# Sewer System Management Plan (SSMP) Audit Report

August 2, 2021 to August 2, 2024



**REVIEWED AND APPROVED BY:** 



MATT MACHADO, P.E. District/CSAs Engineer

Santa Cruz County Sanitation District/CSAs

PREPARED BY:



1/28/2025

**Date Signed** 

# Sanitary Sewer Collection System Waste Discharge IDs (WDID):

System 1 (3SSO10324, SCCSD), System 2 (3SSO10263, Davenport CSD), System 3 (3SSO10267, Freedom CSD), System 4 (3SSO10323, CSA #5), System 5 (3SSO10326, CSA #7), System 6 (3SSO10312, CSA #10)





# **CERTIFICATE**

**OF COMPLETION** 

August 2, 2021 to August 2, 2024

# **SEWER SYSTEM MANAGEMENT PLAN AUDIT**

- Regulatory review, agency expectations and compliance best practices
- Regional Water Quality Control Board inspector expectations
- Completion of State Water Board Pre-Inspection Questionnaire
- Completion of Compliance Evaluation Inspection (CEI)
- Findings/Best Practice Recommendations for further improving agency program effectiveness, compliance, and resilience

James Fischer

James Fischer, PE NPDES Compliance Inspector





December 18, 2024

Santa Cruz County Sanitation District/CSAs

Att: Matt Machado, P.E.

District/CSAs Engineer

Legally Responsible Official (LRO)

701 Ocean Street, Room 410

Santa Cruz, CA 95060

Dear Mr. Machado,

We are pleased to present the 2021-2024 Sewer System Management Plan (SSMP) Audit Report for the Santa Cruz County Sanitation District/CSAs and the additional 5 satellite collection systems.

The SSMP Audit meets and exceeds compliance with the Reissued WDR (State Water Board, Water Quality Order No. 2022-0103-DWQ). The Audit also shed light on many existing and successful best practices and presents additional areas to address with the Reissued WDR.

Detailed desktop and field reviews incorporating USEPA/Water Board Compliance Evaluation Inspection (CEI) procedures, including comprehensive interviews with management and field staff were relied upon for generating the Audit findings and best practice recommendations.

With completion of the Audit, the District/CSAs becomes one of the few systems in the State to be comprehensively audited against the Reissued WDR ahead of the required deadline (2/2/2025).

We recommend the District/CSAs utilize the SSMP Audit Report as a roadmap for improving SSMP compliance, implementation, and effectiveness. The District/CSAs should complete Appendix 3 (SSMP Implementation Plan/Schedule) for all systems as soon as practical.

Sincerely, James Fischer

James Fischer, P.E. (Principal, Fischer Compliance LLC and Credentialed U.S. EPA NPDES Compliance Inspector)



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# **LIST OF ACRONYMS**

Acronym	Description/Reference Hyperlinks
CEI	Compliance Evaluation Inspection
CIP	System Evaluation, Capacity Assurance/Capital Improvement Program (SECAP), Att. D-8
CSA	County Service Area
CIWQS	California Integrated Water Quality System
DS	Data Submitter (DS) registered with State Water Board
FOG	Fats, Oils and Grease (FOG) Control Program (Reissued WDR)
LRO	Legally Responsible Official (LRO) registered with State Water Board
NMMRP	Notification, Monitoring, Reporting, Record Keeping (NMRR), Att. E-1
SECAP	System Evaluation, Capacity Assurance/Capital Improvement Program (SECAP), Att. D-8
O/M	Operations and Maintenance Program (O/M)
SCADA	Supervisory Control and Data Acquisition system installed to monitor pump stations
SERP	Spill Emergency Response Plan (SERP)
SSMP	Sewer System Management Plan (SSMP)
SWRCB	State Water Resources Control Board (SWRCB)
Waters of the State	Any water, surface or underground, including saline waters, within the boundaries of California. In case of a sewage spill, storm drains are considered to be waters of the State unless the sewage is completely contained and returned to the sewer system; Aug also be referred to as surface water(s) or State waterway



### **PART 1 – EXECUTIVE SUMMARY**

The County of Santa Cruz Public Works Department is responsible for the administration, engineering, maintenance, emergency response and construction of all County sanitation services. The department also manages various Board-governed special District/CSAs (County Service Areas). This SSMP Audit report was completed for the Santa Cruz County Sanitation District/CSAs (District/CSAs), Davenport Sanitation District/CSAs, Freedom Sanitation District/CSAs, and County Service Area (CSA) sanitary sewer systems #5, #7, and #10) to comply with the State Water Resources Control Board (SWRCB) General Reissued Waste Discharge Requirements (WDR) for Sanitary Sewer Systems ("Reissued WDR", Order No. 2022-0103-DWQ). District/CSAs collectively are referred to in the report as the "District/CSAs."

