
**Appendix G – NPDES Unauthorized Discharges and Sanitary Sewer Overflows
Notification Requirements for
CMSA Treatment Plant Unauthorized Discharges & Collection System Sanitary Sewer Overflows**

1. Purpose

This document outlines the response, notification, and reporting requirements for:

1. Unauthorized wastewater and hazardous materials discharges from the treatment plant.
2. Sanitary sewer overflows (SSOs) in the collection systems.

2. Staff Notifications

When an unauthorized discharge or SSO occurs, notify the following staff in order:

1. **Treatment Plant Manager (TPM) - Legally Responsible Officer, Nick Talbot**
Cellular: 415-572-0127
Work: 415-459-1455 x 101
2. **Regulatory Compliance Manager (RCM), Mark Koekemoer**
Cellular: 707-515-8905
Work: 415-459-1455 x 147
3. **Operator-in-Charge (OIC)**
Work: 415-459-1455 X 2
4. **General Manager (GM), Jason Dow**
Cellular: 415-242-2268
Home: 415-897-3858

The first staff member notified follows the procedures below.

3. Outside Agency Notifications

The following is a list of agencies, which may also need to be contacted, depending on the type and location of unauthorized discharge or SSO:

1. **California Office of Emergency Services (Cal OES)**
Main Office: 800-852-7550
2. **County of Marin Office of Environmental Health Services (Marin Co EHS)**
8 am – 4 pm: 415-473-6907
24 hours: 415-499-7237
3. **Region 2 - San Francisco Regional Water Quality Control Board (RWQCB)**
Kerry O'Connor, NPDES Wastewater & Enforcement Division Engineer: (510) 622-2465
Email: kerry.oconnor@waterboards.ca.gov
Main Office Contact: 510-622-2369 or 510-622-2300
Email: rb2spillreports@waterboards.ca.gov
4. **Sanitary District No. 2 of Marin, Corte Madera (SD#2)**
Public Works On-Call Personnel: 415-613-5437
Fernanda Stefanick, Sanitary District No. 2: 415-299-3939
5. **County of Marin, Department of Public Works**
Mary Hobson, Capital Planning and Project Manager: 415-473-6519
Public Works: 415-473-6530
6. **California Department of Corrections (CDCR)—San Quentin**
Kyle Cox, Correctional Plant Supervisor: 415-306-4928
Watch Commander, 24-hour contact number: 415-455-5051 or 415-454-1460 X 5051

4. Unauthorized Wastewater Treatment Plant Discharge – Definition & Regulation

- **Definition:** Title 23 California Code of Regulations Section 2250 (b) states that an unauthorized discharge includes discharges such as untreated wastewater, partially treated wastewater, fully treated wastewater, oil spills, and spills of hazardous waste to an unauthorized location.
- **Regulation:** Unauthorized discharges shall refer to those that occur at the CMSA wastewater treatment plant facility which is regulated by National Pollutant Discharge Elimination System (NPDES) Permit CA0038628, Attachment G.

CMSA NPDES Attachment G –Unauthorized Wastewater Treatment Plant Discharges - Regulations

Central Marin Sanitation Agency Wastewater Treatment Plant	NPDES Permit CA0038628
5.5.2. Unauthorized Municipal Wastewater Treatment Plant Discharges¹	
5.5.2.1. Two-Hour Notification. For any unauthorized discharge that enters a drainage channel or surface water, the Discharger shall, as soon as possible, but not later than two hours after becoming aware of the discharge, notify the California Office of Emergency Services (800-852-7550) and the local health officer or director of environmental health with jurisdiction over the affected water body. Notification shall include the following:	
5.5.2.1.1.	Incident description and cause;
5.5.2.1.2.	Location of threatened or involved waterways or storm drains;
5.5.2.1.3.	Date and time that the unauthorized discharge started;
5.5.2.1.4.	Estimated quantity and duration of the unauthorized discharge (to the extent known), and estimated amount recovered;
5.5.2.1.5.	Level of treatment prior to discharge (e.g., raw wastewater, primary-treated wastewater, or undisinfected biologically-treated wastewater); and
5.5.2.1.6.	Identity of person reporting the unauthorized discharge.

CMSA NPDES Attachment G – Oil and Other Hazardous Materials Spills - Regulations

Central Marin Sanitation Agency Wastewater Treatment Plant	NPDES Permit CA0038628
5.5. Twenty-Four Hour Reporting – Supplement to Attachment D, Provision 5.5	
5.5.1. Oil or Other Hazardous Material Spills	
5.5.1.1. Within 24 hours of becoming aware of a spill of oil or other hazardous material not contained onsite and completely cleaned up, the Discharger shall report as follows:	
5.5.1.1.1.	If the spill exceeds reportable quantities for hazardous materials listed in 40 C.F.R. part 302. The Discharger shall call the California Office of Emergency Services (800 852-7550).
5.5.1.1.2.	If the spill does not exceed reportable quantities for hazardous materials listed in 40 C.F.R., part 302, the Discharger shall call the Regional Water Board (510-622-2369).

