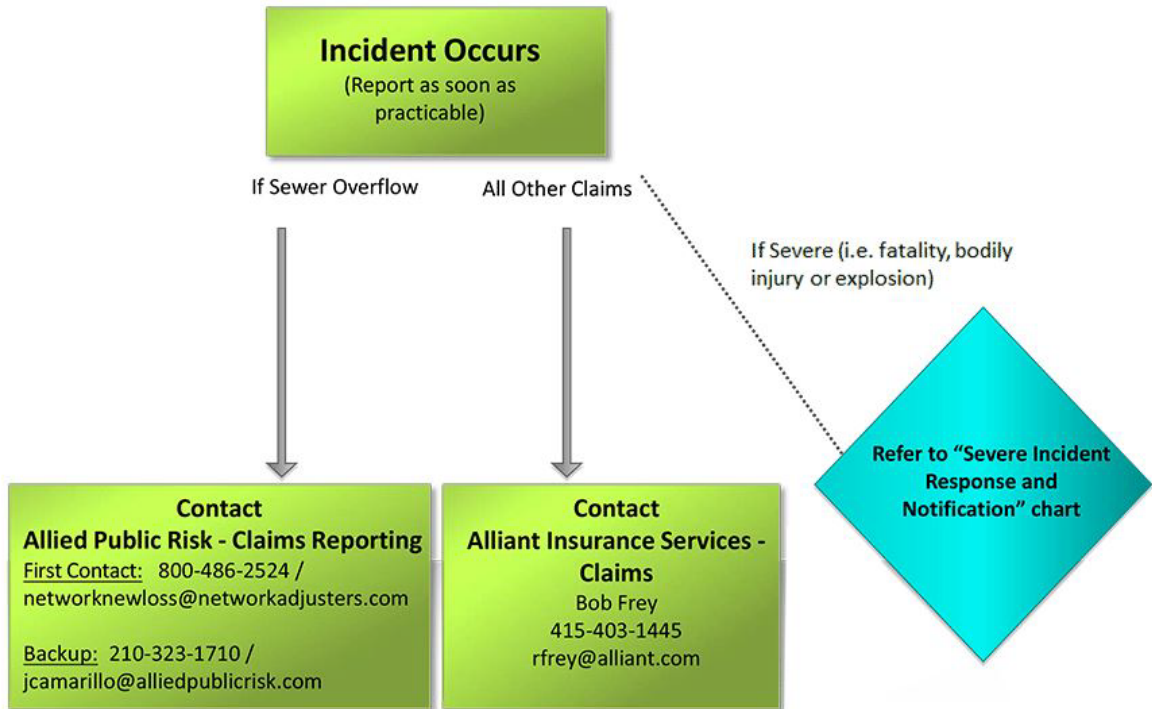
Appendix B
Insurance Claims and
Cleaning Services

THIS PAGE LEFT BLANK INTENTIONALLY

Primary Insurance

The Claims Reporting Flowcharts are intended to provide a basic guideline for reporting claims for the various coverage programs. When in doubt, contact the CSRMA Program Administrators, Alliant Insurance Services: 415-403-1400. Seth Cole, P.J. Skarlanic, Myron Leavell, or Dennis Mulqueeny.

The CSRMA "PIP" program provides coverage for General and Automobile Liability as a result of Bodily Injury, Property Damage, Personal Injury, Employment Practices Liability, Public Entity Errors and Omissions Liability and Auto Physical Damage. NOTE: Not all members purchase all of the above mentioned coverages.



Cleaning Services Contacts

For District Personnel only

Cleaning Services

Jon Takata, Owner
Restoration Management Company
4142 Point Eaden Way
Hayward, CA 94545-3703
(800) 400-5058 (24 hours)
Email: calcenter@rmc.com

John Moore, Owner/President
JM Environmental, Inc.
P.O. Box 2189
Granite Bay, CA 95746-2189
(916) 726-0304 (24 hours)
Email: jmoore@jmenv.com

Charles Hoag, CEO
ServiceMaster/Service Master Elite
5451 Industrial Way
Benicia, CA 94510
(800) 480-8439 ext 0 (24 hours)
Email: intake@smrestore.net

Cleaning Contractor
Doug Thompson, President/ CEO
Sierra Pacific Loss Management (Cleaning Oversight Co.)
1210 Cuttings Wharf Road
Napa, CA 94559
(800) 413-2999 (24 hours)
Office Ph. No. (707) 252-5480 option 1 for emergencies
Cell No. (707) 592-9918 - Doug
Email: dthompson@splmca.com
Fee is now \$110.00/Hour

Appendix C
Fats Oils and Grease (FOG)
Ordinances

THIS PAGE LEFT BLANK INTENTIONALLY



CENTRAL MARIN SANITATION AGENCY

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

Ordinance No. 2021-1

February 2021

CENTRAL MARIN SANITATION AGENCY

ORDINANCE NO. 2021-1

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

TABLE OF CONTENTS

SECTION 1 - INTRODUCTION 3

SECTION 2 - ORDINANCE BACKGROUND 3

SECTION 3 - PURPOSE AND POLICY 4

SECTION 4 - JURISDICTION 5

SECTION 5 - DEFINITIONS..... 6

SECTION 6 - GREASE INTERCEPTOR INSTALLATION REQUIREMENTS 9

SECTION 7 - REQUIREMENTS AND BEST MANAGEMENT PRACTICES..... 13

SECTION 8 – GREASE INTERCEPTOR MAINTENANCE REQUIREMENTS..... 16

SECTION 9 - PERMIT REQUIREMENTS, FEES, AND ENFORCEMENT 18

SECTION 10 - HEARINGS AND APPEALS 21

SECTION 11 - SEVERABILITY 22

SECTION 12 - REVISION 23

SECTION 13 - EFFECTIVE DATE..... 24

CENTRAL MARIN SANITATION AGENCY

ORDINANCE NO. 2021-1

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

SECTION 1 – INTRODUCTION

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

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

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

SECTION 2 – ORDINANCE BACKGROUND

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

SECTION 3 – PURPOSE AND POLICY

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

SECTION 4 – JURISDICTION

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

SECTION 5 – DEFINITIONS

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

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

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

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

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

CMSA - Central Marin Sanitation Agency.

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

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

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

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

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

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

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

Grease Trap – See the Hydromechanical Grease Interceptor definition.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SECTION 6 – GREASE INTERCEPTOR INSTALLATION REQUIREMENTS

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

Grease Interceptor Installation Requirements Summary

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

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

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

A. New Food Service Establishments

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

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

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

B. Kitchen Remodel

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

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

C. Existing Food Service Establishments – Upstream of Hot Spot

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

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

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

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

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

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

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

E. Change of Ownership

When an FSE changes ownership, new ownership shall provide new use information to CMSA. An evaluation of the facility's new use shall be completed to determine GI installation and/or upgrade requirements.

F. Variance Procedure

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

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

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

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

SECTION 7 – REQUIREMENTS AND BEST MANAGEMENT PRACTICES

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

A. Prohibitions

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

B. Best Management Practices (BMPs)

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

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

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

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

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

SECTION 8 – GREASE INTERCEPTOR MAINTENANCE REQUIREMENTS

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

A. Large GI(s)

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

B. Small GI(s)

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

C. Pumping and Reporting Requirements

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

D. Self-Clean Procedure

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

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

E. Twenty-Five Percent (25%) Rule

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

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

SECTION 9 – PERMIT REQUIREMENTS, FEES, AND ENFORCEMENT

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

A. Permits

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

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

B. Permit Waiver

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

C. Permit Inspections

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

D. Permit Fees

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

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

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

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

E. Permit Violations

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

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

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

F. Re-inspection

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

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

G. Escalated Enforcement

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

SECTION 10 – HEARINGS AND APPEALS

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

SECTION 11 – SEVERABILITY

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

SECTION 12 – REVISION

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

SECTION 13 – EFFECTIVE DATE

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


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


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

NOES: None

ABSENT: None

Attest:


Dean DiGiovanni, Secretary


Michael Boorstein, Chairperson

SAN RAFAEL SANITATION DISTRICT

RESOLUTION NO. 21-1226

**A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE SAN RAFAEL SANITATION DISTRICT
AUTHORIZING THE SIGNING OF AN AGREEMENT
WITH CMSA TO PARTICIPATE IN THE
FATS, OILS, & GREASE (FOG) SOURCE CONTROL PROGRAM**

**THE BOARD OF DIRECTORS OF THE SAN RAFAEL SANITATION DISTRICT,
COUNTY OF MARIN**, hereby resolve as follows:

The Board Chair is hereby authorized to execute, on behalf of the San Rafael Sanitation District, an agreement with CMSA to participate in the Fats, Oils, & Grease (FOG) Source Control Program, a copy of which is hereby attached and by this reference made a part hereof.

PASSED AND ADOPTED at a regular meeting of the San Rafael Sanitation District Board of Directors held on the 6th day of May 2021 by the following vote, to wit:

AYES: Director Rice, Chair Kate

NOES: None

ABSENT/ABSTAIN: Director Bushey

Kate Colin

Kate Colin (May 18, 2021 18:08 PDT)

Kate Colin, Chair

ATTEST:

Katie Rice

Katie Rice (May 26, 2021 10:04 PDT)

Katie Rice, Acting Secretary









SRSD FOG Agreement Resolution

Final Audit Report

2021-05-26

Created:	2021-05-18
By:	Cindy Hernandez (cindy.hernandez@cityofsanrafael.org)
Status:	Signed
Transaction ID:	CBJCHBCAABAHCvEPN04N9aCIK8YwSY_7o9P0CIXN_7Q

"SRSD FOG Agreement Resolution" History

-  Document created by Cindy Hernandez (cindy.hernandez@cityofsanrafael.org)
2021-05-18 - 10:36:44 PM GMT- IP address: 199.88.89.34
-  Document emailed to Kate Colin (kate.colin@cityofsanrafael.org) for signature
2021-05-18 - 10:37:37 PM GMT
-  Email viewed by Kate Colin (kate.colin@cityofsanrafael.org)
2021-05-19 - 1:07:54 AM GMT- IP address: 73.70.76.37
-  Document e-signed by Kate Colin (kate.colin@cityofsanrafael.org)
Signature Date: 2021-05-19 - 1:08:06 AM GMT - Time Source: server- IP address: 73.70.76.37
-  Document emailed to Katie Rice (krice@marincounty.org) for signature
2021-05-19 - 1:08:07 AM GMT
-  Email viewed by Katie Rice (krice@marincounty.org)
2021-05-26 - 5:04:18 PM GMT- IP address: 104.47.65.254
-  Document e-signed by Katie Rice (krice@marincounty.org)
Signature Date: 2021-05-26 - 5:04:34 PM GMT - Time Source: server- IP address: 24.128.29.70
-  Agreement completed.
2021-05-26 - 5:04:34 PM GMT

FATS, OILS, & GREASE (FOG) SOURCE CONTROL PROGRAM AGREEMENT

Between the San Rafael Sanitation District and Central Marin Sanitation Agency

This Agreement is between the CENTRAL MARIN SANITATION AGENCY (hereinafter referred to as CMSA), and SAN RAFAEL SANITATION DISTRICT (hereinafter referred to as SRSD).