The Reissued WDR replaced the original 2006 WDR (Order No. 2006-003-DWQ and its Monitoring and Reporting Program, Order No. 2013-0058-EXEC), which became effective on June 5, 2023. The Reissued WDR requirements are the strictest sewer regulations in the country requiring a proactive approach for operations, maintenance, and



This Audit report meets and exceeds the minimum requirements specified in the Reissued WDR (Attachment D-10 and Specifications 5.4), scaled to the size/complexity of the District/CSAs sewer system. This includes evaluating the SSMP implementation and effectiveness, compliance with the Reissued WDR, and identifying deficiencies in addressing ongoing spills.

management of sanitary sewer collection system to reduce or eliminate sewer spills. Attachment D-10 of the Reissued WDR requires periodic SSMP Audits to be completed by the District/CSAs at least every three years.

To comply with the SSMP Audit requirements, Fischer Compliance LLC in collaboration with District/CSAs management completed a Sewer System Management Plan (SSMP) Audit covering Aug 2, 2021 through Aug 2024 (due for approval by District/CSAs management and uploading to CIWQS no later than 6 months, by 2/2/2025).

### **REGULATORY BACKGROUND**

### 2006 WDR:

To provide a consistent, statewide regulatory approach to address sewage spills, the State Water Resources Control Board (State Water Board) adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Order No. 2006-0003 (SSS WDRs), on Aug 2, 2006. All public agencies that own or operate a sanitary sewer system that is comprised of more than one mile of pipes or sewer lines that convey wastewater to a publicly owned treatment facility were required to apply for coverage under the Order.

### 2022 WDR:

The 2006 WDR was rescinded and replaced with a "Reissued WDR" (Order No. 2022-0103-DWQ), adopted on December 5, 2023 which became effective on 6/5/2023. The Reissued WDR updates many aspects of the 16-year-old Order and includes several new requirements for Sewer System Management Plans.



### SSMP AUDIT REQUIREMENTS

This section provides details about the SSMP Audit requirements mandated by the Reissued WDR. An SSMP is a spill reduction/mitigation plan that lays the foundation for how an agency implements its work programs, assesses effectiveness of its maintenance program, and provides resilience to bounce-back from emergencies, upsets, and scrutiny by regulators conducting a Compliance Evaluation Inspection (CEI) or formal spill investigation. The Reissued WDR includes the following specific requirements for completion of SSMP Internal Audits:

### Specifications 5.4 (Sewer System Management Plan Audits, page 19):

"The Enrollee shall conduct an internal audit of its Sewer System Management Plan, and implementation of its Plan, at a minimum frequency of once every three years. The audit must be conducted for the period after the end of the Enrollee's last required audit period. Within six months after the end of the required 3-year audit period, the Legally Responsible Official shall submit an audit report into the online CIWQS Sanitary Sewer System Database per the requirements in section 3.10 (Sewer System Management Plan Audit Reporting Requirements) of Attachment E1 of this General Order. Audit reports submitted to the CIWQS Sanitary Sewer System Database will be viewable only to Water Boards staff.

The internal audit shall be appropriately scaled to the size of the system(s) and the number of spills. The Enrollee's sewer system operators must be involved in completing the audit. At minimum, the audit must:

- Evaluate the implementation and effectiveness of the Enrollee's Sewer System Management Plan in preventing spills.
- Evaluate the Enrollee's compliance with this General Order.
- Identify Sewer System Management Plan deficiencies in addressing ongoing spills and discharges to waters
  of the State; and
- Identify necessary modifications to the Sewer System Management Plan to correct deficiencies.

The Enrollee shall submit a complete audit report that includes:

- Audit findings and recommended corrective actions.
- A statement that sewer system operators' input on the audit findings has been considered; and
- A proposed schedule for the Enrollee to address the identified deficiencies."

### Attachment D-10 (Internal Audits, page D-10):

The Plan shall include internal audit procedures, appropriate to the size and performance of the system, for the Enrollee to comply with section 5.4 (Sewer System Management Plan Audits) of this General Order."