5. Wastewater Treatment Plant Discharge - Procedure

Report any unauthorized treated, partially treated, or untreated wastewater that reaches surface water and/or a drainage channel to surface water, and cannot be contained and pumped back to the treatment plant.

Notification

The CMSA staff member who observes an unauthorized wastewater discharge from a treatment process and is not captured onsite prior to leaving the treatment facility grounds, shall contact the TPM (See Section 2 – Staff Notifications) immediately upon discovery of the discharge. If the TPM cannot be contacted within one hour of the discharge, the OIC (See Section 2 – Staff Notifications) will report the spill verbally to Cal OES and Marin Co EHS to meet the 2-hour Cal OES reporting requirement. Document the date and time of the call and any Cal OES control number provided.

- Notify Cal OES at (800) 852-7550
- Notify Marin Co EHS (415) 473-6907
- o Date Called: _____
- o Time called: _____ : _____ AM PM
- o Cal OES Control number: _____

When contacting the Cal OES and Marin Co EHS, provide the following message:

“This is (employee name) from the Central Marin Sanitation Agency. I am calling to report that an overflow from the (location and the level of treatment the wastewater received) has occurred and was discovered at (date/time). The estimated gallons discharged is (# gallons). This estimated gallon (# gallons) will be accurately checked, verified, and provided in the NPDES required five-day written report. The duration of the discharge is (# number of minutes or hours) and the (estimated amount recovered if any). It has resulted in a discharge that has reached surface water and/or a drainage channel tributary to surface water”

Reporting

A five-day written report is required for the incident. The TPM or RCM must notify the RWQCB and its NPDES Wastewater & Enforcement Division Engineer (See Section 3 – Outside Agency Notifications) as soon as possible by call and email, informing them of the unauthorized discharge, that Cal OES & Marin Co EHS have been contacted within the 2-hour reporting requirement, and the five-day report is being prepared. Once completed, the report will be emailed directly to the NPDES Wastewater & Enforcement Division Engineer. The discharge details will also be included in the Agency’s monthly Self-Monitoring Report (SMR). If there are significant changes to the reported spill volume or impacts, Cal OES must be notified promptly. Any additional reporting or documentation requirements specified by the NPDES Wastewater & Enforcement Division Engineer must also be addressed and submitted as directed.

NPDES Five Day Written Report Requirements

5.5.2.2.	Five-Day Written Report. Within five business days following the two-hour notification, the Discharger shall submit a written report that includes, in addition to the information listed in Provision 5.5.2.1, above, the following:
5.5.2.2.1.	Methods used to delineate the geographical extent of the unauthorized discharge within receiving waters;
5.5.2.2.2.	Efforts implemented to minimize public exposure to the unauthorized discharge;
5.5.2.2.3.	Visual observations of the impacts (if any) noted in the receiving waters (e.g., fish kill, discoloration of receiving water) and extent of sampling if conducted;
5.5.2.2.4.	Corrective measures taken to minimize the impact of the unauthorized discharge;
5.5.2.2.5.	Measures to be taken to minimize the potential for a similar unauthorized discharge in the future;
5.5.2.2.6.	Summary of Spill Prevention Plan or Operation and Maintenance Manual modifications to be made, if necessary, to minimize the potential for future unauthorized discharges; and
5.5.2.2.7.	Quantity and duration of the unauthorized discharge, and the amount recovered.

Sampling

During normal business hours, Technical Services (TS) staff will collect the water samples listed below. After business hours, Operations will collect the samples and place them in the laboratory sample refrigerator and notify TS staff. From each site listed in below, collect samples for enterococcus, ammonia, and total and fecal coliform daily.

Sampling of Flow in Drainage Conveyance System (DCS) Prior to Discharge

Sample Location	Sampling Location Description
DCS-001	A point in a drainage conveyance system before the drainage conveyance system flow discharges into a receiving water.

Receiving Surface Water Sampling (RSW)

Sampling Location	Sampling Location Description
RSW-001 Point of Discharge	A point in the receiving water where wastewater initially enters the receiving water.
RSW-001U: Upstream of Point of Discharge	A point in the receiving water, upstream of the point of wastewater discharge, to capture ambient conditions absent of sewage discharge impacts.
RSW-001D: Downstream of Point of Discharge	A point in the receiving water, downstream of the point of wastewater discharge, where the spill material is fully mixed with the receiving water.