WHEREAS, SRSD received a 13267 letter from the San Francisco Regional Water Board in July 2005 requiring it to develop a Sewer System Management Plan (SSMP), which includes a Fats Oils and Grease (FOG) program; and

WHEREAS, the State Water Resources Control Board issued on May 2, 2006 a Statewide General Waste Discharge Requirement, for all collection system agencies within the State, that requires each to prepare an SSMP and a source control program for FOG, if FOG is determined by the collection system agency to be a contributor to sewer overflows; and

WHEREAS, SRSD has determined that specific identified areas within its collection system require routine maintenance and cleaning (“hot spots”) to remove FOG; and

WHEREAS, CMSA employs source control staff to regulate and enforce the pretreatment and pollution prevention programs within its service area, and CMSA has a comprehensive FOG Ordinance (Ordinance) and related administrative and enforcement documents; and

WHEREAS, SRSD and CMSA entered into an agreement in May 2006 for CMSA to develop, implement, manage, and administer a FOG source control program (Program) within SRSD’s service area, under authority of the Ordinance; and

WHEREAS, SRSD’s Program has been fully developed and the regulated FSEs in its service area are in compliance with the Ordinance; and

WHEREAS, now SRSD and CMSA desire to update the 2006 Agreement to reflect the current state of the Program and its ongoing administration; and

NOW, THEREFORE, it is agreed as follows:

1. **Definitions:**

- Source control - Inspections, permits, education, enforcement and other activities for the purpose of reducing or eliminating discharge of pollutants of concern (in this case FOG) to the sanitary sewers.

- Food Service Establishment (FSE) - Includes any facility preparing and/or serving food for commercial use or sale. This includes restaurants, cafes, lunch counters, cafeterias, hotels, hospitals, convalescent homes, factory or school kitchens, catering kitchens, bakeries, grocery stores with food preparation (excluding stores with only food warming operations), meat cutting and preparation, and other food handling facilities.
 - Grease Removal Device (GRD) - A grease trap (smaller, in kitchen) or grease interceptor (larger, outside) installed on FSE kitchen drains.
 - Sewer system "hot spot"- A location in the sanitary sewer system that requires significantly increased maintenance to prevent FOG-related line blockages and/or where FOG-related sewer overflows have occurred.
 - "Blanket" FOG program - A FOG source control program where all identified FSEs are regulated.
 - "Targeted" FOG program - A FOG source control program where the FSEs regulated are only those that are upstream of a documented sanitary sewer system "hot spot."
 - Hauling manifest - A form documenting maintenance (grease pumping) of a grease interceptor or trap.
2. **FOG Program:** The Program will regulate, through source control activities, the FSEs that are located upstream of any documented sanitary sewer system "hot spot". The "targeted" Program may be expanded in the future, as requested by SRSD, to a "blanket" Program that would require regulation of all FSEs in the SRSD service area.
3. **Scope of Services:** CMSA hereby agrees to provide the following services:
- Maintaining a current database of the FSE information in the SRSD service area.
 - As needed, conduct FSE plan review in coordination with Marin County Environmental Health Services for GRD installation compliance with the Ordinance.
 - Notify new and remodeled FSEs of the Program requirements in Ordinance
 - Maintain the Program. Tasks will include issuing FSE FOG permits, performing field inspections to verify that appropriate GRDs are installed, and that FSEs are in compliance with the Ordinance provisions.
 - Implement accelerated monitoring to address chronic non-compliant FSEs. Accelerated monitoring may involve up to monthly FSE inspection to facilitate compliance with the Ordinance provisions.

- Provide on-going administration of the Program. This will include on-going coordination with SRSD staff to maintain current FSE information, perform periodic inspections of FSEs, and perform follow-up inspections and enforcement actions as needed.
4. **Quarterly Report**: CMSA shall keep and maintain records of expenditures, FSE inspection reports, FOG hauling manifests, and other pertinent program documentation. CMSA shall provide SRSD with a quarterly report of the FOG program activities.
 5. **Compensation**: SRSD shall reimburse CMSA quarterly for work performed under this agreement. Reimbursement shall be based on the current weighted hourly rates of the CMSA staff performing the work, plus a 10% overhead rate. Rates will be included in the annual budget.

In the event it is necessary for CMSA personnel to work overtime, as authorized by SRSD, the overtime hours shall be reimbursed at one and one-half times the weighted hourly rate plus overhead.

CMSA personnel shall use CMSA vehicles for all work performed under this agreement. SRSD shall reimburse CMSA monthly for actual mileage on CMSA vehicles for work under this agreement. The mileage will be reimbursed at the IRS mileage rate for the current calendar year.

CMSA will adjust weighted hourly rates within a budget year to account for CMSA cost of living (COLA) and equity salary adjustments.

6. **Budget Estimate**: CMSA shall develop an estimated annual budget for the Program. The budget is an estimate and may vary depending on enforcement measures needed as a result of discharger violations, scope of work desired by SRSD, and other requested services. The draft budget will be submitted by May 1st.
7. **Liability**: Both parties agree to hold the other free and harmless from all claims arising from this Agreement for damage to persons or property except those resulting from negligence on the part of either party.
8. **Reporting**: SRSD shall be responsible for meeting regulatory FOG reporting requirements. At SRSD's request, CMSA can assist with preparing or can prepare the FOG reports.
9. **Term**: This Agreement shall take effect the day after it is signed by the last signatory and shall remain in full force and effect from year to year unless the Agreement is terminated by either party by providing the other party a 90 days written notice of the intention to terminate the Agreement. In the event either party delivers to the other a 90 day written notice, this Agreement shall terminate 90 days after the date of the written notice unless the parties agree to a longer or shorter termination period.

10. **Independent Contractor:** The status of CMSA is that of independent contractor having control of its work and the manner in which it is performed. CMSA, its employees and agents are not considered to be officers, employees, or agents of SRSD.
11. **Reports, Plans and Documents:** All reports, drawings, calculations, plans, specifications, and other documents prepared or obtained pursuant to the terms of this Agreement shall be the property of SRSD. However, CMSA may retain a copy for its records. In addition, data prepared or obtained under this Agreement shall be made available, upon request, to SRSD at no cost. Historical data retention for all FOG related activities shall be maintained by CMSA for five calendar years.
12. **Notices:** All written notices permitted or required under the terms of this Agreement shall be addressed as follows:

If to the CMSA: Jason Dow, General Manager
 Central Marin Sanitation Agency
 1301 Andersen Drive
 San Rafael, CA 94901

If to the SRSD: Doris Toy, District Manager/Engineer
 San Rafael Sanitation District
 111 Morphew Street
 San Rafael, CA 94901

San Rafael Sanitation District

Kate Colin
Kate Colin (May 18, 2021 18:06 PDT)

Kate Colin, Board Chair

Date: May 18, 2021

Maribeth Bushey
Maribeth Bushey (May 21, 2021 13:50 PDT)

Maribeth Bushey, Board Secretary

Date: May 21, 2021

Central Marin Sanitation Agency

Michael Boorstein

Michael Boorstein, Commission Chair

Date: 6/15/21

Dean DiGiovanni

Dean DiGiovanni, Commission Secretary

Date: 6/14/21

Appendix D
SSMP Audit Forms

THIS PAGE LEFT BLANK INTENTIONALLY

**San Rafael Sanitation District
Sewer System Management Plan (SSMP)
Audit Report**

The purpose of the Annual SSMP Audit is to evaluate the effectiveness of the San Rafael Sanitation District's SSMP and to identify deficiencies, if any, and steps to correct them. The audit is submitted pursuant to the San Francisco Bay Regional Water Quality Control Board's Sewer System Management Plan Development Guide, July 2005.

Directions: Please check **YES** or **NO** for each question. If **NO** is answered for any question, describe the updates/changes needed and the timeline to complete those changes in the “*Description of Scheduled Updates/Changes to the SSMP*” section on Page 5 of this form.

		YES	NO
ELEMENT 1 – GOALS			
A.	Are the goals stated in the SSMP still appropriate and accurate?	<input type="checkbox"/>	<input type="checkbox"/>
ELEMENT 2 -- ORGANIZATION			
A.	Is the District Services Key Staff Telephone List current?	<input type="checkbox"/>	<input type="checkbox"/>
B.	Is the Sanitary Sewer Overflow Responder Telephone List current?	<input type="checkbox"/>	<input type="checkbox"/>
C.	Is the chart in the SSMP, entitled “SRSD Organizational Chart,” current?	<input type="checkbox"/>	<input type="checkbox"/>
D.	Are the position descriptions and accurate portrayal of staff responsibilities?	<input type="checkbox"/>	<input type="checkbox"/>
E.	Is the table in the SSMP, titled “Chain of Communication for Reporting and Responding to SSOs,” accurate and up-to-date?	<input type="checkbox"/>	<input type="checkbox"/>
ELEMENT 3 – LEGAL AUTHORITY			
Does the SSMP contain excerpts from the current San Rafael Sanitation District Resolutions, Ordinances, and Standards documenting the District’s legal authority to:			
A.	Prevent illicit discharges?	<input type="checkbox"/>	<input type="checkbox"/>
B.	Require proper design and construction of sewers and connections?	<input type="checkbox"/>	<input type="checkbox"/>
C.	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the District? Not Applicable. Laterals are owned by the property owner.	<input type="checkbox"/>	<input type="checkbox"/>
D.	Limit discharges of fats, oil and grease?	<input type="checkbox"/>	<input type="checkbox"/>
E.	Enforce any violation of its sewer ordinances?	<input type="checkbox"/>	<input type="checkbox"/>

