

# **SAN RAFAEL SANITATION DISTRICT**

111 Morphew Street  
San Rafael, CA 94901



## **SEWER SYSTEM MANAGEMENT PLAN**

**Latest Update by SRSD: June 2023**

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## **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.

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## **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.

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## **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.

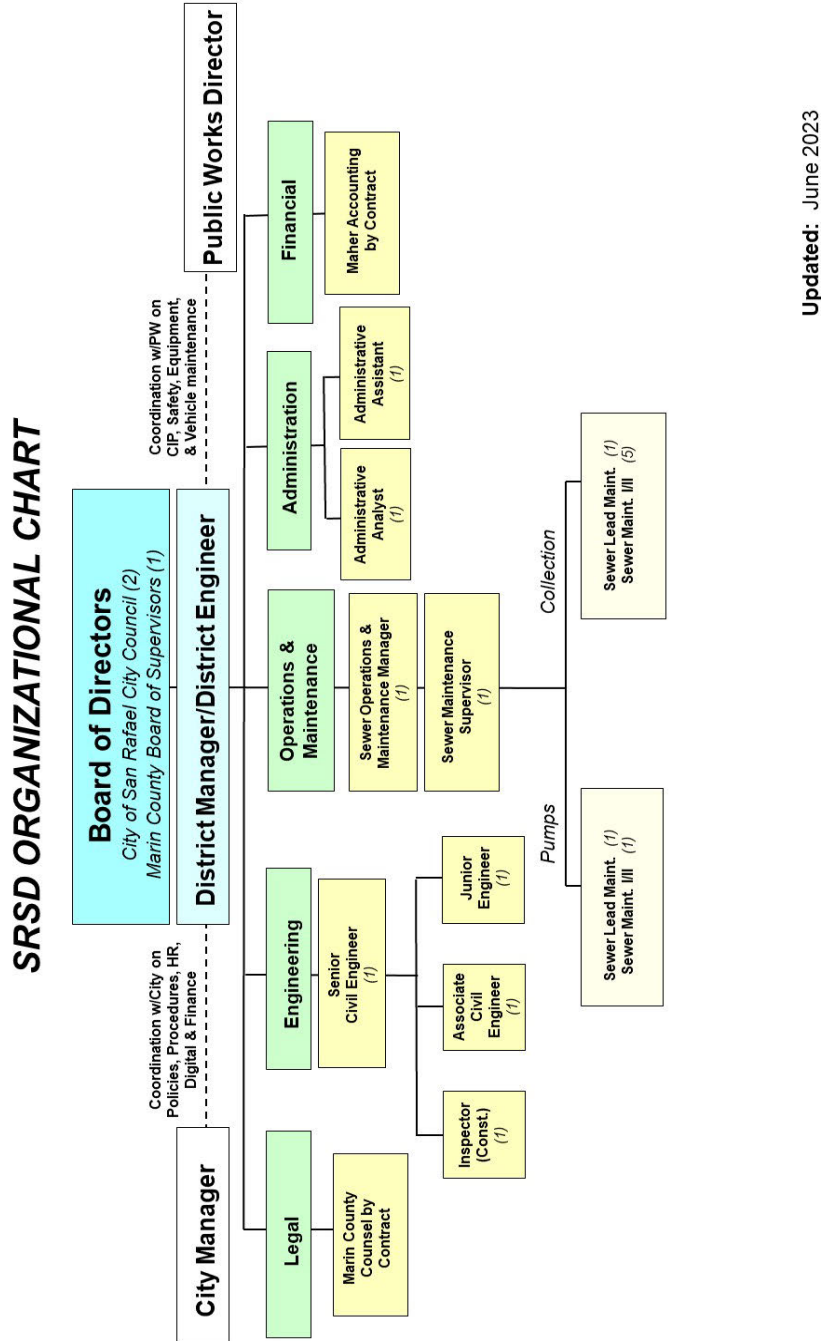


Figure 1-1 – SRSD Organization Chart

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 | [REDACTED]     |
|                     | Cell | (415) 725-9338 |
| 2. Allan Lee        | Home | [REDACTED]     |
|                     | Cell | (415) 725-9342 |
| 3. Hector Rodriguez | Home | [REDACTED]     |
|                     | Cell | (415) 725-9431 |

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

- |           |      |                |
|-----------|------|----------------|
| Doris Toy | Home | [REDACTED]     |
|           | 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.