6. Oil and Other Hazardous Materials Spill – Procedure

Report any unauthorized spill of oil or hazardous materials (Diesel, Gasoline, Ferric Chloride, Sodium Hypochlorite, Sodium Bisulfite, Hydrogen Peroxide, Polymer, or FOG) from the treatment facility that reaches surface water and/or a drainage channel to surface water, and cannot be contained and fully cleaned up on-site.

Notification

The CMSA staff member who observes an unauthorized spill of oil or hazardous materials that cannot be captured on-site prior to leaving the treatment facility shall contact the TPM immediately upon discovery of the discharge spill. If the TPM cannot be contacted, CMSA's Operator in Charge (See Section 2 – Staff Notifications) will contact the Regulatory Compliance Manager (RCM) (See Section 2 – Staff Notifications). If the TPM and/or RCM are not able to report to the appropriate agency within the 24 hours, the Operator in Charge will report the spill, following the procedures below:

1. Identify the material spilled, the container or equipment affected, the approximate amount spilled, where the spill is located and whether it is currently contained or uncontained.
2. Place absorbent material, blankets, berms, etc. in the path of the spill and at any location where the spill is entering surface water and/or a drainage channel to surface water
3. Begin contacting the following agencies:
 - Cal OES: (800) 852-7550
 - National Response Center (800) 424-8802
 - Marin Co EHS (415) 473-6907
 - United States Environmental Protection Agency, Region 9, (800) 300-2193
 - Fish and Game Office of Spill Prevention and Response (916) 455-9338
 - Regional Water Quality Control Board (510) 622-2300

Document the date and time of the call and any control number provided.

- Date Called: _____
- Time called: _____:_____ AM PM
- Control numbers: _____

When contacting the Cal OES, National Response Center, Marin Co EHS, United States Environmental Protection Agency, Region 9, Fish and Game Office of Spill Prevention and Response, Regional Water Quality Control Board provide the following message:

"This is (employee name) from the Central Marin Sanitation Agency. I am calling to report a spill of (type of material) that occurred at (specific location within the facility) and was discovered on (date/time). The estimated volume of the spill is (# gallons). This estimated gallon (# gallons) will be accurately checked, verified, and provided in the NPDES required five-day written report. The spill lasted approximately (# minutes/hours), and (# gallons) have been recovered so far. The spill has reached surface water or a drainage channel leading to surface water."

4. After making notifications and in consultation with Agency management, initiate further containment and cleanup of the spill.
5. As necessary utilize outside spill control contractors as follows:
 - a. Environmental Cleanup Contractor –
 - NRC Environmental Services (510) 749-1390

Reporting

A five-day written report is required for the incident. The TPM or RCM must notify the RWQCB and its RWQCB's NPDES Wastewater & Enforcement Division Engineer (See Section 3 – Outside Agency Notifications) as soon as possible by call and email, informing the RWQCB of the unauthorized spill of oil or hazardous materials, that Cal OES & Marin Co EHS have been contacted within the 24-hour reporting requirement, and the five-day report is in progress. Once completed, the report will be emailed directly to the RWQCB's NPDES Wastewater & Enforcement Division Engineer. The unauthorized spill details will also be included in the Agency's monthly Self-Monitoring Report (SMR). If there are significant changes to the reported spill volume or impacts, Cal OES must be notified promptly. Any additional reporting or documentation requirements specified by the RWQCB's NPDES Wastewater & Enforcement Division Engineer must also be addressed and submitted as directed.

5.5.1.2. The Discharger shall submit a written report to the Regional Water Board within five working days following either of the above telephone notifications unless directed otherwise by Regional Water Board staff. A report submitted electronically is acceptable. The written report shall include the following:

- 5.5.1.2.1. Date and time of spill, and duration if known;
- 5.5.1.2.2. Location of spill (street address or description of location);
- 5.5.1.2.3. Nature of material spilled;
- 5.5.1.2.4. Quantity of material spilled;
- 5.5.1.2.5. Receiving water body affected, if any;
- 5.5.1.2.6. Cause of spill;
- 5.5.1.2.7. Estimated size of affected area;
- 5.5.1.2.8. Observed impacts to receiving waters (e.g., oil sheen, fish kill, water discoloration);
- 5.5.1.2.9. Corrective actions taken to contain, minimize, or clean up the spill;
- 5.5.1.2.10. Future corrective actions planned to prevent recurrence, and implementation schedule; and
- 5.5.1.2.11. Persons or agencies notified.

Sampling

Refer to section 5 – Sampling for procedures.