### SSMP AUDITING PROCEDURES

A comprehensive SSMP Audit was completed in partnership with District/CSAs managers responsible for providing the auditing team with all data requests and information evaluated in the project. The following key elements were reviewed for compeltion of the Audit:

- Assessment of the District/CSAs existing 2017 SSMP including connected collection systems
- Detailed interviews with District/CSAs collection management
- In-person group interviews/surveys with field staff operators
- Completion of a Compliance Evaluation Inspection (CEI) mirroring procedures established and implemented by U.S. EPA and the Water Board staff assessing compliance and taking enforcement for noncompliance with the California Water Code, Federal Clean Water Act, and the Reissued WDR (see Appendix 1A-1D)
- Review of District/CSAs spill reports, system data, and other documentation
- Guidelines and recommendations for SSMPs (incorporated throughout the Audit Report for thoroughness) prepared and published by the Bay Area Clean Water Agencies (BACWA) posted on the <u>SWRCB's website</u>.

### **COLLECTION SYSTEM INFORMATION**

The County of Santa Cruz Public Works Department is responsible for the administration, engineering, maintenance, emergency response and construction of all County sanitation services. The department also manages various Board-governed special District/CSAss and County Service Areas.

The Sanitation Operations unit is one of six organizational units within the Special Services Division of Public Works and provides operation and maintenance services to County sanitation District/CSAss and CSAs. Sanitation operations employees work in all District/CSAss and County Service Areas. Each sanitation District/CSAs is governed according to its specific code of regulations. The District/CSAss' codes are very similar and some sections are adopted by reference from the Santa Cruz County Sanitation District/CSAs Code. The CSAs are governed according to the Santa Cruz County Code of Regulations. Most of the County Code pertaining to sanitary sewer collection systems is adopted by reference from the SCCSD Code.

Figures 1-7 below provide current Facility At-A-Glance reports from the the State Water Board Database (CIWQS) for District/CSAs. The SCCSD was inspected and was issued an inspection report by the State Water Board in 2023 (see Appendix 1D).



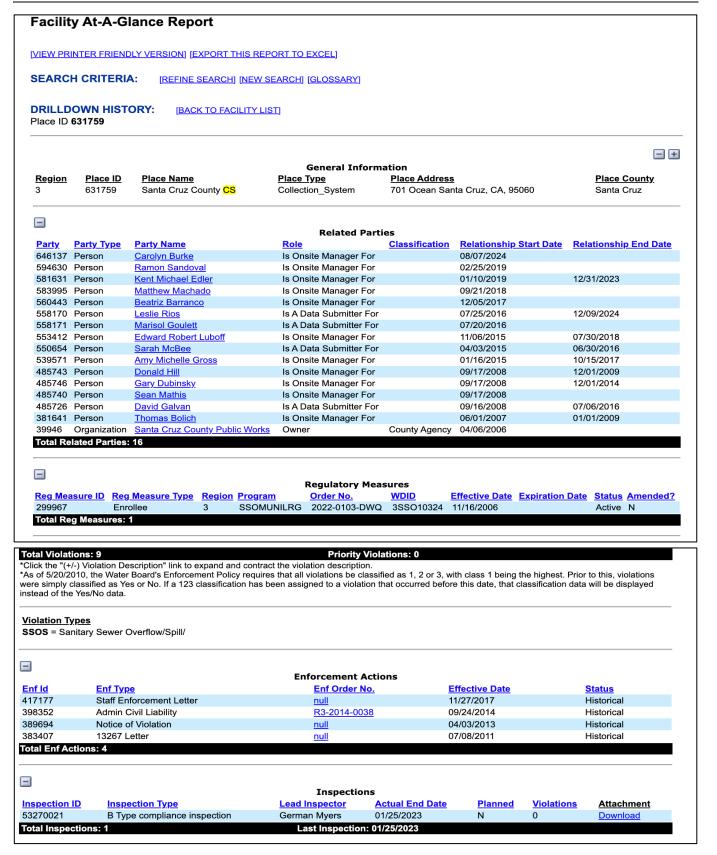


Figure 1 - District/CSAs Facility At-A-Glance report (State Water Board Online Database, pulled from CIWQS)