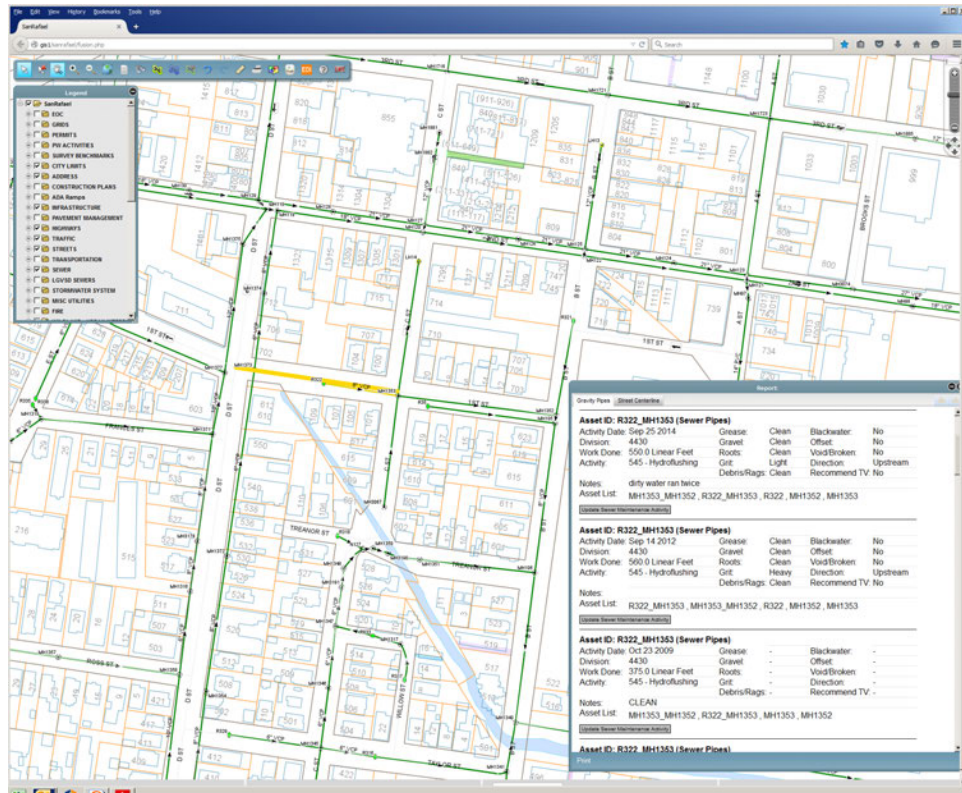
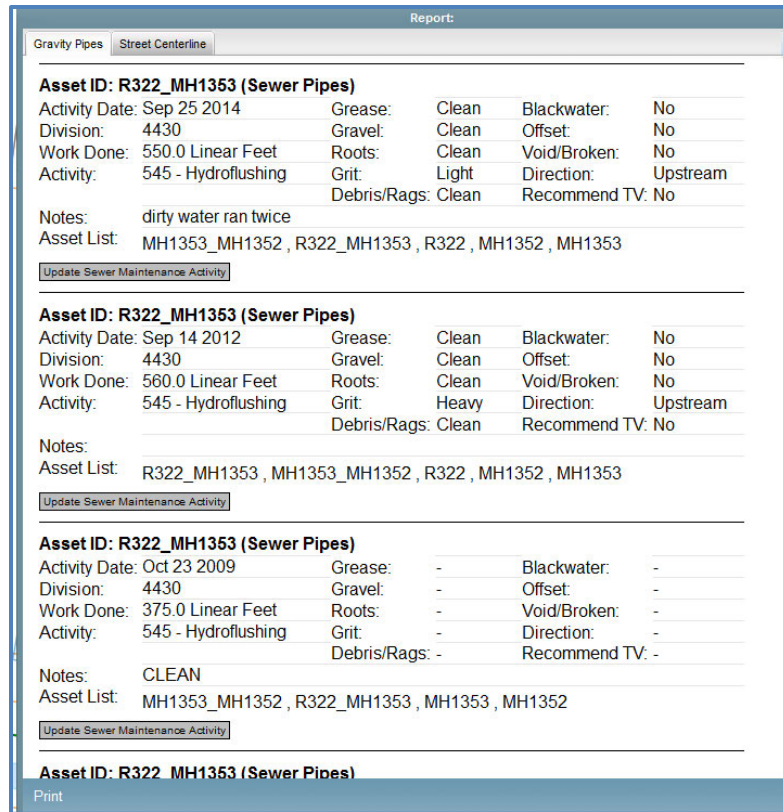


Figure 4-1 DashGIS Screen Display

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**

<b>Equipment</b>	<b>Manufacturer</b>	<b>Fuel type/ Power source</b>	<b>Description</b>
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

<b>Equipment</b>	<b>Manufacturer</b>	<b>Fuel type/ Power source</b>	<b>Description</b>
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**

<b>Equipment</b>	<b>Manufacturer</b>	<b>Description/ Comments</b>
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.