7. Sanitary Sewer System - Definition & Regulation

- Definition:** Any system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities, such as vaults, temporary piping, construction trenches, wet wells, and tanks, are part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be SSOs.
- Regulation:** Sanitary Sewer Systems are regulated by SWRCB Waste Discharge Requirements – Order WQ 2022-0103-DWQ Statewide Waste Discharge Requirements.

8. Definition of Spill Categories

Category	Definition
Category 1:	Discharge of untreated or partially treated wastewater of any volume resulting from a sanitary sewer system failure or flow condition that either: <ul style="list-style-type: none"> Reaches surface water and/or drainage channel tributary to a surface water; or Reached a Municipal Separate Storm Sewer System (MS4) and was not fully captured and returned to the sanitary sewer system or otherwise captured and disposed of properly.
Category 2:	Discharge of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from a sanitary sewer system failure or flow condition that either: <ul style="list-style-type: none"> Does not reach surface water, a drainage channel, or an MS4, or The entire SSO discharged to the storm drain system was fully recovered and disposed of properly.
Category 3:	Discharge of equal to or greater than 50 gallons and less than 1,000 gallons, from or caused by a sanitary sewer system that does not discharge to a surface water.
Category 4:	Discharge of less than 50 gallons, from or caused by a sanitary sewer system that does not discharge to a surface water.

9. Spill Categories Notification, Monitoring, and Reporting Requirements

SSO Spill Category 1: Spills of 1,000 Gallons or Greater That Discharge to Surface Waters

Spill Requirement	Due	Method
Notification	Within two (2) hours of the Agency's knowledge of a Category 1 spill of 1,000 gallons or greater, discharging or threatening to discharge to surface waters: Notify the California Office of Emergency Services and obtain a notification control number.	California Office of Emergency Services at: (800) 852-7550
Monitoring	<ul style="list-style-type: none"> Conduct spill-specific monitoring. 	

	<ul style="list-style-type: none"> Conduct water quality sampling of the receiving water within 18 hours of initial knowledge of spill of 50,000 gallons or greater to surface waters. 	
Reporting	<ul style="list-style-type: none"> Submit Draft Spill Report within three (3) business days of the Agency's knowledge of the spill. Submit Certified Spill Report within 15 calendar days of the spill end date. Submit Technical Report within 45 calendar days after the spill end date for a Category 1 spill in which 50,000 gallons or greater discharged to surface waters; and Submit Amended Spill Report within 90 calendar days after the spill end date. 	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee's Legally Responsible Official(s).

SSO Spill Category 2: Spills of 1,000 Gallons or Greater That Do Not Discharge to Surface Waters

Spill Requirement	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	<ul style="list-style-type: none"> Conduct spill-specific monitoring. 	
Reporting	<ul style="list-style-type: none"> Submit Draft Spill Report within three (3) business days of the Agency's knowledge of the spill. Submit Certified Spill Report within 15 calendar days of the spill end date. Submit Amended Spill Report within 90 calendar days after the spill end date. 	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee's Legally Responsible Official(s).

SSO Spill Category 3: Spills of Equal or Greater than 50 Gallons and Less than 1,000 Gallons That Does Not Discharge to Surface Waters

Spill Requirement	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	<ul style="list-style-type: none"> Conduct spill-specific monitoring. 	
Reporting	<ul style="list-style-type: none"> Submit monthly Certified Spill Report to the online CIWQS Sanitary Sewer System Database within 30 calendar days after the end of the month in which the spills occur; and Submit Amended Spill Report within 90 calendar days after the spill end date. 	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee's Legally Responsible Official(s).

SSO Spill Category 4: Spills Less Than 50 Gallons That Do Not Discharge to Surface Waters

Spill Requirement	Due	Method
Notification	Not Applicable	Not Applicable
Monitoring	<ul style="list-style-type: none"> Conduct spill-specific monitoring. 	

10. Notification for Category 1 SSOs

Notification to Cal OES is required within two hours of becoming aware that a Category 1 SSO greater than or equal to 1,000 gallons that results or may result in a discharge to surface waters. Specifically, as soon as possible, but not later than two (2) hours after (A) the staff member has knowledge of the discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures. Notify Cal OES (800-852-7550) and obtain a notification control number, and notify Marin Co EHS (415-473-6907).