		YES	NO
ELEMENT 4 – OPERATIONS AND MAINTENANCE			
Collection System Maps			
A.	Does the SSMP reference the current process and procedures for maintaining the District’s wastewater collection system maps?	<input type="checkbox"/>	<input type="checkbox"/>
B.	Are the District’s wastewater collection system maps complete, current, and sufficiently detailed?	<input type="checkbox"/>	<input type="checkbox"/>
Resources and Budget			
C.	Does the District allocate sufficient funds for the effective operation, maintenance and repair of the wastewater collection system and is the current budget structure documented in the SSMP?	<input type="checkbox"/>	<input type="checkbox"/>
Prioritized Preventive Maintenance			
D.	Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewer lines?	<input type="checkbox"/>	<input type="checkbox"/>
E.	Based upon information in the Annual SSO Report, are the District’s preventive maintenance activities sufficient and effective in minimizing SSOs and blockages?	<input type="checkbox"/>	<input type="checkbox"/>
Scheduled Inspections and Condition Assessments			
F.	Is there an ongoing condition assessment program sufficient to develop a capital improvement plan addressing the proper management and protection of infrastructure assets? Are the current components of this program documented in the SSMP?	<input type="checkbox"/>	<input type="checkbox"/>
Contingency Equipment and Replacement Inventory			
G.	Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system and document the procedures of inventory management?	<input type="checkbox"/>	<input type="checkbox"/>
H.	Are contingency equipment and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?	<input type="checkbox"/>	<input type="checkbox"/>
Training			
I.	Is the training calendar current?	<input type="checkbox"/>	<input type="checkbox"/>
J.	Does the SSMP document current training expectations and programs within the District?	<input type="checkbox"/>	<input type="checkbox"/>
Outreach to Plumbers and Building Contractors			
K.	Does the SSMP document current outreach efforts to plumbers and building contractors?	<input type="checkbox"/>	<input type="checkbox"/>

		YES	NO
ELEMENT 5 – DESIGN AND PERFORMANCE STANDARDS			
A.	Does the SSMP contain current design and construction standards for the installation of new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer systems?	<input type="checkbox"/>	<input type="checkbox"/>
B.	Does the SSMP document current procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and the rehabilitation and repair of existing sewer lines?	<input type="checkbox"/>	<input type="checkbox"/>
ELEMENT 6 – OVERFLOW AND EMERGENCY RESPONSE PLAN			
A.	Does the District’s Sanitary Sewer Overflow and Backup Response Plan establish procedures for the emergency response, notification, and reporting of sanitary sewer overflows (SSOs)?	<input type="checkbox"/>	<input type="checkbox"/>
B.	Are staff and contractor personnel appropriately trained on the procedures of the Sanitary Sewer Overflow and Backup Response Plan?	<input type="checkbox"/>	<input type="checkbox"/>
C.	Considering performance indicator data in the Annual SSO Report, is the Sanitary Sewer Overflow and Backup Response Plan effective in handling SSOs in order to safeguard public health and the environment?	<input type="checkbox"/>	<input type="checkbox"/>
ELEMENT 7 – FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM			
A.	Does the Fats, Oils, and Grease (FOG) Control Program include efforts to educate the public on the proper handling and disposal of FOG?	<input type="checkbox"/>	<input type="checkbox"/>
B.	Does the District’s FOG Control Program identify sections of the collection system subject to FOG blockages, establish a cleaning schedule and address source control measures to minimize these blockages?	<input type="checkbox"/>	<input type="checkbox"/>
C.	Are requirements for grease removal devices, best management practices (BMP), record keeping and reporting established in the District’s FOG Control Program?	<input type="checkbox"/>	<input type="checkbox"/>
D.	Does the District have sufficient legal authority to implement and enforce the FOG Control Program?	<input type="checkbox"/>	<input type="checkbox"/>
E.	Is the current FOG program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system?	<input type="checkbox"/>	<input type="checkbox"/>
ELEMENT 8 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN			
A.	Does the District’s Sanitary Sewer Master Plan evaluate hydraulic deficiencies in the system, establish sufficient design criteria and recommend both short and long term capacity enhancement and improvement projects?	<input type="checkbox"/>	<input type="checkbox"/>
B.	Does the District’s Capital Improvement Plan (CIP) establish a schedule of approximate completion dates for both short and long-term improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishment?	<input type="checkbox"/>	<input type="checkbox"/>

		YES	NO
ELEMENT 9 – MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS			
A.	Does the SSMP accurately portray the methods of tracking and reporting selected performance indicators?	<input type="checkbox"/>	<input type="checkbox"/>
B.	Is the District able to sufficiently evaluate the effectiveness of SSMP elements based on relevant information?	<input type="checkbox"/>	<input type="checkbox"/>
ELEMENT 10 – SSMP AUDITS			
A.	Will the SSMP Audit be submitted with the SSO Annual Report to the Regional Water Board by March 15 th of the year following the end of the calendar year being audited?	<input type="checkbox"/>	<input type="checkbox"/>
ELEMENT 11 – COMMUNICATION PROGRAM			
A.	Does the District effectively communicate with the public and other agencies about the development and implementation of the SSMP and continue to address any feedback?	<input type="checkbox"/>	<input type="checkbox"/>

THIS PAGE LEFT BLANK INTENTIONALLY

Appendix E
Capital Improvements
Program Schedule

THIS PAGE LEFT BLANK INTENTIONALLY

SAN RAFAEL SANITATION DISTRICT
80-YEAR LIFE-CYCLE PROGRAM (GRAVITY SEWERS)
PROPOSED SCHEDULE TO FY 2023-24

Project	Est. Cost	Fiscal Year				
		2019-20	2020-21	2021-22	2022-23	2023-24
Sewer Televising 2018	\$200,000	\$200,000				
2018 Sewer Pipe Repair	\$300,000	\$300,000				
Forbes Sewer Improvement	\$925,000	\$925,000				
Sewer Televising 2019	\$300,000	\$1,000	\$299,000			
Francisco Blvd East at Medway & Vivan	\$750,000	\$50,000	\$700,000			
Francisco Blvd East at Grange	\$540,000		\$40,000	\$500,000		
Rehabilitation of Beach Sewers-Bayside Acres	\$2,760,366	\$83,000	\$140,000	\$500,000	\$2,000,000	
Woodland Pl/Ave & Octavia	\$2,780,000	\$80,000	\$200,000	\$2,500,000		
Third St Rehabilitation	\$2,020,000	\$15,000	\$120,000	\$1,900,000		
Miramar and Miraflores	\$1,065,566	\$45,000	\$20,000	\$1,000,000		
2020 Sewer Pipe Repair/Repl, Ph 1/2/3	\$4,700,000		\$700,000	\$4,000,000		
#70-96 Bret Harte Easement	\$3,088,000	\$88,000		\$1,000,000	\$1,000,000	\$1,000,000
Sewer Televising 2020	\$400,000			\$400,000		
Second St, Ida to E Streets	\$1,300,000				\$100,000	\$1,200,000
Fifth Ave, Ray Ct to Sirard Ln	\$2,000,000				\$300,000	\$1,700,000
2021 Sewer Pipe Repair/Repl	\$4,500,000			\$1,500,000	\$3,000,000	
Sewer Televising 2021	\$400,000				\$400,000	
2022 Sewer Pipe Repair/Repl	\$4,600,000				\$1,500,000	\$3,100,000
Sewer Televising 2022	\$400,000					\$400,000
2023 Sewer Pipe Repair/Repl	\$4,700,000					\$1,500,000
TOTAL CAPITAL EXPENDITURES	\$60,322,720	\$1,787,000	\$2,219,000	\$13,300,000	\$8,300,000	\$8,900,000

SAN RAFAEL SANITATION DISTRICT
PUMP STATION & FORCE MAIN CAPITAL IMPROVEMENT PROGRAM
PROPOSED SCHEDULE TO FY 2023-24

Project	Est. Cost	Fiscal Year				
		2019-20	2020-21	2021-22	2022-23	2023-24
CAPITAL IMPROVEMENT PROJECTS						
N. Francisco Force Main Sleeve	\$200,000	\$175,000				
South Francisco Pump Station	\$2,520,000	\$925,000	\$1,465,000			
Third St PS & Fiberglass PS	\$3,400,000		\$60,000	\$2,540,000	\$800,000	
ARV at Harbor	\$280,000		\$80,000	\$200,000		
Isolation Valve Replacement	\$600,000		\$125,000	\$475,000		
Force Main Condition Assessment	\$470,000	\$120,000	\$50,000	\$100,000	\$100,000	\$100,000
N Fran PS & WRR PS					\$2,500,000	\$2,500,000
Projects to be identified	\$1,000,000					\$1,000,000
TOTAL CAPITAL EXPENDITURES	\$8,470,000	\$1,220,000	\$1,780,000	\$3,315,000	\$3,400,000	\$3,600,000

Appendix F
Summary of SSOs
From 2017 to 2022

THIS PAGE LEFT BLANK INTENTIONALLY

SUMMARY OF SANITARY SEWER OVERFLOWS FROM 2015 to 2020

Table 1. Number of SSOs

	2015	2016	2017	2018	2019	2020
Size of SSO (gallons)	Number	Number	Number	Number	Number	Number
Less than 10 gallons	5	5	4	2	8	1
From 10 to 99 gallons	7	5	9	3	13	3
From 100 to 999 gallons	5	11	6	13	8	3
Greater than or equal to 1,000 gallons	0	2	4	4	5	
Total Number of SSO's	17	23	23	22	34	7

Table 2. Volume of SSOs

	2015	2016	2017	2018	2019	2020
Volume of SSO's	Volume (gallons)	Volume (gallons)	Volume (gallons)	Volume (gallons)	Volume (gallons)	Volume (gallons)
Total volume contained and returned to sewer system for treatment	1,971	1,528	1,057	5,099	12,708	650
Total volume reaching waters of the State	0	38,894	7,266	3,223	9,021	249
Total volume not contained but not reaching waters of the State (everything else)	1,289	3,162	2,955	5,471	1,508	1,022
Total Volume of SSO's	3,260	43,584	11,278	13,793	23,237	1,921