### DISTRICT/CSAS SSMP/AUDIT DUE DATES

This section provides an overview of upcoming due dates for the District/CSAs to update its SSMP and complete its next SSMP Audit. Figure 4 below displays a summary of the upcoming due dates for the District/CSAs posted on the State Water Board's online Lookup Tool (due 8/2/2025 for its 2025 SSMP Update and by 2/2/25 for its next required SSMP Audit, 6 months after the end of the Audit period shown in the table).

oarch by M	Vaste Discha	rgo Idontific		.0003-DW					
-	harge Identification (WI	0	·	·		ment Pl	an (SSMP) Update a	nd Audit due dat	es for vour system.
3SSO10324		,		,	0		,		, ,
Show Update/Audit	Dates								
		Sewer Syster	n Managemen	nt Plan & Subsequ	ent Updat	e Due	Dates		
System Name	WDID Number	Original Plan Re Date	Original Plan Required Due Required Plan Update Due Required Plan Update Due Date Date			Required Plan Update Due Date*			
Santa Cruz County CS	3SSO10324	8/2/200	09	8/2/2014		8/2/2019		8/2/2025	
			A	udit Due Dates					
System Name	WDID Number	Original Required Plan Audit Due Date	Required Plar Audit Due Date	n Required Plan Audit Due Date	Required Audit D Date		Required Plan Audit Due Date	Required Pla Audit Due Date	End of Required 3-Year Audit Period**
Santa Cruz County CS	3SSO10324	8/2/2011	8/2/2013	8/2/2015	8/2/20	17	8/2/2019	8/2/2021	8/2/2024

Figure 2- District/CSAs SSMP Update/Audit Due Dates (SWRCB website)



### DISTRICT/CSAS SPILL PERFORMANCE

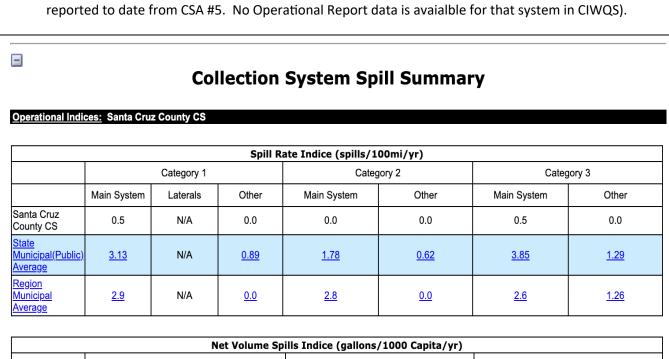
This section provides an overview to showcase Agency spill performance information including trends and benchmarks to allow a comparison of the Agency's performance against other collection system agencies within the Regional Water Board area and State.

### Certified Spills (2007-2024)

Appendix 2A includes a recent data pull for all certified spills entered into CIWQS to date.

### Certified Spills (Operational Report, 2023-2024)

• Figures 3- below and Appendix 2B includes a recent publicly-available operational reports for managers to compare how their system spills compare with the regional and state spill rates (no spills have been reported to date from CSA #5. No Operational Report data is available for that system in CIWQS).



	Net Volume Spills Indice (gallons/1000 Capita/yr)									
	Category 1			Categ	gory 2	Category 3				
	Main System	Laterals	Other	Main System	Main System Other		Other			
Santa Cruz County CS	18.33	N/A	0.0	0.0	0.0	8.47	0.0			
State Municipal(Public) Average	<u>-9741.31</u>	N/A	<u>1338.81</u>	<u>503.52</u>	68.28	<u>104.66</u>	<u>5.26</u>			
Region Municipal Average	1807.82	N/A	0.0	<u>503.15</u>	0.0	<u>37.45</u>	11.24			

Figure 3 - SCCSD CIWQS Spill Data Metrics (Operational Report 2024)





# **Collection System Spill Summary**

Operational Indices: Davenport CS

Spill Rate Indice (spills/100mi/yr)										
	Category 1			Categ	ory 2	Category 3				
	Main System	Laterals	Other	Main System	Other	Main System	Other			
Davenport CS	0.0	N/A	0.0	0.0	0.0	0.0	0.0			
<u>State</u> <u>Municipal(Public)</u> <u>Average</u>	<u>1.93</u>	N/A	<u>1.22</u>	<u>1.49</u>	2.85	2.93	<u>0.77</u>			
<u>Region</u> <u>Municipal</u> <u>Average</u>	<u>1.06</u>	N/A	<u>0.35</u>	<u>1.35</u>	<u>1.15</u>	2.4	0.8			