The Agency staff member who observes a Category 1 SSO from the sanitary sewer system of SD#2 or CDCR, should contact the appropriate agency (See Section 3 – Outside Agency Notifications) immediately upon discovery of the spill. If the SSO is from San Quentin Village Sewer Maintenance District (SQVSMD) refer to section No. 13 procedures. If a representative from SD#2 or CDCR, cannot be contacted within one hour of the spill, or a message has been left with no response, contact the appropriate Agency staff in the order listed (See Section 2 – Staff Notifications) and the spill will be reported by CMSA. If CMSA staff makes the initial report to the regulatory agencies, Cal OES and Marin Co EHS on behalf of the SD#2 or CDCR, state the message in the following way:

“This is (employee name) from the Central Marin Sanitation Agency and I am calling on behalf of (the agency, district, or CDCR). I am calling to report that an overflow from the (location and the level of treatment the wastewater received) has occurred and was discovered at (date/time). The estimated gallons discharged is (# gallons). This estimated gallon (# gallons) will be accurately checked, verified, and provided in the draft spill report and certified spill reports. The duration of the discharge is (# number of minutes or hours) and the (estimated amount recovered if any). The spill has reached surface water, or a drainage channel leading to surface water and was not recovered”

Reporting

Provide the notification control number to the district representative who will prepare the required reports. Write down the Cal OES notification control number. Reporting requirements for specific spill categories (See Section 9 – Spill Categories Notification, Monitoring, and Reporting Requirements).

- Notify Cal OES at (800) 852-7550
- Notify Marin Co EHS (415) 473-6907
- o Date Called: _____
- o Time called: _____ : _____ AM PM
- o Cal OES Control number: _____

Sampling

Conduct water quality sampling within 18 hours after the initial SSO notification for Category 1 SSO’s in which 50,000 gallons or greater are spilled to surface waters or as directed by Marin Co EHS. During normal business hours, TS staff will collect the water samples listed below. After business hours, Operations staff will collect the samples and place them in the laboratory sample refrigerator and notify the RCM. If unavailable, leave a message, and then contact the TS staff. From each site listed in (Section 5 – Sampling), collect samples for ammonia, enterococcus, and total and fecal coliform. Daily, continue to collect above-specified samples until the affected area has been cleared by Marin County EHS.

Control the Spill

During business hours, State and local agencies will work with CMSA to resolve the situation. If SD#2 or CDCR representative is not available, CMSA will take all necessary actions to stabilize the situation. Determine the source of the spill as rapidly as possible and then address the problem and minimize the damage. Depending on the circumstances, CMSA staff may need to take several of the following steps:

- Call the necessary Agency staff for help.
- Shut-off flow from upstream pump stations.
- Dike, berm, sandbag or otherwise contain the spill to prevent it from entering a storm drain or body of water. If the spill has entered a storm drain, you may be able to stop the sewage from discharging from the other end of the storm drain.
- Repair the leak.
- Secure the contaminated area (cones, barricades, signs, etc.) to prevent public contact with the sewage.
- Post notification signage according to (See Section 15 – Public Notification).
- Procure additional equipment and services as needed to assist.

11. Sanitary Sewer Overflows from SD#2 Pump Stations

Description

Any SSO from an SD#2 pump station that reaches surface water and/or a drainage channel tributary (MS4) to surface water and cannot be contained and or pumped back into the sanitary sewer system.

Notification

The Agency staff member who observes an SSO from the SD#2 pump station or sanitary sewer system shall immediately contact the SD#2 representative (See Section 3 – Outside Agency Notifications) upon discovery of the spill. If the SD#2 representative cannot be contacted within one hour of the spill, or a message has been left with no response, CMSA's RCM or OIC will report Category 1 SSO's (See Section 9 – Notification for Category 1 SSO's) verbally to Cal OES and Marin Co EHS (See Section 3 – Outside Agency Notifications) to meet the Cal OES two-hour reporting requirement. CMSA staff will obtain a notification control number and provide this to the SD#2 representative. CMSA shall notify SD#2 representatives as soon as practicably possible, but in no event later than 24 hours after the incident has been observed and/or addressed.

Reporting

SD#2 staff shall be responsible for meeting the SSO reporting requirements of the SWRCB Sanitary Sewer Systems General Order. At the District's request and based on CMSA's staff availability, CMSA may assist with investigating the cause(s) of the SSO, calculating the volume of sewage released from the pump station or sanitary sewer system, and preparing written reports. SD#2 staff will submit all reports to California Integrated Water Quality System Project (CIWQS).

Sampling

At the District's request and based on CMSA's staff availability. CMSA may perform required sampling and analyses consistent with the requirements in (Section 5 – Sampling).

Control the Spill

During business hours SD#2 will work with CMSA staff to resolve the situation. If SD#2 staff are not available, CMSA staff will take all necessary actions 24 hours/day to stabilize and resolve the situation.

12. Sanitary Sewer Overflow from CDCR San Quentin Pump Station (SQPS)

Description

Any SSO from the SQPS that reaches surface water and/or a drainage channel tributary (MS4) to surface water and cannot be contained and/or pumped back into the sanitary sewer system.