SUMMARY OF SANITARY SEWER OVERFLOWS FROM 2015 TO 2020

Table 3. Causes of SSOs

	2015	2015	2016	2016	2017	2017	2018	2018	2019	2019	2020	2020
Cause of SSO	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Blockage:												
Roots	7	41.2	13	54.2	1	4.3	6	27.3	8	23.5	0	0.0
Grease	0	0.0	0	0.0	0	0.0	0	0.0	5	14.7	1	14.3
Debris	1	5.9	3	12.5	1	4.3	1	4.5	2	5.9	0	0.0
Debris from Laterals	0	0.0	0	0.0	2	8.7	3	13.6	0	0.0	1	14.3
Rags/Wipes	0	0.0	0	0.0	0	0.0	0	0.0	2	5.9	3	42.9
CS Maintenance cause spill	0	0.0	0	0.0	0	0.0	1	4.5	0	0.0	0	0.0
Pipe Structural Problem/ Failure	1	5.9	2	8.3	0	0.0	2	9.1	6	17.6	1	14.3
Vandalism	0	0.0	0	0.0	1	4.3	0	0.0	0	0.0	0	0.0
Pump Station - others	0	0.0	0	0.0	0	0.0	0	0.0	3	8.8	0	0.0
Operation Error	0	0.0	0	0.0	0	0.0	0	0.0	1	2.9	0	0.0
Animal Carcass	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Comstuction Failure	0	0.0	0	0.0	1	4.3	0	0.0	1	2.9	0	0.0
Construction Debris	1	5.9	0	0.0	1	4.3	1	4.5	0	0.0	0	0.0
Multiple Causes	7	41.2	5	20.8	14	60.9	8	36.4	5	14.7	1	14.3
Subtotal for Blockage	17	100.0	23	95.8	21	91.3	22	100.0	33	97.1	7	100.0
Infrastructure Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Inflow & Infiltration	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Electrical Power Failure	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Flow Capacity Deficiency	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Natural Disaster	0	0.0	0	0.0	1	4.3	0	0.0	0	0.0	0	0.0
Bypass	0	0.0	0	0.0	0	0.0	0	0.0	1	2.9	0	0.0
Cause Unknown	0	0.0	0	0.0	1	4.3	0	0.0	0	0.0	0	0.0
Total	17	100	23	96	23	100	22	100	34	100	7	100

Appendix G

Mutual Aid & Assistance Agreement
between Marin County
Wastewater Agencies

THIS PAGE LEFT BLANK INTENTIONALLY

**Mutual Aid and Assistance Agreement
Between
Marin County Wastewater Agencies**

This agreement (hereinafter "Agreement") is made and entered into by the Novato Sanitary District, Las Gallinas Valley Sanitary District, Central Marin Sanitation Agency, Sewerage Agency of Southern Marin, Sanitary District No.5 of Marin County, and Sausalito Marin City Sanitary District, hereinafter called "Agencies", for the purpose of providing mutual aid and assistance to each other in times of need and to provide for a method of reimbursement for equipment, materials and supplies, and personnel made available under this Agreement.

In consideration of the mutual covenants and agreements hereinafter set forth, the Agencies will consider providing mutual aid and assistance to each another in times of need. Each Agency has the absolute discretion to decline to provide any requested assistance and the execution of this Agreement shall not create any duty to respond on the part of any Agency.

Nothing in this Agreement prohibits or precludes other local agencies in Marin County that provide wastewater services to request participation in the Agreement. Participation must be approved by all Agencies, and the contract amended pursuant to Section 8.

1. Requesting Assistance

The General Manager, or designated representative, of an Agency may request aid and assistance (Requesting Agency) from the General Manager, or designated representative, of another Agency (Responding Agency). Requests for assistance can be made orally or in writing. When made orally, the request for personnel, equipment and supplies shall also be prepared in writing and submitted to the other General Manager as soon as practicable.

When a Responding Agency receives a request for aid or assistance, the General Manager of the Responding Agency will evaluate the request and shall inform, as soon as possible, the Requesting Agency about the type and quantity of available resources, if any, and the approximate arrival time of such assistance, or if aid will not be provided.

Employees provided under this agreement will be under the direction and control of the Requesting Agency. The Requesting and Responding Agency's designated manager or supervisor(s) shall keep accurate records of the equipment and materials used, and the time expended and work performed by personnel during the period of assistance. The Responding Agency's General Manager retains the right to withdraw some or all of its resources at any time for any reason at the Responding Agency's sole discretion.

2. Cost Reimbursement

a. Personnel: The Responding Agency will make such employees as are willing to participate available to the Requesting Agency at the Requesting Agency's expense, defined as being equal to the Responding Agency's full cost, i.e., equal to the employee's applicable salary or hourly wage plus fringe benefits and overhead, including the overtime rate as applicable. The Requesting Agency shall be responsible for all direct and indirect labor costs.

b. Equipment: Use of equipment, such as construction equipment, vehicles, tools, pumps and generators, shall be at the Responding Agency's current equipment rate and subject to the following conditions: The Requesting Agency shall reimburse the Responding Agency for use of equipment including, but not limited to, all fuel, lubrication, maintenance, transportation, and loading/unloading of loaned equipment. All equipment shall be returned to the Responding Agency as soon as is practicable and reasonable under the circumstances.

- 1) At the option of the Responding Agency, equipment may be provided with an operator;
- 2) Equipment shall be returned to the Responding Agency within 24 hours after receipt of an oral or written request for return;
- 3) In the event equipment is damaged while being dispatched to Requesting Agency, or while in the custody and use of Requesting Agency, Requesting Agency shall reimburse the Responding Agency for the reasonable cost of repairing said damaged equipment. If the equipment can not be repaired, the Requesting Agency shall reimburse the Responding Agency for the cost of replacing such equipment with equipment that is of at least equal value and capability as determined by the Responding Agency. If the Responding Agency must lease a piece of equipment while the Requesting Agency's equipment is being repaired or replaced, the Requesting Agency shall reimburse the Responding Agency for such lease cost.

c. Materials and Supplies: The Requesting Agency shall reimburse the Responding Agency in kind or at actual replacement cost, plus handling charges, for use of expendable or non-returnable supplies. Other supplies and reusable items that are returned to the Responding agency in a clean, damage-free condition shall not be charged to the Requesting Agency and no rental fee shall be charged; otherwise, they shall be treated as expendable supplies. Supplies that are returned to the Responding Agency with damage must be treated as expendable supplies for purposes of cost reimbursement.

3. Payment Period

The Responding Agency shall provide an itemized invoice to the Requesting Agency for the expenses incurred in providing assistance under this Agreement not later than the 10th of the month following the month wherein assistance is provided. The Requesting Agency agrees to reimburse the Responding Agency within 15 days from receipt of an invoice.

4. Records

Authorized representatives of each Agency shall have access to the other's books, documents, notes, reports, papers and records for the purpose of reviewing the accuracy of the invoice(s) rendered.

5. Defense and Indemnification

The Requesting Agency shall assume the defense of, fully indemnify, and hold harmless the Responding Agency, their Board members, officers and employees, from all claims, loss, damage, injury and liability of every kind, nature and description, directly or indirectly arising from assistance provided hereunder, including, but not limited to, negligent or wrongful use of equipment, supplies or personnel provided, or faulty workmanship or other negligent acts, errors or omission.

6. Workers' Compensation

Each Agency is responsible for providing worker's compensation benefits and administering worker's compensation for its employees.

7. Termination

Any Agency may terminate this Agreement by providing written notice to the others. Termination does not absolve the Requesting Agency's duty to reimburse the Responding Agency for assistance rendered, which duty shall survive such termination.

8. Modification

Modification to this agreement must be in writing and approved by all parties participating in Agreement at the time of the subject modification.

9. Severability

If any provision of this Agreement is declared by a court of competent jurisdiction to be invalid, the validity of the remaining terms and provisions shall not be affected.

10. Conflict Resolution

If a situation arises where the Responding and Requesting agencies' managers disagree on the interpretation of an Agreement provision or the reimbursement amount for mutual aide services, the parties in disagreement will resolve the situation through an informal Mediation and if Mediation is unsuccessful, then through binding Arbitration. The expenses associated with the conflict resolution process will be shared equally by the Responding and Requesting agencies.

The effective date of this agreement is when it has been executed by all the Agencies.

SAUSALITO-MARIN CITY SANITARY DISTRICT

By: Robert A. Simmons
Bob Simmons, District Manager

Date: 3/31/11

CENTRAL MARIN SANITATION AGENCY

By: Jason Dow
Jason Dow, General Manager

Date: 3/10/2011

NOVATO SANITARY DISTRICT

By: Beverly B. James
Beverly James, Manager/Engineer

Date: 4/8/2011

SEWERAGE AGENCY OF SOUTHERN MARIN

By: Stephen Danahy
Stephen Danahy, General Manager

Date: 4/1/11

LAS GALLINAS VALLEY SANITARY DISTRICT

By: Mark Williams
Mark Williams, District Manager

Date: 5/24/11

SANITARY DISTRICT No. 5

By: Robert Lynch
Robert Lynch, District Manager

Date: 5-20-11

Amendment #1

Mutual Aid and Assistance Agreement Between Marin County Wastewater Agencies

This amendment (hereinafter "Amendment") is made and entered into by the Novato Sanitary District, Las Gallinas Valley Sanitary District, Central Marin Sanitation Agency, Sewerage Agency of Southern Marin, Sanitary District No.5 of Marin County, and Sausalito-Marín City Sanitary District, hereinafter called "Agencies".

BACKGROUND

The Agencies desire to amend the May 2011 agreement entitled "Mutual Aid and Assistance Agreement between Marin County Wastewater Agencies" (the Agreement), to create a mechanism for other Marin County water and wastewater entities to become Parties to the Agreement.

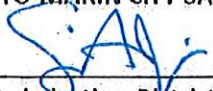
The Agencies therefore agree as follows:

AGREEMENT

- 1) Definition of Party: a local agency that provides water or wastewater services within Marin County that is party to the Agreement.
- 2) Definition of Addendum: an agreement that is in conformity with the addendum as set forth in Exhibit A to this Amendment #1.
- 3) Addition of Section 11 – New Local Agency Members: Any local agency in Marin County that provides water and/or wastewater services can become Party to this Agreement upon (a) approval of a majority of the current Parties, and (b) execution of a completed addendum by the governing board of the local agency.
- 4) Effect. Except as modified by this Amendment, all provisions of the original Agreement remain in full force and effect and continue to bind all Parties hereto.
- 5) Signatures. The following signatures attest the Agencies agreement hereto.

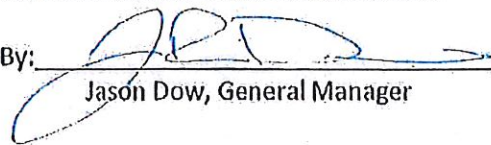
The effective date of this Amendment is when it has been executed by each Agency's representative on the following page.