	Net Volume Spills Indice (gallons/1000 Capita/yr)										
	Category 1			Cate	gory 2	Category 3					
	Main System	Laterals	Other	Main System	Main System Other		Other				
Davenport CS	0.0	N/A	0.0	0.0	0.0	0.0	0.0				
State Municipal(Public) Average	<u>9312.9</u>	N/A	<u>3687.94</u>	270.38	<u>2603.82</u>	93.3	<u>57.07</u>				
Region Municipal Average	<u>1215.99</u>	N/A	<u>426.97</u>	218.07	<u>16.91</u>	<u>61.95</u>	1.74				

Figure 4 - Davenport CIWQS Spill Data Metrics (Operational Report 2024)



# **General Information**

- +

RegionPlace IDPlace NameCS CategoryPlace AddressPlace County3631968Freedom Co Sanitation District CSMunicipal(Public)701 Ocean Santa Cruz CA 95060Santa Cruz

# **Collection System Spill Summary**

Operational Indices: Freedom Co Sanitation District CS

	Spill Rate Indice (spills/100mi/yr)										
	Category 1			Categ	ory 2	Category 3					
	Main System	Laterals	Other	Main System	Other	Main System	Other				
Freedom Co Sanitation District CS	2.08	N/A	0.0	0.0	0.0	2.08	0.0				
State Municipal(Public) Average	<u>1.93</u>	N/A	<u>1.22</u>	<u>1.49</u>	2.85	<u>2.93</u>	0.77				
Region Municipal Average	<u>1.06</u>	N/A	<u>0.35</u>	<u>1.35</u>	<u>1.15</u>	<u>2.4</u>	0.8				

	Net Volume Spills Indice (gallons/1000 Capita/yr)										
	Category 1			Cate	gory 2	Category 3					
	Main System	Laterals	Other	Main System	Main System Other		Other				
Freedom Co Sanitation District CS	2.96	N/A	0.0	0.0	0.0	1.04	0.0				
<u>State</u> <u>Municipal(Public)</u> <u>Average</u>	<u>9312.9</u>	N/A	<u>3687.94</u>	<u>270.38</u>	<u>2603.82</u>	93.3	<u>57.07</u>				
Region Municipal Average	<u>1215.99</u>	N/A	<u>426.97</u>	<u>218.07</u>	<u>16.91</u>	<u>61.95</u>	<u>1.74</u>				

Figure 5 - Freedom CIWQS Spill Data Metrics (Operational Report 2024)





# **Collection System Spill Summary**

Operational Indices: Sand Dollar Beach CS

	Spill Rate Indice (spills/100mi/yr)										
	Category 1			Categ	gory 2	Category 3					
	Main System	Laterals	Other	Main System	Other	Main System	Other				
Sand Dollar Beach CS	0.0	N/A	0.0	0.0	0.0	0.0	0.0				
State Municipal(Public) Average	<u>1.93</u>	N/A	<u>1.22</u>	<u>1.49</u>	<u>2.85</u>	<u>2.93</u>	<u>0.77</u>				
Region Municipal Average	<u>1.06</u>	N/A	<u>0.35</u>	<u>1.35</u>	<u>1.15</u>	<u>2.4</u>	0.8				

Net Volume Spills Indice (gallons/1000 Capita/yr)									
		Category 1		Cate	gory 2	Category 3			
	Main System	Laterals	Other	Main System	Other	Main System	Other		
Sand Dollar Beach CS	0.0	N/A	0.0	0.0	0.0	0.0	0.0		
<u>State</u> <u>Municipal(Public)</u> <u>Average</u>	9312.9	N/A	<u>3687.94</u>	<u>270.38</u>	<u>2603.82</u>	<u>93.3</u>	<u>57.07</u>		
Region Municipal Average	<u>1215.99</u>	N/A	<u>426.97</u>	<u>218.07</u>	<u>16.91</u>	<u>61.95</u>	<u>1.74</u>		

Figure 6 - CSA #5 CIWQS Spill Data Metrics (Operational Report 2024)