Notification

The CMSA staff member who observes an SSO from the SQPS or sanitary sewer system shall immediately contact the CDCR representative (See Section 3 – Outside Agency Notifications) upon discovery of the spill. If the CDCR representative cannot be contacted within one hour of the spill, or a message has been left with no response, CMSA’s RCM or OIC will report Category 1 SSO’s (See Section 9 – Notification for Category 1 SSO’s) verbally to Cal OES and Marin Co EHS (See Section 3 – Outside Agency Notifications) to meet the Cal OES two-hour reporting requirement. CMSA staff will obtain a notification control number and provide this to the CDCR San Quentin representative. CMSA shall notify CDCR San Quentin representatives as soon as practicably possible, but in no event later than 24 hours after the incident has been observed and/or addressed.

Reporting

CDCR shall be responsible for meeting the. At CDCR’s request, and based on CMSA’s staff availability, CMSA will assist with investigating the cause(s) of the SSO, calculating the volume of sewage released from the pump station or sanitary sewer system, and preparing written reports. CDCR staff will submit all reports to CIWQS.

Sampling

At CDCR’s request, and based on CMSA’s staff availability, CMSA staff may perform required sampling and analyses consistent with the requirements in (Section 5 – Sampling).

Control the Spill

CMSA staff will take all necessary actions 24 hours/day to stabilize and resolve the situation.

13. Sanitary Sewer Overflow from San Quentin Village Sewer Maintenance District (SQVSMD)

Description

Any SSO from the SQVSMD that reaches surface water and/or a drainage channel tributary (MS4) to surface water and cannot be contained and/or pumped back into the sanitary sewer system.

Notification & Reporting

SQVSMD is a sanitary sewer system that is less than one mile in length, and the State Water Resources Control Board and Regional Water Quality Control Board currently do not require regulatory coverage of SQVSMD under the existing SWRCB Waste Discharge Requirements – Order WQ 2022-0103-DWQ, due to the system’s limited size and its history of zero SSOs. However, in the event of an SSO, CMSA will still report the spill, investigate the cause, estimate the volume released, and submit written reports to the appropriate regulatory agencies as a precautionary measure.

The CMSA staff member who observes an SSO from the SQVSMD system shall contact the Agency’s TPM or RCM (See Section 2 – Staff Notifications) immediately upon discovery of the spill. If the TPM or RCM cannot be contacted within one hour of the spill, or message has been left with no response, CMSA’s OIC will report Category 1 SSO’s (See Section 9 – Notification for Category 1 SSO’s) verbally to Cal OES and Marin Co EHS (See Section 3 – Outside Agency Notifications).

CMSA staff will obtain a notification control number if provided and provide this to County of Marin staff. CMSA shall notify County of Marin, Department of Public Works (See Section 3 – Outside Agency Notifications) of any observed SSO as soon as practicably possible, but in no event later than 24 hours after the incident has been observed and/or addressed.

Sampling

CMSA will perform required sampling and analyses consistent with the requirements in (Section 5 – Sampling).

Control the Spill

CMSA staff will take all necessary actions 24 hours/day to stabilize and resolve the situation.

14. Sanitary Sewer Overflows from Joint Powers Authority Agency Collection Systems

Any SSO observed within a JPA's member agency's collection system shall be reported pursuant to the member agency call list and notification procedures. CMSA will notify the member agency of the spill location and time it was observed. The member agency is responsible for the reporting and notification requirements. CMSA staff, if requested and based on availability, may assist member agency staff with notification sign placement and water sample collection and analyses (See Section 5 – Sampling).

15. Public Notification

Signage – SSO Site

CMSA maintains an inventory of Raw and Partially Treated Sewage notification signs for posting at recreational areas or locations where the public may potentially contact wastewater that was spilled into the storm drain system, drainage channels, creeks, storage ponds, or lagoons downstream of the spill. Signs are stored in the equipment room of the headworks building adjacent to spill supplies and at the SD#2 Paradise pump station. The following are general notification and sign posting procedures, for agency-specific posting practices; seek the agency's guidance and authorization.

Notification signs shall be posted as soon as practicably possible after discovery of an SSO from any CMSA operated or maintained collection system. Post signs that state "Raw Sewage Avoid Contact" if a discharge of untreated wastewater occurs. Coordinate with agency staff members on the appropriate locations to post the notification signs. Generally and at a minimum, signs should be placed at the discharge location and 100 feet upstream and downstream of the discharge. Photograph the completed sign placement for the record. Signs shall be left posted until the potentially affected area is cleared by Marin Co EHS, or other appropriate regulatory agencies.

Signage - Treatment Plant

Notification signs shall be posted as soon as practically possible after discovery of an unauthorized discharged at the treatment plant.