SAUSALITO-MARIN CITY SANITARY DISTRICT

By: 
Craig Justice, District Manager

Date: 9/14/2014

CENTRAL MARIN SANITATION AGENCY

By: 
Jason Dow, General Manager

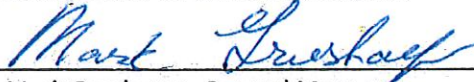
Date: 9/10/14

NOVATO SANITARY DISTRICT

By: 
Sandeep Karkal, Manager/Engineer

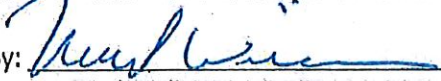
Date: 9/24/14

SEWERAGE AGENCY OF SOUTHERN MARIN

By: 
Mark Grushayev, General Manager

Date: 9-24-14

LAS GALLINAS VALLEY SANITARY DISTRICT

By: 
Mark Williams, District Manager

Date: 9/12/14

SANITARY DISTRICT No. 5

By: 
Tony Rubio, Acting District Manager

Date: 9/16/14

Exhibit A

**Mutual Aid and Assistance Agreement
between
Marin County Wastewater Agencies**

FORM OF ADDENDUM

This addendum to the Amended Mutual Aid and Assistance Agreement between Marin County Wastewater Agencies (the "Agreement"), is dated February 22, 2019, and is made by San Rafael Sanitation District (the "Agency"), for the purpose of Agency becoming a party to the Agreement. The Agreement is incorporated by reference and made a part of this Addendum.

The Agency acknowledges that it has received a copy of the Agreement and, after a thorough review of the Agreement, desires to become a party to the Agreement. The Agreement permits the addition of parties to the Agreement if (a) such addition is approved by a majority of the current Parties, as defined in the Agreement, and (b) the Agency desiring to become a party through the execution of an addendum by its governing board.

The governing body of the Agency certifies that the Agency has reviewed the Agreement and agrees to its terms.

In consideration for the mutual promises set forth in the Agreement, the governing body of the Agency hereby agrees to accept and perform all duties, responsibilities and obligations as set forth in the Agreement. Further, the governing body authorizes its District Manager, or his/her designee, as its Representative, with authority to sign all documents necessary to implement the Agreement.

The notice address for the Agency's Representative is:
San Rafael Sanitation District
111 Morpew Street
San Rafael, CA 94901

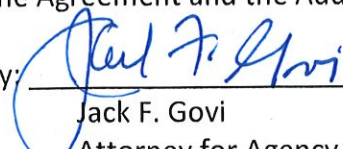
San Rafael Sanitation District

By: _____


Gary O. Phillips
Chairperson

The Agreement and the Addendum are approved as to form:

By: _____


Jack F. Govi
Attorney for Agency

**Mutual Aid and Assistance Agreement
Between Marin County Wastewater Agencies
Emergency Equipment Resources**

Agency: Central Marin Sanitation Agency

Contact Name: Jason Dow Contact Phone Number: 415-459-1455

Last Updated: 7/29/2021

E.g., Generator

E.g., Kohler, 10 kW, diesel, trailer-mounted

1

Olive Street Pump Station

Item	Specifics	Qty	Location/Assigned to
Abrasive Cut Off Saw	Stihl, Gasoline	1	Maintenance tool crib
Air Blowers	Allegro Model 9543, Electric, 1 HP, 115V, 1842 CFM	2	Confined space cart
Air Blowers	Allegro Model 9543, Electric, 1 HP, 115V, 1842 CFM	2	Confined space cart
Air Blowers	Allegro Model 9514, Electric, 1/3 HP, 115V, 1275 CFM	1	Maintenance annex
Drill Press	Dayton 1-1/2 HP	1	Maintenance shop
Flatbed/Crane truck	Ford F450 Super Duty, Diesel, 16,000 GVW	1	Corp yard
Forklift	Toyota 6000 lb, Propane	1	Corp yard
Gas detectors	RKI GX2012 - (4-gas)	4	Lab Office
Lathe	Nardini, 17" x 85"	1	Maintenance Shop
Pipe Threader	Rigid 535, up to 2 inches	1	Maintenance annex
Portable Generator	Honda, Model 2200X, Gasoline, 2200 Watt, 120 VAC	1	Maintenance annex
Portable Generator	Coleman Sport 1600, Gasoline, 1600 W	1	Paradise Pump Station
Portable Generator	Honda, Gasoline, 10,000 W 120/240 V	2	Maintenance annex
Rough Terrain Telehandler	SkyTrak, 5 ton	1	Corp yard
Skid Steer Loader	Bobcat, S185	1	Corp yard
Towable generator	Wacker G50, Diesel, 38KW, 48KVa, 3PH-240-480 VAC, 1PH-120/240 VAC	1	Corp yard
Trash Pumps	Multi-Quip, QP-3TH, 3-inch, Gasoline	2	Maintenance annex
Trash Pump	Goodwin, GTP-80HX, 3-inch, Gasoline	1	Maintenance annex
Trash Pump	Wacker Neuson-inch, Gasoline	1	Maintenance annex
Vertical Milling Machine	Lagun, Variable speed, 10" X 50" table	1	Maintenance shop
Welder/Generator	Miller Bobcat 225, 225A, 25V Welder 80/40A, 120/240 VAC 60Hz Generator	1	Engine room

**Mutual Aid and Assistance Agreement
Between Marin County Wastewater Agencies
Emergency Equipment Resources**

Agency: LGVSD

Contact Name: Greg Pease Contact Phone Number: 707.533.3520

Last Updated: 08/27/2021

E.g., Generator

E.g., Kohler, 10 kW, diesel, trailer-mounted

1

Olive Street Pump Station

Item	Specifics	Qty	Location/Assigned to
F-750 Flusher	Flusher	1	Collections/Fleet Storage Carport
F-650 Rodder	Champion Rodder	1	Reclamation Corp. Yard
Freightliner CNG	CNG fuel - T.V./Flusher Combo	1	Collections/Fleet Storage Carport
Emergency Response Trailer	Spill Response - absorbent, clean-up equipment, berms, etc	1	Collections/Next to DBF
Honda Trash Pump	2"	1	Collections/Fleet Storage Carport
Honda Generator	Portable generator - EV 2000	3	Collections/Fleet Storage Carport
Vivax Push Cam	Vivax Camera and 200' cable	2	Collections/Fleet Storage Carport
Locator	512 Hz	2	Collections/Fleet Storage Carport
Gas Techs	atmospheric monitoring	6	Collections Dept. Office
Confined Space Equipment	all entry equipment	1	Collections/Tuff shed
2020 Frieghtliner Vacon	Vac/flusher combo	1	Collections/Fleet Storage Carport
Case 586H Forklift	6000 lb capacity	1	Collections/Fleet Storage Carport
F-450 Flusher	flusher (1/2" hose, 600 gallons water)	1	Collections/Fleet Storage Carport
F-550 Dominator	Boom Truck	1	Collections/Fleet Storage Carport
Repair Couplings	Sizes range from 6"-18"	9	Reclamation (Conex Box)
Pump Hoses	Sizes range from 2" - 8" (lay flat and rigid)	700'+/-	Hose Storage (treatment plant)
Generator	Multiquip 40kw, diesel, 480/240 VAC towable	1	Collections/Fleet Storage Carport
Generator	Multiquip 110kw, diesel, 480/240 VAC towable	1	Collections/Fleet Storage Carport
Generator	Kohler 380kw, diesel, towable	1	Collections/Fleet Storage Carport
Generator	Wacker 25kw, diesel, towable	1	Collections/Fleet Storage Carport
Pump	12" Godwin trash pump, diesel, towable	1	John Duckett Pump Station
Pump	8" Godwin trash pump, diesel, towable	1	Collections/Fleet Storage Carport
Pump	4" Godwin trash pump, diesel, towable	1	Collections/Fleet Storage Carport

**Mutual Aid and Assistance Agreement
Between Marin County Wastewater Agencies
Emergency Equipment Resources**

Agency: Novato Sanitary District

Contact Name: Sandeep Karkal

Contact Phone Number: 415-892-1694

Last Updated: 8/30/21

Item	Specifics	ID#	Qty	Location/Assigned to
Escape Breathing Air	EBA rescue air packs		3	Pump Station Service Truck (1) Collections Department Office (2)
Gas Detectors	RKI Instruments 4-gas meters		8	Collections Department Office
Portable Pumps	Trailer mounted 4" Screwsucker pump	3409	1	NSD Treatment Plant
	4-inch pump trailer, Gorman Rupp w/ Deutz diesel engine		1	Reclamation Sludge Lagoons
Air Compressor	Trailer-mounted Ingersoll-Rand air compressor	Veolia	1	NSD Treatment Plant
Generators	Trailer mounted Kohler MQ 20 kW generator	3306	1	NSD Treatment Plant
	Trailer mounted Kohler 20 kW generator	3302	1	NSD Treatment Plant
	Trailer mounted Kohler 30 kW generator	3303	1	NSD Treatment Plant
	Trailer mounted Kohler 30 kW generator	3312	1	NSD Treatment Plant
	Trailer mounted Kohler 30 kW generator	3313	1	NSD Treatment Plant
	Trailer mounted MQ power 45 kW generator	3307	1	NSD Treatment Plant
	Trailer mounted Kohler 45kW generator	3311	1	NSD Treatment Plant
	Trailer mounted Kohler 45kW generator	3310	1	NSD Treatment Plant
	Honda EM3500X generator		1	NSD Treatment Plant
	Honda E2000i generator		2	NSD Treatment Plant
	Honda EU3000i generator		1	NSD Treatment Plant
	Honda E1000i generator		1	NSD Treatment Plant
	Trailer mounted Kohler 200 kW generator		1	Olive Street Pump Sta.
Pickup Trucks	2002 Dodge Dakota	Veolia	1	Laboratory
	2005 Chevrolet ½ ton	3122	1	Collections
	2007 Ford 4X4 Extra Cab	3129	1	Field Services Manager
	2007 Dodge Dakota	3130	1	Inspection