# **General Information**



631763

Region Place ID Place Name Boulder Crk Golf & Cntry Club CS

CS Category Municipal(Public) Place Address

16901 Big Basin Boulder Creek CA 95006

Place County Santa Cruz

# **Collection System Spill Summary**

Operational Indices: Boulder Crk Golf & Cntry Club CS

	Spill Rate Indice (spills/100mi/yr)									
	Category 1			Categ	ory 2	Category 3				
	Main System	Laterals	Other	Main System	Other	Main System	Other			
Boulder Crk Golf & Cntry Club CS		N/A	0.0	0.0	0.0	0.0	0.0			
State Municipal(Public) Average	<u>1.93</u>	N/A	1.22	<u>1.49</u>	2.85	<u>2.93</u>	0.77			
Region Municipal Average	<u>1.06</u>	N/A	<u>0.35</u>	<u>1.35</u>	<u>1.15</u>	<u>2.4</u>	0.8			

	Net Volume Spills Indice (gallons/1000 Capita/yr)									
		Category 1		Cate	gory 2	Category 3				
	Main System	Laterals	Other	Main System	Other	Main System	Other			
Boulder Crk Golf & Cntry Club CS		N/A	0.0	0.0	0.0	0.0	0.0			
State Municipal(Public) Average	<u>9312.9</u>	N/A	<u>3687.94</u>	<u>270.38</u>	<u>2603.82</u>	<u>93.3</u>	<u>57.07</u>			
Region Municipal Average	<u>1215.99</u>	N/A	<u>426.97</u>	<u>218.07</u>	<u>16.91</u>	<u>61.95</u>	<u>1.74</u>			

Figure 7 - CSA #7 CIWQS Spill Data Metrics (Operational Report 2024)





# **Collection System Spill Summary**

Operational Indices: Rolling Woods Subdivision CS

Spill Rate Indice (spills/100mi/yr)									
	Category 1			Categ	ory 2	Category 3			
	Main System	Laterals	Other	Main System	Other	Main System	Other		
Rolling Woods Subdivision CS	0.0	N/A	0.0	0.0	0.0	0.0	0.0		
<u>State</u> <u>Municipal(Public)</u> <u>Average</u>	<u>1.93</u>	N/A	<u>1.22</u>	<u>1.49</u>	2.85	<u>2.93</u>	0.77		
Region Municipal Average	<u>1.06</u>	N/A	<u>0.35</u>	<u>1.35</u>	<u>1.15</u>	<u>2.4</u>	0.8		

	Net Volume Spills Indice (gallons/1000 Capita/yr)									
		Category 1		Cate	gory 2	Category 3				
	Main System	Laterals	Other	Main System	Other	Main System	Other			
Rolling Woods Subdivision CS	0.0	N/A	0.0	0.0	0.0	0.0	0.0			
State Municipal(Public) Average	<u>9312.9</u>	N/A	<u>3687.94</u>	<u>270.38</u>	<u>2603.82</u>	<u>93.3</u>	<u>57.07</u>			
<u>Region</u> <u>Municipal</u> <u>Average</u>	<u>1215.99</u>	N/A	<u>426.97</u>	<u>218.07</u>	<u>16.91</u>	<u>61.95</u>	<u>1.74</u>			

Figure 8 - CSA #10 CIWQS Spill Data Metrics (Operational Report 2024)



### SSMP AUDIT FINDINGS

This section provides a high-level summary of the SSMP Audit findings (see Tables 2 and 3 below) for incorporation into the District/CSAs 2025 SSMP Update <u>due on or before 8/2/2025.</u>

Table 1 Summary of District/CSAs SSMP Audit Findings (Reissued WDR, ATTACHMENTS)

SSMP AUDIT FINDINGS (ATTACHMENTS)								
Requireme	ents	Violations?	Areas of Concern?	Audit References				
Att. D-1	Goal & Intro	1 Yes	No	See detailed findings below				
Att. D-2	Organization	No	Yes	See detailed findings below				
Att. D-3	Legal Authority	No	Yes	See detailed findings below				
Att. D-4	O/M Program	No	Yes	See detailed findings below				
Att. D-5	Design and Performance	No	No	None				
Att. D-6	Spill Emergency Response Plan (SERP)	No	Yes	See detailed findings below				
Att. D-7	Pipe Blockage Control Program.	No	Yes	See detailed findings below				
Att. D-8	SECAP	No	Yes	See detailed findings below				
Att. D-9	Monitoring, Measurement	No	No	See detailed findings below				
Att. D-10	Audits	No	Yes	See detailed findings below				
Att. D-11	Communications	No	No	See detailed findings below				
Att. E1	Notification, Monitoring, Reporting, Records	No	No	See detailed findings below				