- Post signs that state "Partially Treated Sewage" if a discharge occurs from any treatment process after the primary clarifiers.
- Post signs at the locations accordingly as indicated in Attachments C, D, E, and F.
- Photograph the completed sign placement for the record.
- Signs will remain posted until the potentially affected area is cleared by Marin Co EHS and/or other appropriate regulatory agencies.
- Notification on the CMSA website will also be posted.

16. Public Reporting

When a member of the public notifies Agency staff of a potential SSO, determine the location and if the discharge is from CMSA or a collection system. If from a collection system, notify the appropriate district pursuant to (Section 3 – Outside Agency Notifications). If from CMSA, notify the staff member in (Section 2 – Staff Notifications). If the public notification is on the weekend, holiday, or after normal Agency business hours, the OIC shall also send an email to the management staff in (Section 2 – Staff Notifications) summarizing the event.

17. Estimating Sanitary Sewer Overflow Volume

There are a variety of approaches for estimating the volume of sanitary sewer overflow. Here are three methods that are most often used. Use the method that is most appropriate for the sewer overflow in question and the best information available. See attachment A on page 15 for more information as well

Method 1: Eyeball Estimate

This method can be useful for small spills up to 100 gallons. To use this method, imagine the amount of water that would spill from a bucket or barrel. A bucket contains 5 gallons, and a barrel contains 50 gallons. If the spill is larger than 50 gallons, try to break the standing water into barrels and multiply by 50 gallons.

Method 2: San Diego Reference Chart

Review Attachment A below. This method can be used for spills up to 275 gallons per minute. To use this method, estimate flow based on what the reference sheet has depicted in each of the 9 slides provided.

Method 3: Measured Volume

Most small spills can be estimated with this method. The shape, dimensions, and depth of the spilled wastewater are needed. The shape and dimensions are used to calculate the area of the spill, and the depth is used to calculate the volume:

- Step 1 - Sketch the shape of the contained sewage
- Step 2 - Measure or pace off the dimensions.
- Step 3 - Measure the depth at several locations
- Step 4 - Convert the dimensions including depth to feet
- Step 5 - Calculate the area using the following formulas:

Rectangle Area = length x width

Circle Area = radius squared x 3.14

Triangle Area = base x height x 0.5

Step 6 - Multiply area times the depth

Step 7 - Multiply the volume by 7.5 to convert it to gallons

Method 4: Duration and Flow

This method is used when it is difficult or impossible to measure area and depth. The volume of the spill is estimated by multiplying the duration (in hours or days) by the flowrate (in gallons per hour or gallons per day).

Duration: The time elapsed from the start of the spill to the time the spill has stopped. The following are some approaches that can be used to estimate duration.

Start time: Interview residents to find out what they have observed. If the spill occurred out of public view, observations such as odors or sound (running water) can be used to estimate start time.

Check to see if there are any changes in a downstream flowmeter. Typically, the daily flow peaks are “cut off” or flattened by the loss of flow. Compare the hourly flowrate data. Initially, there will be limited deposits of grease and toilet paper at the spill site. After a few days, the grease forms a light-colored residue. After a few weeks, the grease turns dark, and the quantity of toilet paper and other materials will increase. These changes can be used to estimate start time in the absence of other information.

End Time: The time is estimated by observing the “blow down” that occurs when the blockage has been removed. The “blow down” can also be observed in downstream flowmeters.

Flowrate: Flowrate is the average flow leaving the sewer system at the time the spill has stopped. Two ways to estimate the flowrate are:

Flowmeter: Changes in flows in the downstream flowmeters can be used to estimate the flowrate during the spill.

Upstream Connections: Once the location of the spill is known, the number of upstream connections can be determined from the field books. Multiply the number of connections by 200 to 250 gallons per day per connection or 8-10 gallons per hour per connection.

Attachment A - Estimating Sanitary Sewer Overflow Volume



City of San Diego
Metropolitan Wastewater Department



5 gpm



100 gpm



225 gpm

Reference Sheet for Estimating Sewer Spills
from Overflowing Sewer Manholes

All estimates are calculated in gallons per minute (gpm)



25 gpm



150 gpm



250 gpm



50 gpm



200 gpm



275 gpm

rev. 4/99

All photos were taken during a demonstration using metered water from a hydrant in cooperation with the City of San Diego's Water Department.

Attachment B: CMSA Unauthorized Discharge and Sanitary Sewer Overflow Report

Your Name:		Date & Time Spill Was Reported:		
Reported By:		Location of Spill (From & To)		
Approximate Amount of Sewage Spilled:		gal	Approximate Flow Rate:	
gpm				
Cause of Spill:				
Describe Type, Quantity, and Location of Spill Debris and Impact on the Area:				
Date and Time Problem Corrected:				
Describe Actions Taken:				

Samples (total coliform and fecal coliform).