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## **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.

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## **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.



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## 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"> <li>▪ Average response time</li> <li>▪ Percent of total SSO volume contained or returned to sewer</li> </ul>
Fats, Oils & Grease Control	Minimize blockages and overflows due to FOG	<ul style="list-style-type: none"> <li>▪ Number of blockages due to FOG</li> <li>▪ Number of overflows due to FOG</li> <li>▪ Number of FOG producing facilities inspected</li> </ul>
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"> <li>▪ Total number and volume of SSOs</li> <li>▪ Number of repeat SSOs (same location as any previous SSO)</li> <li>▪ Total number of sewer lateral SSOs</li> <li>▪ Total number of sewer main SSOs</li> <li>▪ Number of pipe failures</li> <li>▪ Total length of pipe CCTV'd</li> <li>▪ Total length of pipe hydro cleaned</li> </ul>
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"> <li>▪ Number of SSOs due to capacity limitations or wet weather</li> <li>▪ Date of completion of most recent capacity evaluation</li> <li>▪ Backlog of capacity improvement</li> </ul>

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"> <li>▪ Date of completion of last annual audit</li> </ul>
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
<b>Cause of SSO</b>	<b># SSOs</b>	<b># SSOs</b>	<b># SSOs</b>	<b># SSOs</b>	<b># SSOs</b>	<b># SSOs</b>
<b>Blockage:</b>						
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
<b>Subtotal for Blockage</b>	<b>21</b>	<b>22</b>	<b>33</b>	<b>7</b>	<b>18</b>	<b>15</b>
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
<b>Total</b>	<b>23</b>	<b>22</b>	<b>34</b>	<b>7</b>	<b>19</b>	<b>16</b>

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.

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## **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).

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## **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**

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# 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**

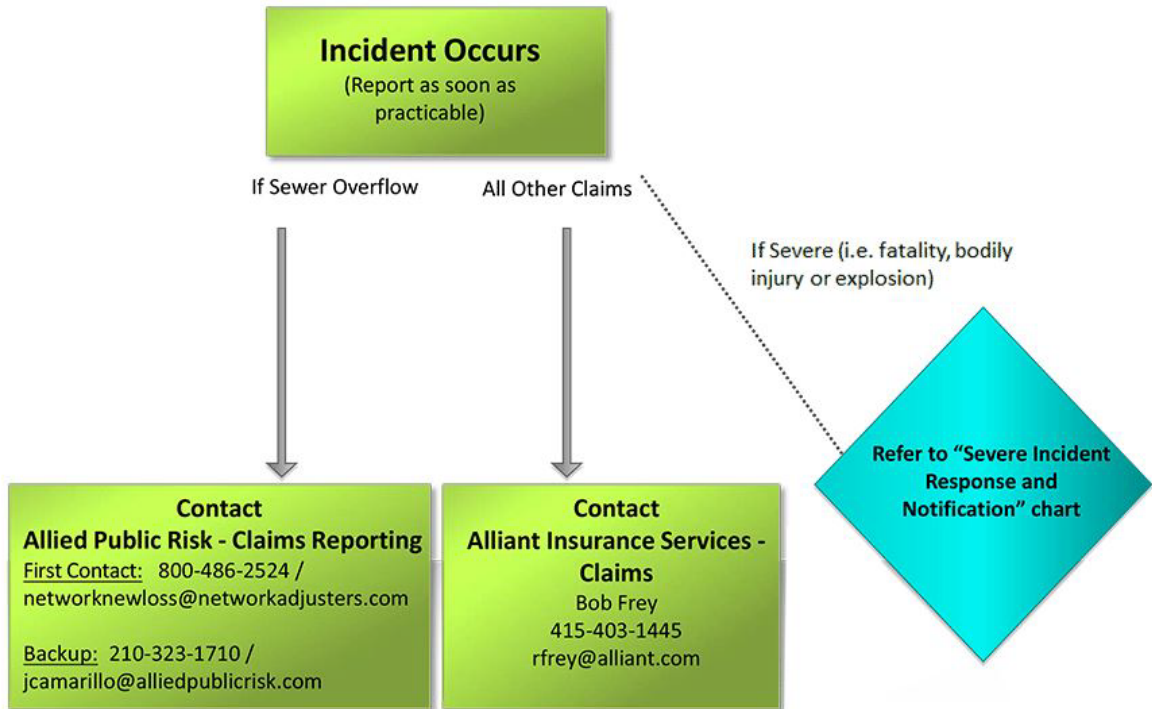
**Cleaning Services**

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# 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](mailto: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](mailto: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](mailto: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](mailto:dthompson@splmca.com)  
Fee is now \$110.00/Hour