Table 2 Summary of SSMP Audit Findings (Reissued WDR, SPECIFICATIONS)

SSMP AUDIT FINDINGS (SPECIFICATIONS)								
Requiremen	ts	Violations? <sup>1</sup>		Areas of Concern? <sup>2</sup>		Audit References		
Spec. 5.1	Designation Of LRO		No		No	• None		
Spec. 5.2	SSMP Development, Implementation		No	<b>A</b>	Yes	See detailed findings below		
Spec. 5.3	SSMP Updates		No		No	• None		
Spec. 5.4	SSMP Audits		No		No	• None		
Spec. 5.6	System Resilience		No		No	• None		
Spec. 5.10	Resources		No	A	Yes	See detailed findings below		
Spec. 5.11	Performance Analysis		No		No	• None		
Spec. 5.12	Spill Emergency Resp. Plan		No	A	Yes	See detailed findings below		
Spec. 5.13	Notif, Monitoring, Reporting, Records		Yes		No	See detailed findings below		
Spec. 5.14	Notifications (Private Spills)		No		No	• None		
Spec. 5.15	Failure To Report		No		No	• None		
Spec. 5.19	Proper O/M		No	A	Yes	See detailed findings below		

<sup>&</sup>lt;sup>1</sup> Violation of <u>REISSUED WDR</u> requirement

<sup>&</sup>lt;sup>2</sup> Area of Concern with <u>REISSUED WDR</u> requirement which could lead to a violation



### **AUDIT CONCLUSIONS**

The 2021-2024 SSMP Audit completed by Fischer Compliance LLC in collaboration with District/CSAs management and field operations staff shed light on many existing successful work programs in place. When comparing the District/CSAs spill data/metrics performance with other collection systems in the Central Coast (Region 3) Water Board area, the District/CSAs performs near the top with its significant investments and virtually all-new collection system for increasing performance and reliability to reduce spills.

Detailed Auditing procedures incorporating review of questionnaires, the District/CSAs existing SSMP, interviews and other data were relied on for generating the detailed Audit findings for documenting the District/CSAs SSMP compliance, implementation, and effectiveness. To facilitate the project and improve effectiveness of the Audit process, the District/CSAs dedicated an internal staff person for managing the project, responding to questions/data requests, and provide regular communications to auditors in every phase of the project.

Several specific technical recommendations along with an implementation plan/schedule were generated for helping the District/CSAs get a jump start on updating its SSMP, several months ahead of schedule before its due date on 8/2/2025. The Audit also revealed several areas to provide an advantage to help prepare the District/CSAs for regulatory compliance inspections and improve SSMP effectiveness. This includes providing insights for the District/CSAs to reflect on additional ways for further improving existing work programs and spill reduction measures.

Appendix 1-4 serves as the heart of the Audit containing detailed Compliance Evaluation Inspection (CEI) reports for supporting findings and conclusions. Appendix 2A-2C allow District/CSAs and regulators to evaluate spill performance and other data to help compare the District/CSAs performance against other collection systems in the Region. Appendix 3 helps the District/CSAs with a simplified checklist to demonstrate full implementation of the Audit findings, refine updating of the District/CSAs SSMP Update (due by 8/2/2025), and provide a roadmap of both required and recommended actions including short-term and long-term plans/schedules to be taken over the next several years.





### POST-AUDIT RECOMMENDATIONS

The District/CSAs and should complete Appendix 3 (SSMPP Implementation Plan/Schedule) as soon as practical to commit to ongoing/future improvements to reduce the District/CSAs enforcement liability exposure. This exercise also provides valuable information for management to help expedite completion of the District/CSAs required 2025 SSMP Update due by 8/2/2025.



# PART 2 (DETAILED AUDIT FINDINGS/RECOMMENDATIONS)

This section provides detailed Audit findings and recommendations to provide an advantage for the District/CSAs to for streamlining its 2025 SSMP Update required by the Reissued WDR. The procedures employed for this section include evaluating the District/CSAs sewer programs against each required SSMP element required in the Reissued WDR. Requirements are presented at the beginning for each element along with an analysis of District/CSAs compliance and implementation.

Additional information for helping District/CSAs managers measure SSMP effectiveness and provide resilience are also included for each SSMP element in this section. This information provides a strong foundation to help the District/CSAs with updating its SSMP, due by 8/2/2025. Each section ends with a checklist of common violations/areas and a checklist of findings including determination of compliance.