Collect at least 2 days of samples or as recommended by the RWQCB or County Health Department.

Receiving Water Sampling	Date	Time	Results/Comments
100 Ft. Upstream of Spill			
100 Ft. Downstream of Spill			
Downstream of Spill Where There Is Public Contact			
Spill Site			
Contacts And Notifications: Name & Agency of Person Contacted			

Attachment C - Overview of Sign Locations for authorized discharge at the CMSA treatment plant



Attachment D - Map 2-Sign Locations, West Zone near Highway 580



Attachment E - Map 3-Bayside Signs, West Zone Bayshore



Attachment F – Sign Locati



**Appendix M – NPDES Final Effluent Exceedances
Notification Requirements for
Treatment Plant Final Effluent Exceedances**

1. Purpose

This document outlines the notification and reporting requirements for Treatment Plant Final Effluent Exceedances.

2. Staff Notifications

When a treatment plant final effluent exceedance occurs, notify the following staff in order:

5. Treatment Plant Manager (TPM) - Legally Responsible Officer, Nick Talbot

Cellular: 415-572-0127

Work: 415-459-1455 x 101

6. Regulatory Compliance Manager (RCM), Mark Koekemoer

Cellular: 707-515-8905

Work: 415-459-1455 x 147

7. Operator-in-Charge (OIC)

Work: 415-459-1455 X 2

8. General Manager (GM), Jason Dow

Cellular: 415-246-2268

Home: 415-897-3858

The first staff member notified follows the procedures below.

3. Outside Agency Notification:

The following agency will need to be contacted if a final effluent exceedance occurs:

Region 2 - San Francisco Regional Water Quality Control Board (RWQCB)

Kerry O'Connor, NPDES Wastewater & Enforcement Division Engineer: (510) 622-2465

Email: kerry.oconnor@waterboards.ca.gov

Main Office Contact: 510-622-2369 or 510-622-2300

4. Description

Final effluent exceedances may occur if any of the instantaneous, daily, weekly, or monthly sampling analytic results exceed the limits specified in the Agency's permit. The table below identifies NPDES permit limits.

Compound	Analysis	Limit
Chlorine	On-Line Meter – Hourly average	0.56 mg/L
Enterococcus	6-Week Rolling Geometric Mean	255 CFU/100 mL
	10% Maximum	1,055 CFU/100mL
pH	On-Line Meters - Continuous	Range 6.0 – 9.0
Suspended Solids	Weekly Average	45 mg/L
	Monthly Average	30 mg/L
	Monthly Removal Average	85%

CBOD	Weekly Average	40 mg/L
	Monthly Average	25 mg/L
	Monthly Removal Average	85%
Cyanide	Daily Maximum	37 ug/L
	Monthly Average	21 ug/L
Copper	Daily Maximum	84 ug/L
	Monthly Average	48 ug/L
Mercury	Weekly	0.072 ug/L
	Monthly Average	0.066 ug/L
	Annual Mass Average	0.11 kg/yr
Chronic Toxicity	MDL - Sub-lethal Endpoint	Fail
	MDL - Survival Endpoint	≥50%
	MDL - Sub-lethal Endpoint	≥50%
	MMEL – Endpoint (any)	Fail
Ammonia	Daily Maximum	110 mg/L
	Monthly Average	60 mg/L

Notification

The RWQCB must be notified by telephone and email within 24 hours of discovery of the exceedance. If a final exceedance has occurred notify the TPM and RCM immediately to report and meet the 24-hour notification requirement. If the TPM and/or RCM cannot be contacted within 24-hours the Operator in Charge will report the exceedance to the RWQCB by calling and emailing. The verbal and emailed message that is to be provided to the RWQCB should be stated in the following way:

“This is (employee name) from the Central Marin Sanitation Agency. I am calling to report a potential permit exceedance for (i.e. Chlorine Residual) that may have occurred, and we are performing an investigation. The findings of the investigation will be included in the monthly Self-Monitoring Report. The Treatment Plant Manager or Regulator Compliance Manger will contact you as soon as possible to discuss the exceedance and provide additional reporting if necessary.”

Reporting

A verbal report to the RWQCB is required with 24 hours of discovery of the exceedance. The verbal report must be followed up by a written report in the monthly SMR. A five-day written report may be required to be submitted or on a case-by-case basis. The information must include the parameter exceeded, the cause of the exceedance, and remedial actions to prevent the exceedance from recurring. Additional sampling results and findings from a potential investigation may also be required.

Sampling

Sampling and accelerated monitoring is required based on the exceedance and if the exceedance is for a daily, weekly, or monthly limit. Samples must be collected daily until the analytical results of the exceeded constituent meets the permit limits.