**Appendix C**  
**Fats Oils and Grease (FOG)**  
**Ordinances**

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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**

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**CENTRAL MARIN SANITATION AGENCY**

**ORDINANCE NO. 2021-1**

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

**SECTION 1 – INTRODUCTION**

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

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

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

**SECTION 2 – ORDINANCE BACKGROUND**

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

### SECTION 3 – PURPOSE AND POLICY

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

## SECTION 4 – JURISDICTION

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

## SECTION 5 – DEFINITIONS

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

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

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

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

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

CMSA - Central Marin Sanitation Agency.

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

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

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

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

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

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



Grease Interceptor (GI) – A device used to remove FOG from kitchen wastes discharged to the Wastewater Collection System, i.e., a Gravity Grease Interceptor, 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**

	<b>NOT Upstream of <i>Hot Spot</i></b>	<b>Upstream of <i>Hot Spot</i></b>
<b>New FSE</b>	GI required (see Section 6.A)	GI required (see Section 6.A)
<b>Kitchen Remodel</b>	GI required (see Section 6.B)	GI required* (see Section 6.B)
<b>Change of Ownership</b>	GI may be required (see Section 6.E)	GI may be required (see Section 6.E)
<b>Existing FSE</b>	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 9<sup>th</sup> day of February 2021, by the following vote:

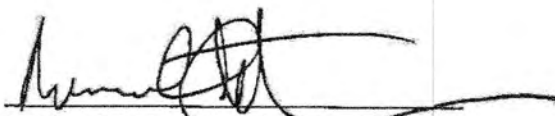
AYES: Eli Beckman, Michael Boorstein, Maribeth Bushey, Dean DiGiovanni, Doug Kelly

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)

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**Kate Colin, Chair**

**ATTEST:**

*Katie Rice*

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

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**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)  
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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.  
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# 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 1<sup>st</sup>.
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**

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**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
<b>ELEMENT 1 – GOALS</b>			
A.	Are the goals stated in the SSMP still appropriate and accurate?	<input type="checkbox"/>	<input type="checkbox"/>
<b>ELEMENT 2 -- ORGANIZATION</b>			
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"/>
<b>ELEMENT 3 – LEGAL AUTHORITY</b>			
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? <b>Not Applicable. Laterals are owned by the property owner.</b>	<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
<b>ELEMENT 4 – OPERATIONS AND MAINTENANCE</b>			
<b>Collection System Maps</b>			
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"/>
<b>Resources and Budget</b>			
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"/>
<b>Prioritized Preventive Maintenance</b>			
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"/>
<b>Scheduled Inspections and Condition Assessments</b>			
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"/>
<b>Contingency Equipment and Replacement Inventory</b>			
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"/>
<b>Training</b>			
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"/>
<b>Outreach to Plumbers and Building Contractors</b>			
K.	Does the SSMP document current outreach efforts to plumbers and building contractors?	<input type="checkbox"/>	<input type="checkbox"/>

		YES	NO
<b>ELEMENT 5 – DESIGN AND PERFORMANCE STANDARDS</b>			
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"/>
<b>ELEMENT 6 – OVERFLOW AND EMERGENCY RESPONSE PLAN</b>			
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"/>
<b>ELEMENT 7 – FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM</b>			
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"/>
<b>ELEMENT 8 – SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN</b>			
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
<b>ELEMENT 9 – MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS</b>			
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"/>
<b>ELEMENT 10 – SSMP AUDITS</b>			
A.	Will the SSMP Audit be submitted with the SSO Annual Report to the Regional Water Board by March 15 <sup>th</sup> of the year following the end of the calendar year being audited?	<input type="checkbox"/>	<input type="checkbox"/>
<b>ELEMENT 11 – COMMUNICATION PROGRAM</b>			
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"/>



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**Appendix E**  
**Capital Improvements**  
**Program Schedule**

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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
<b>TOTAL CAPITAL EXPENDITURES</b>	<b>\$60,322,720</b>	<b>\$1,787,000</b>	<b>\$2,219,000</b>	<b>\$13,300,000</b>	<b>\$8,300,000</b>	<b>\$8,900,000</b>