Item	Specifics	ID#	Qty	Location/Assigned to
	Ford F-250 ¾ ton w/fuel transfer tank	3133	1	Collections
	2018 Ford Supercab F150	3136	1	Collections Supt.
	2019 Ford Supercab F250 w/fuel trans tank	3137	1	Collections
	2019 Ford Supercab F250 w/fuel trans tank	3138	1	Collections
	2019 Nissan Frontier	3139	1	E/I Tech
Passenger	2007 Chevrolet Blazer	3128	1	General Manager
Vehicles	2008 Toyota Prius	3131	1	Administration
	2017 Ford Fusion hybrid	3134	1	Deputy General Mgr
Utility Truck	2011 Ford F550 service truck	3207	1	Collections
Sewer Maintenance Vehicles	2014 International Terrastar rodder	3208	1	Collections
	2017 Ford F-550 flusher	3209	1	Collections
	2005 Peterbilt Camel flusher/vac. cleaner	3207	1	Collections
	2006 Sterling Camel flusher/vac. cleaner	3206	1	Collections
	Kenworth vactor	3210	1	Collections
	Godwin 6" portable pump	3414	1	Collections
CCTV Camera Van	2018 Ford 350 Transit	3135	1	Collections
Portable 2- Way Radios	Motorola		12	Collections Dept. Office
Confined Space Equipment	DBI/SALA davit style hoist and winches 3 fall arrest/hoist + 2 winch/hoist only		5	Pump Station Service Truck and Confined Space Conex Box
Miscellaneous	Davit arm lift w/winch (equipment lift)		1	Ignacio

**Mutual Aid and Assistance Agreement
Between Marin County Wastewater Agencies
Emergency Equipment Resources**

Agency: Ross Valley Sanitary District

Contact Name: Manuel Vigil _____

Contact Phone Number: 415 259 2949

Last Updated: August 31, 2021

E.g., Generator

E.g., Kohler, 10 kW, diesel, trailer-mounted

1

Olive Street Pump Station

Item	Specifics	Qty	Location/Assigned to
Dump Truck	2013 DuroStar 4400	2	Landing
Combo	2008 Peterbilt VacCon	1	Landing
SUV	2016 Explorer	1	Kerner
Tractor	Kubota KX121	1	Landing
Tractor	John Deere D50	1	Landing
Jetter	2012 Vactor Ramjet	2	Landing
Jetter	2015 F-550 Harben 18 GPM at 4000 PSI	2	Landing and Kerner
SUV	2018 Ford Escape	1	Landing
Truck	2011 F-250	5	Landing and Kerner
Truck	2016 F-150	3	Landing and Kerner
Jetter	2021 Vactor RamJet	2	Landing
Condition Assessment Vehicle	2019 Freightliner Sprinter	1	Kerner
Truck	2018 Silverado 1500	4	Landing and Kerner
Rodder	OK Champion Mechanical Rodder	1	Landing
Trailer	Tractor Trailer	2	Landing
Air Compressor	Ingersoll Rand 185	1	Landing
Cargo Trailer	Emergency Bypass Trailer	1	Landing
Cargo Trailer	Grout Trailer	1	Landing
Condition Assessment Vehicle	2011 Aries	1	Landing
Cured in Place Point Repair	2014 Izusu NOR	1	Landing
Crane Truck	F-750	1	Landing
Truck	Silverado 3500HD	1	Landing
Pump	1" to 3" Submersibles	8	TR06 Landing
Generator	Towable Generac	1	Landing
Portable Generators	Honda	1	Kerner
Hose	4" Flex Hose 100 ft	3	Landing
Radios	Hectera	8	Landing
Radios	Motorola	8	Landing

**Mutual Aid and Assistance Agreement
Between Marin County Wastewater Agencies
Emergency Equipment Resources**

Agency: Ross Valley Sanitary District

Contact Name: Manuel Vigil

Contact Phone Number: 415 259 2949

Last Updated: August 31, 2021

E.g., Generator

E.g., Kohler, 10 kW, diesel, trailer-mounted

1

Olive Street Pump Station

Item	Specifics	Qty	Location/Assigned to
3" suction hose	3" cam lock suction hose 25'	3	Landing
Multiquip 3" pump	3" automatic trash pump	3	Landing
Multiquip generator	6kw mobile generator	3	Landing
3" discharge hose	Cam lock discharge hose 25'	10	Landing
3" discharge hose	Cam lock discharge hose 50'	10	Landing
3" discharge hose	Cam lock discharge hose 100'	10	Landing
2" discharge hose	Cam lock discharge hose 50'	5	Landing
Driveway ramps	Ramps for 3" hose	10	Landing
Sump pump	Multiquip 1hp 2" sump pump	2	Landing
Sump pump	1/2 hp 2" sump pump	2	Landing
Plugs	High flow/no flow 6"	3	Landing
Plugs	High flow/no flow 8"	3	Landing
Plugs	6" plug	6	Landing
Plugs	8" plug	4	Landing
Plugs	4" plug	6	Landing
Wye manifold	3" wye manifold with check valves	2	Landing
Generator	2kw Honda	4	Landing
Generator	3kw Honda	3	Landing
Generator	5kw Honda	1	Landing
Swedge	Piranha Hose Only	2	Landing
Fuel	Diesel 5 Gallon	4	Landing
Fuel	Gas 5 Gallon	3	Landing
Camera	Push Camera	7	Landing and Kerner
Camera	5 "-24" Mainline Camera	4	Landing and Kerner
Gas Monitor	RKI	10	Landing
Cones	24"	100+	Landing and Kerner

**Mutual Aid and Assistance Agreement
Between Marin County Wastewater Agencies
Emergency Equipment Resources**

Agency: Ross Valley Sanitary District

Contact Name: Manuel Vigil _____ Contact Phone Number: 415 259 2949

Last Updated: August 31, 2021 _____

E.g., Generator

E.g., Kohler, 10 kW, diesel, trailer-mounted

1

Olive Street Pump Station

Item	Specifics	Qty	Location/Assigned to
Storm Drain Protection	Various PIG drain inlet covers	14	Landing
Welder	Gas	1	Anderson
Welder	Mig	1	Anderson
Welder	Mig	1	Landing
Pump	Venturi Jetter Pump	2	Landing
Pump	Electric Hands Free Pump	4	Landing
Excavation	Trench Plates	10	Landing
Excavation	Shoring	16	Landing

**Mutual Aid and Assistance Agreement
Between Marin County Wastewater Agencies
Emergency Equipment Resources**

Agency: Sanitary District #2/Town of Corte Madera

Contact Name: Fernanda Stefanick Contact Phone Number: 415-927-5792

Last Updated: 1/15/20

E.g., Generator

E.g., Kohler, 10 kW, diesel, trailer-mounted

1

Olive Street Pump Station

Item	Specifics	Qty	Location/Assigned to
Air Compressor	Atlas Copco (trailer)	1	Public Works Corp Yard
Backhoe	Case	1	"
Confined Space			Public Works Corp Yard
Entry Equip.	Blower	1	Generator Room
	Harnesses	2	"
	Tripod	2	"
	Winch	2	"
Vehicles			Public Works Corp Yard
Crane Truck (S-2)	2017 Ford F-550	1	"
Dump Truck (S-6)	1997 Ford F-800	1	"
Dump Truck (S-7)	2017 Ford F-550	1	"
Spill Response Truck	2003 Chevy 3500 HD	1	"
Sweeper S-10	Ravo	1	"
Combo Truck (S-74)	VacCon/Freightliner	1	"
Forklift	Hyster 50	1	"
Gas Meter	BW Gas Alert Max XTII	2	Public Works Corp Yard/ Sanitary Office
Pipe Plugs	4"-8"	2	Public Works Corp Yard/Stall 18
	6"-12"	2	"
	8"-12"	5	"
	12"-18"	3	"
	18"-30"	1	"

**Mutual Aid and Assistance Agreement
Between Marin County Wastewater Agencies
Emergency Equipment Resources**

Agency: Sanitary District #2/Town of Corte Madera

Contact Name: Fernanda Stefanick Contact Phone Number: 415-927-5792

Last Updated: 1/15/20

E.g., Generator

E.g., Kohler, 10 kW, diesel, trailer-mounted

1

Olive Street Pump Station

Item	Specifics	Qty	Location/Assigned to
Push Camera/Locator	Vivax Vcam6	1	Public Works Shop
Spill Contain. Matl	Various		Public Works Corp Yard Stall 18
Submersible Pump	Teel 2"	1	Public Works Corp Yard Stall 18
Trash Pump	Multiquip 4" 200' of discharge		Public Works Corp Yard Stall 18
Trench Plates	4'x8'	6	Paradise PS Storage Yard
Pipes			Paradise PS Storage Yard
C-900	10"	20'	"
	8"	40'	"
	6"	40'	"
	4"	40'	"
SCH 80	2"	20'	"
	1.5"	20'	"
Misc. Couplers			Paradise PS Storage Yard
Mission Couplers	10" AC/DI to 10" AC/DI	2	"
	8" AC/DI to 8" AC/DI	2	"
	6" AC/DI to 6" AC/DI	2	"
	4" AC/DI to 4" AC/DI	2	"
	10" AC/DI to 10" CI/PL	3	"
	8" AC/DI to 8" CI/PL	3	"
	6" AC/DI to 6" CI/PL	3	"
	4" AC/DI to 4" CI/PL	3	"

**Mutual Aid and Assistance Agreement
Between Marin County Wastewater Agencies
Emergency Equipment Resources**

Agency: Sanitary District No.5 of Marin County

Contact Name: Tony Rubio Contact Phone Number: 415-435-1501

Last Updated: 8/9/2021

E.g., Generator

E.g., Kohler, 10 kW, diesel, trailer-mounted

1

Olive Street Pump Station

Item	Specifics	Qty	Location/Assigned to
Generator	40Kw trailer mounted single & 3 phase	1	Tiburon PS#5
Generator	800W	1	Tiburon MP
Generator	11,000W	1	Tiburon MP
Portable Pump	150 GPM trash pump 3" discharge	2	Tiburon MP
Portable Pump	150 GPM Flygt Submersible 2" Discharge	3	Emergency Response Trailer
Portable Pump	1500 GPM trailer mounted diesel pump 6"	1	Tiburon MP
Hoses	3" Flex discharge 500ft	1	Emergency Response Trailer
Hoses	3" suction 100 ft	1	Emergency Response Trailer
Hoses	2" flex discharge 300 ft	1	Emergency Response Trailer
Hoses	2" suction 100ft	1	Emergency Response Trailer
Confined Space Equip	Full set up confined space entry	1	Emergency Response Trailer
SCBA	MSA	1	Emergency Response Trailer
Air Compressor	Gasoline Powered	1	Tiburon MP
Lights	Emergency Lights 1000W	1	Emergency Response Trailer
Repair Clamps	Misc full circle clamps 4-12"		Tiburon MP
Band Seals	4-12"		Tiburon MP
Pump	75hp Flygt Submersible	1	Tiburon MP
Pump	5hp Flygt Submersible	2	Tiburon MP
Pump	3hp Flygt Submersible	2	Tiburon MP
Generator	100KW trailer mounted diesel	1	Tiburon PS#5
Generator	30 KW trailer mounted diesel	1	Tiburon PS#5
Combination Truck	3.5 yard Vactor	1	Tiburon MP

**Mutual Aid and Assistance Agreement
Between Marin County Wastewater Agencies
Emergency Equipment Resources**

Agency: San Rafael Sanitation District

Contact Name: Kris Ozaki Contact Phone Number: 415-725-9338

Last Updated: 8/24/2021

E.g., Generator

E.g., Kohler, 10 kW, diesel, trailer-mounted

1

Olive Street Pump Station

Item	Specifics	Qty	Location/Assigned to
Mobile Pump	Godwin 8", diesel, trailer-mount	1	Corporation Yard
Mobile Pump	Godwin 4", diesel, trailer-mount, sound attenuated	1	Cayes Main Pump Station
Generator	Doosan 56kw, diesel, trailer-mount, sound attenuated	3	Corporation Yard, Peacock and Cayes Main Pump Station
Generator	Doosan 260kw, diesel, trailer-mount, sound attenuated	1	Simms Pump Station
Generator	Kohler 60kw, diesel, trailer-mount	1	Riviera Pump Station
Generator	Aggreko 200kw, diesel, trailer-mount, sound attenuated	1	West Railroad Pump Station
Vactor	2100i, PD blower, single rear axle, 10 yard, 1000 gallons water	1	Corporation Yard
Vactor	2100, Fan blower, tandem rear axle, 12, yard, 1500 gallons water	1	Corporation Yard
Crane Truck	Ford F-550, 7,500 lb. capacity crane, 100 gal. aux. diesel tank, air compressor, tools, confined space equipment	1	Corporation Yard
Pump Equipment Trailer	Hallmark 20', suction and discharge hoses, cones, barricades, 3" trash pump, 2" Flygt Submersible Pump	1	Corporation Yard
Rodder	OK Champion 1600' 0.383 continuous steel rod	2	Corporation Yard
1 Ton Pick-up	Ford F-350 Utility bed lumber rack, 90 gal. aux. diesel tank, tools for work on pumps	1	Corporation Yard
3/4 Ton Pick-up	Ford F-250 Utility bed lumber rack, tools and fittings for pipe repairs	1	Corporation Yard
3/4 Ton Pick-up	Chevrolet 2500 Tommy Lift Gate	1	Corporation Yard
Water Truck	Ford F-750 2,000 Gallon Water Tank	1	Corporation Yard
Generator	Honda 2000 watt gasoline	2	Corporation Yard
Generator	Makita 5700 watt gasoline	1	West Railroad Pump Station
Small Machine	Duracable Power Snake 2 spools of 3/4" 150 cable	1	Corporation Yard
Generator/Welder	Miller AEAD200LE 5kva 140 amp arc welder	1	West Railroad Pump Station
Gas Detector	RKI GX-2012 4 gas	3	Corporation Yard
CCTV	Cues MP2020 push camera 300' cable	1	Corporation Yard
CCTV	Subsite Trackstar 2 1000' cable pan/tilt 6"-10" tractor	1	Corporation Yard
Inflatable Pipe Plugs	4" - 28" inflatable pipe plugs and air lines	8	Simms Pump Station
Force Main Repair Clamps	Smith Blair, Power Seal, Rockwell, Superior Utility, Apac - Various sizes	26	North Francisco Pump Station

**Mutual Aid and Assistance Agreement
Between Marin County Wastewater Agencies
Emergency Equipment Resources**

Agency: Sewerage Agency of Southern Marin (SASM WWTP)

Contact Name: Mark Grushayev Contact Phone Number: 415-388-2402

Last Updated: January 3, 2019

E.g., Generator

E.g., Kohler, 10 kW, diesel, trailer-mounted

1

Olive Street Pump Station

Item	Specifics	Qty	Location/Assigned to
6" Hose	Flat M/F 20' long	2	Trestle Glen
6" Hose	Suction Hose 20' long	2	Trestle Glen
6" Hose	Suction Hose 25' long	1	Trestle Glen
6" Hose	Suction Hose 30' long	1	Trestle Glen
6" Hose	Suction Hose 10' long	10	Trestle Glen
4" Hose	Suction Hose 20' long	7	Plant
4" Hose	Suction Hose 10' long	7	Plant
3" Hose	Suction Hose 20' long	4	Plant
3" Hose	Suction Hose 10' long	4	Plant
2" Hose	Suction Hose 20' long	8	Plant
2" Hose	Suction Hose 10' long	2	Plant
2" Hose	Suction Hose 25' long	1	Plant
2" Hose	Suction Hose 25' long	1	Trestle Glen
2" Hose	Flat Hose 10"	2	Safety Room - Shop
2" Hose	Flat Hose 20'	2	Safety Room - Shop
2" Hose	Flat Hose 30'	2	Safety Room - Shop
Arc Welder	150 amp AC/DC Lincoln Kohler Gas	1	Safety Room - Shop
Air Compressor	17 CFM, 100 PSI, 8 HP, Honda Gas	1	Safety Room - Shop
Air Compressor	Emglo Electric	1	Safety Room - Shop
6" Water Pump	Trailer, Diesel	1	Trestle Glen
4" Water Pump	Honda, Gas	2	Storage - Plant
3" Water Pump	Honda, Gas	1	Storage - Plant
Generator	4000 Watt 120/240V, Dayton Gas 10 Gal Tank	1	Storage - Plant
Sump Pumps	2" Submersible 120V	8	Safety Room - Shop
Full Circle band clamps	21.52 to 22.27 X 20	2	Trestle Glen
Full Circle Band Clamp	11.04 to 11.44 X12.5	1	Trestle Glen
Full Circle Band Clamp	8.54 to 8.94 X 12.5	7	Trestle Glen
Full Circle Band Clamp	6.56 to 6.96 X 12.5	2	Trestle Glen
Full Circle Band Clamp	14.85 to16.05 X 30	1	Trestle Glen
Full Circle Band Clamp	13.65 to 14.85 X 30	1	Trestle Glen

Full Circle Band Clamp	15.92 to 17.12 X 30	1	Trestle Glen
Full Circle Band Clamp	12.62 to 13.02 X 12.5	1	Trestle Glen
Full Circle Band Clamp	18.46 to 19.66 X 30	1	Trestle Glen
4 Bolt Coupling	6.28 to 6.63	1	Warehouse
4 Bolt Coupling	3.96 to 5.60	2	Warehouse
4 Bolt Coupling	10.72 to 12.12	2	Warehouse
4 Bolt Coupling	6.23 to 7.60	2	Warehouse

San Rafael Sanitation District

Sewer Spill Emergency Response Plan

Effective Date: _____

Revised Date: _____

Approved by: _____

Signature: _____

Date: _____

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 San Rafael Sanitation District 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 San Rafael Sanitation District is granted a non-exclusive right to copy the SERP for use by San Rafael Sanitation District personnel only. The SERP as customized for the San Rafael Sanitation District 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 with, or loaned to, another entity other than the San Rafael Sanitation District 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: Training Record
 - C. Appendix C: Service Call Form
 - D. Appendix D: Door Hanger
 - E. Appendix E: Sanitary Sewer Spill Response Instructions for Contractors
 - F. Appendix F: Sanitary Sewer Spill/Backup Response Workbook

Section 1:

- o Workbook Instructions A-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 Report D-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 San Rafael Sanitation District 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. “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 Bay (Region 2) Regional Water Quality Control Board and the State Water Board Order No. WQ 2022-0103-DWQ (SSS-WDR).

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.

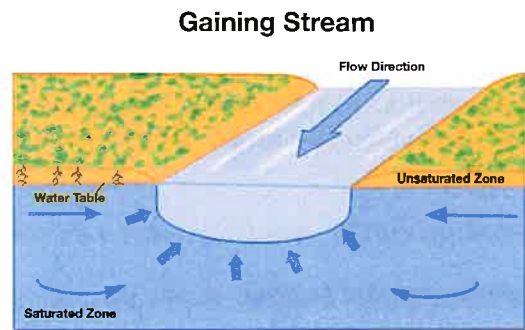
DRAINAGE CONVEYANCE SYSTEM: A drainage conveyance system is a publicly- or privately-owned separate storm sewer system, including but not limited to drainage canals, channels, pipelines, pump stations, detention basins, infiltration basins/facilities, or other facilities constructed to transport stormwater 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 SWRCB Order, groundwater is hydrologically connected to a surface water when the groundwater feeds into the surface water. See image, right. 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 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 State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR).

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 a 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 State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR).

- **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 State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR); 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.cityofsanrafael.org/sewer-documents/>.

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 thirty-three (33) 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: [Emergencies / Sewer Spills - San Rafael \(cityofsanrafael.org\)](#). The District's telephone number for reporting sewer problems is 415-485-3374 Monday thru Friday 6:30 am to 2:30 pm during business hours and 415-485-3000 after hours.

- Normal Work Hours: Calls received at the District Office are conveyed to a field crew member for

prompt action and handling of any spill emergencies or other complaints.

- **After Hours:** The District phone will refer the caller after hours to the City of San Rafael Police Department. The police department will contact Field crew member pager number 415-485-3448 upon receipt of sewer call.

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 maintenance 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 or iPad if available. If a field laptop is not available, the information will be entered into the CMMS when the employee returns to the District office.

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 Districts' 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 tasks 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 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 Office or City of San Rafael Police Department at 415-485-3374 or 415-485-3000 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 at 415-454-4001.

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 (SSSWDR), ATTACHMENT D Element 6 page D-6)

7.1 SEWER SPILL/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 Maintenance Crew performs the following:

- Follows the instructions in the Sanitary Sewer Spill/Backup Response Workbook.
- If the customer is not home the Maintenance Crew completes the Door Hanger and leaves it on the customer's door.
- If the customer is home the Maintenance 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 Maintenance Crew:

- Follows the instructions in the Sanitary Sewer Spill/Backup Response Workbook.
- Notifies Sewer Maintenance Supervisor of the incident.
- Relieves blockage and cleans impacted areas.
- Forwards the completed Sanitary Sewer Spill/Backup Response Workbook to the Sewer Maintenance Supervisor.

The District Manager/District Engineer (LRO) 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 Maintenance 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 Sewer Maintenance Supervisor.

The Sewer Maintenance Supervisor notifies the District Manager of incident.