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
<b>TOTAL CAPITAL EXPENDITURES</b>	<b>\$8,470,000</b>	<b>\$1,220,000</b>	<b>\$1,780,000</b>	<b>\$3,315,000</b>	<b>\$3,400,000</b>	<b>\$3,600,000</b>

**Appendix F**  
**Summary of SSOs**  
**From 2017 to 2022**

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**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	
<b>Total Number of SSO's</b>	<b>17</b>	<b>23</b>	<b>23</b>	<b>22</b>	<b>34</b>	<b>7</b>

**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
<b>Total Volume of SSO's</b>	<b>3,260</b>	<b>43,584</b>	<b>11,278</b>	<b>13,793</b>	<b>23,237</b>	<b>1,921</b>

## 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
<b>Cause of SSO</b>	<b>Number</b>	<b>Percent of Total</b>	<b>Number</b>	<b>Percent of Total</b>	<b>Number</b>	<b>Percent of Total</b>	<b>Number</b>	<b>Percent of Total</b>	<b>Number</b>	<b>Percent of Total</b>	<b>Number</b>	<b>Percent of Total</b>
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
<b>Subtotal for Blockage</b>	<b>17</b>	<b>100.0</b>	<b>23</b>	<b>95.8</b>	<b>21</b>	<b>91.3</b>	<b>22</b>	<b>100.0</b>	<b>33</b>	<b>97.1</b>	<b>7</b>	<b>100.0</b>
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
<b>Total</b>	<b>17</b>	<b>100</b>	<b>23</b>	<b>96</b>	<b>23</b>	<b>100</b>	<b>22</b>	<b>100</b>	<b>34</b>	<b>100</b>	<b>7</b>	<b>100</b>



**Appendix G**

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

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**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 10<sup>th</sup> 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 aid 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: [Signature]  
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: [Signature]  
Stephen Danahy, General Manager

Date: 4/1/11

LAS GALLINAS VALLEY SANITARY DISTRICT

By: [Signature]  
Mark Williams, District Manager

Date: 5/24/11

SANITARY DISTRICT No. 5

By: [Signature]  
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.

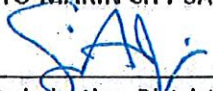
The Agencies therefore agree as follows:

#### 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.

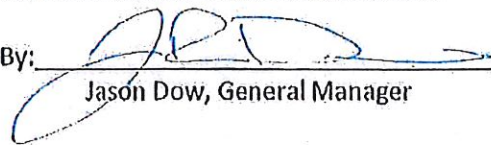
The effective date of this Amendment is when it has been executed by each Agency's representative on the following page.

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

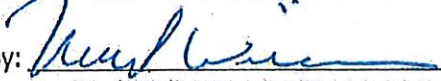
Date: 9/24/14

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

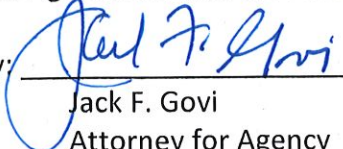
San Rafael Sanitation District

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*

<b>Item</b>	<b>Specifics</b>	<b>Qty</b>	<b>Location/Assigned to</b>
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*

<b>Item</b>	<b>Specifics</b>	<b>Qty</b>	<b>Location/Assigned to</b>
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

<b>Item</b>	<b>Specifics</b>	<b>ID#</b>	<b>Qty</b>	<b>Location/Assigned to</b>
	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*

<b>Item</b>	<b>Specifics</b>	<b>Qty</b>	<b>Location/Assigned to</b>
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*

<b>Item</b>	<b>Specifics</b>	<b>Qty</b>	<b>Location/Assigned to</b>
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	<b>RKI</b>	10	Landing
Cones	<b>24"</b>	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*

<b>Item</b>	<b>Specifics</b>	<b>Qty</b>	<b>Location/Assigned to</b>
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*

<b>Item</b>	<b>Specifics</b>	<b>Qty</b>	<b>Location/Assigned to</b>
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*

<b>Item</b>	<b>Specifics</b>	<b>Qty</b>	<b>Location/Assigned to</b>
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*

<b>Item</b>	<b>Specifics</b>	<b>Qty</b>	<b>Location/Assigned to</b>
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*

<b>Item</b>	<b>Specifics</b>	<b>Qty</b>	<b>Location/Assigned to</b>
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*

<b>Item</b>	<b>Specifics</b>	<b>Qty</b>	<b>Location/Assigned to</b>
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