The District Manager or designee:

- Reviews incident reports, claim form and other incident information and forwards, as appropriate, for sewer overflow, contact:
 - Allied Public Risk – Claims Reporting
 - First Contact: 800-486-2524/ networknewloss@networkadjusters.com
 - Backup: 210-323-1710/ jcamarillo@alliedpublicrisk.com and they will assign a claims representative.
- Communicates with claimant as appropriate.
- Communicates with CSRMA Alliant Insurance Services, Steve Davidson, Account Representative, 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 Operations and Maintenance 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 State Water Board Order No. WQ 2022-0103-DWQ (SSS-WDR), 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 Operations and Maintenance 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 are required to clear blockages in gravity sewers, vacuum spilled sewage, and wash down the impacted area following the spill event.
- *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 Office.

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 Maintenance 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 Services 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 Services instructions and directions regarding placement and language of public warnings will be followed. Additionally, the Maintenance Crew or Operations and Maintenance Manager 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 Services or the Maintenance Crew or Operations and Maintenance Manager.

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/District Engineer 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:

- San Rafael Bay
- Peacock Gap Lake
- San Rafael Canal
- San Rafael Creek
- Black Canyon Creek
- Sisters Creek
- Erwin Creek

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 9.7 (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 9.7 (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 Maintenance Crew will collect water quality samples in accordance with State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR).

The Maintenance Crew collecting the samples will complete the Chain of Custody prior to transferring ownership of the samples to the Central Marin Sanitation Agency.

The Central Marin Sanitation Agency 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 Recreation			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 the Central Marin Sanitation Agency, which is 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/Ab- sent or Quantitray)	8 hours	Plastic (sterile)	Na ₂ S ₂ O ₃ + 0-10°C; No regulatory temp. req. for DW	100 mL
Enterococcus by Enter- olert	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 Maintenance 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 State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), 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 State Water Board Order No. WQ 2022-0103-DWQ (SSS-WDR) 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.
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.

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.

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 sample and be sure to discard rinse water downstream of where sample will be collected. If samples are collected in 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).
- **A point in a drainage conveyance system before the drainage conveyance system flow discharges into a receiving water.**

Sample labels shall be completed for each sample, using waterproof ink, as described in Section 9.5.

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 District Office in the shop. The kit is inspected quarterly by the Sewer Maintenance Supervisor. 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
- 10 Ammonia sample bottles, preserved
- 10 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 Maintenance 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 Maintenance 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 Services, until such time as one of the following criteria have been met:

- The Marin County Environmental Health Services 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 State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR), 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/District Engineer 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?	Maintenance Crews
Training Curriculum	At a minimum, training shall include: <ul style="list-style-type: none"> • The San Rafael Sanitation District 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?	Sewer Maintenance Supervisor
Required Training Records	Employee training sign in log
Who is Responsible for Maintaining Records?	Sewer Maintenance Supervisor

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 State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR) must be submitted electronically to the online CIWQS Sanitary Sewer System Database (<https://ciwqs.waterboards.ca.gov>), unless specified otherwise in State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR). 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	<p>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:</p> <ul style="list-style-type: none"> • Notify the California Office of Emergency Services and obtain a notification control number and • Notify Marin County Environmental Health Services. 	<p>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))</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 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))</p>
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. 	<p>(Section 3.1 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))</p>

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	<p>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:</p> <ul style="list-style-type: none"> Notify California Office of Emergency Services and obtain a notification control number and Notify Marin County Environmental Health Services. 	<p>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))</p>
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 calendar 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 a 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. Not applicable to a spill of less than 1,000 gallons.</p>	<p>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))</p>
Monitoring	<p>Conduct visual monitoring.</p>	<p>(Section 2 of Attachment E1 of the State Water Board ORDER WQ 2022-0103-DWQ)</p>
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. 	<p>(Sections 3.6, 3.7 and 4.4 of Attachment E1 of the State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR))</p>

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;

All 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 on the CMMS, District server and a hard copy at the District offices.

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 overflow 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 E). 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 Maintenance Crew to gather information regarding the incident and notify the Sewer Maintenance Supervisor or their designee.
- It is the responsibility of the Operations and Maintenance 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. Training Record
- C. Service Call Form
- D. Door Hanger
- E. Sanitary Sewer Spill Response Instructions for Contractors
- F. 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 State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR). 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 State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR).

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 State Water Board Order No. WQ 2022-0103-DWQ (SSSWDR)) 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:
Training Record

TRAINING RECORD

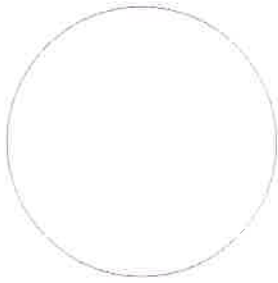
Topic:	Training Date:	
Trainer:	Trainer Position/Company:	
Training Location/Environment:		
BASIS FOR TRAINING AND MATERIALS USED <i>(Basis examples: SOP, PowerPoint, Manufacturer's Recommendations, on-the-job-training. Reference title and/or provide attachments when applicable)</i>		
Comments:		
TRAINING DESCRIPTION <i>(Describe in detail what the training entailed)</i>		
TRAINING METHOD		
<input type="checkbox"/> Classroom/Instructor <input type="checkbox"/> Breakout Sessions <input type="checkbox"/> Tabletop Exercise <input type="checkbox"/> Drill <input type="checkbox"/> Coaching/Mentoring <input type="checkbox"/> Role Playing <input type="checkbox"/> Computerized Training <input type="checkbox"/> Hands-on <input type="checkbox"/> Other (describe):		
METHOD TO QUALIFY TRAINEES <i>(Check all that apply. Maintain qualifying records with training records)</i>		
<input type="checkbox"/> Exam/Quiz <input type="checkbox"/> Assessment of Ability <input type="checkbox"/> Attendance/Participation <input type="checkbox"/> Other (describe):		
Trainer's Signature:	Date:	Length of Training (hours):

APPENDIX C:
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 D:
Door Hanger



San Rafael Sanitation District

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 your responsibility to maintain.

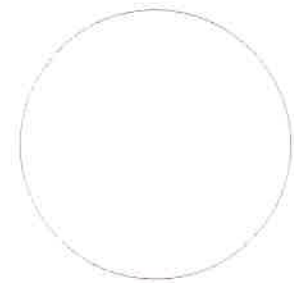
If you require assistance to clear your portion of the lateral you can search the internet for "Sewer Contractors" or "Plumbing Drains & Sewer Cleaning." If you plan to hire a contractor, we recommend getting estimates from more than one company.

District representative notes: _____

District representative name: _____

For questions or comments, please call

San Rafael Sanitation District
Business Hours: 415-485-3374
After Hours: 415-485-3000



San Rafael Sanitation District

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 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.

District representative notes: _____

District representative name: _____

For questions or comments, please call

San Rafael Sanitation District
Business Hours: 415-485-3374
After Hours: 415-485-3000

APPENDIX E
Sewer Spill Response Instructions for Contractors

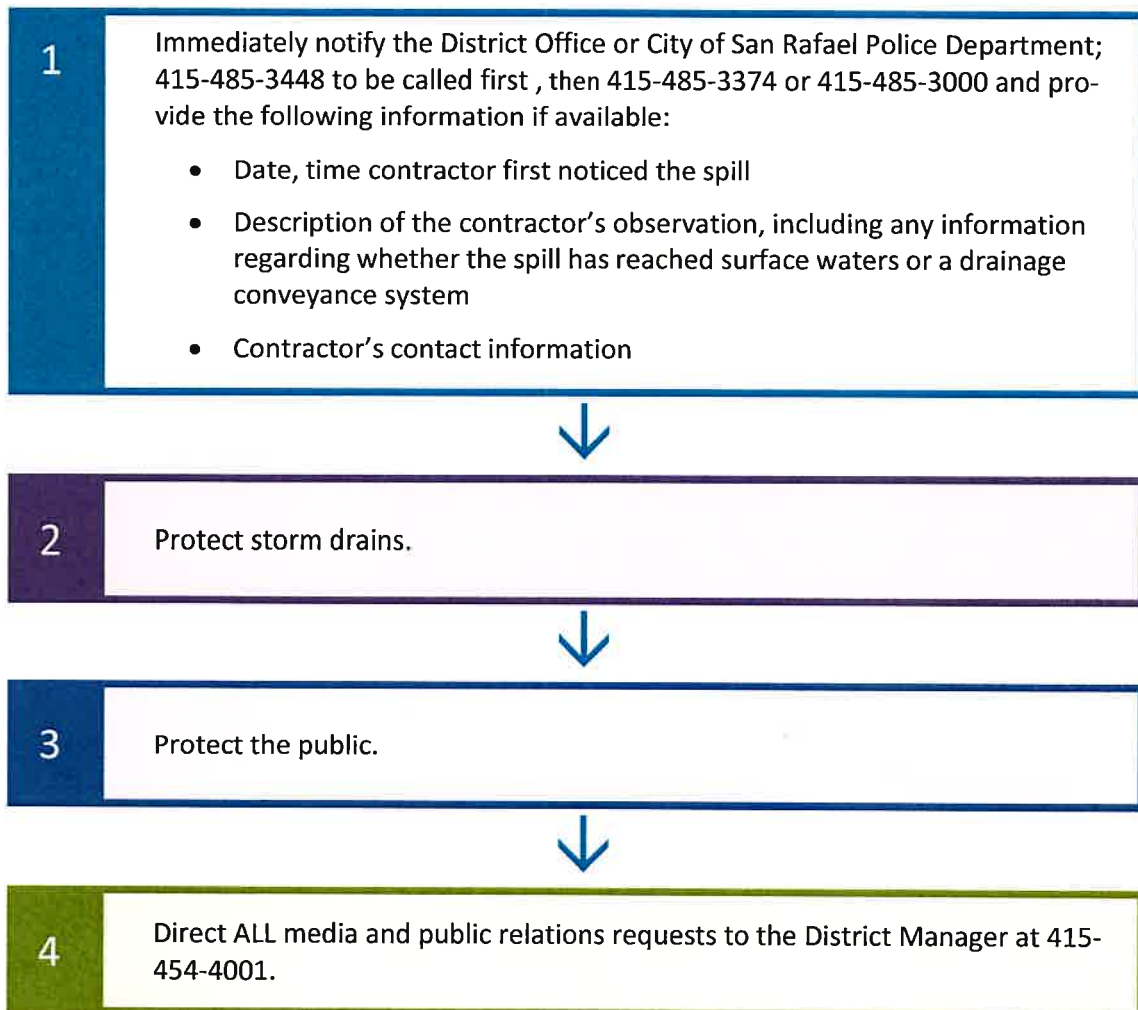
San Rafael Sanitation District
Spill Emergency Response Plan

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 F:
Sewer Spill/Backup Response Workbook