### **ELEMENT 1 – GOAL AND INTRODUCTION**

### 1.1. REGULATORY CONTEXT REQUIREMENTS<sup>3</sup>

"The Plan Introduction section must provide a general description of the local sewer system management program and discuss Plan implementation and updates."

### 1.2. SSMP UPDATE SCHEDULE REQUIREMENTS

"The Plan Introduction section must include a schedule for the Enrollee to update the Plan, including the schedule for conducting internal audits. The schedule must include milestones for incorporation of activities addressing prevention of sewer spills."

### 1.3. SEWER SYSTEM ASSET OVERVIEW

"The District/CSAs Sewer System Management Plan must have an Introduction section to provide a description of the District/CSAs-owned assets and service area including but not limited to.

- Location, including county(ies).
- Service area boundary.
- Population and community served.
- System size, including total length in miles, length of gravity mainlines, length of pressurized (force) mains, and number of pump stations and siphons.
- Structures diverting stormwater to the sewer system.
- Data management systems.
- Sewer system ownership and operation responsibilities between Enrollee and private entities for upper and lower sewer laterals.
- Estimated number or percent of residential, commercial, and industrial service connections.
- Unique service boundary conditions and challenge(s).
- Reference to the Enrollee's up to-date map of its sanitary sewer system, as required in section 4.1 (Updated Map of Sanitary Sewer System) of this Attachment."

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<sup>&</sup>lt;sup>3</sup> Required under Specification 5.4 of the Reissued WDR (see pages 19-20)



# **FINDINGS - Element 1 (Analysis)**

SSMP Element - Att. D-1

### **COMPLIANCE**

To improve compliance, the District/CSAs should address the following key findings revealed during the Audit prior to completing its 2025 SSMP Update (see Appendix 1A-1D).



### WDR CONFORMANCE - VIOLATIONS

- Failure to prevent discharges of sewage to surface waters of the State (518,796 gallons during Audit period from 8/2/2021 to 8/2/2024)
- Improve the narrative for this element in 2025 SSMP Update

### **IMPLEMENTATION**

Address WDR Conformance above by adjusting goals and improving SSMP implementation to reduce future spills



### WDR RECOMMENDATION

To assess implementation, the District/CSAs should

Annually review Element 1 entirely for ensuring all information is accurate and up to date.

### **EFFECTIVENESS**



### WDR RECOMMENDATION

To help measure effectiveness and align with available industry standard guidance, the District/CSAs should check/verify The following data for inclusion in its next required SSMP update:

Has the schedule for conducting audits been adhered to?
Has the schedule for updating the Sewer System Management Plan been adhered to?
Are established milestones being Monitored?
Is the sewer system management program description up to date?
Have audits been performed on schedule?
Has the Sewer System Management Plan been approved by the governing board on schedule (every six years)?
Is asset data kept in the computerized maintenance management system, GIS, etc.,

- programs up to date?
- Does the sewer system asset overview reference up to date maps?



### RESILIENCE

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### WDR RECOMMENDATION

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To help provide resilience, the District/CSAs should:

- Create a work order report for auditing open work orders and assets for any repeat spill locations.
- Implement a formal schedule for ensuring all WDR compliance deadlines are logged into management calendars.

# FINDINGS (Element 1: WDR Violation/Areas of Concern Checklist) 4

<ol> <li>FAILURE TO IDENTIFY APPROPRIATE GOAL</li> </ol>	FA	FΑ	۱L	UI	RE	TC	) (	DE	N.	ΓIF	Y /	۱P	PR	ЭP	RI	ΑT	Έ	GC	)A	L	S
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✓ Violations: No

Areas of Concern: No



### WDR RECOMMENDATION

- Utilize Appendix 3 checklist for revising current SSMP and improving narration for this element
- 2. FAILURE TO ESTABLISH A PROCESS FOR ENSURING PUBLIC ACCESS TO SSMP

✓ Violations: No

Areas of Concern: No

3. FAILURE TO COMPLETE APPROPRIATE SEWER SYSTEM MANAGEMENT PLAN AUDIT

✓ Violations: No.

Areas of Concern: No

4. FAILURE TO MEASURE EFFECTIVENESS AND PROGRESS

✓ Violations: No

Areas of Concern: Yes (see individual SSMP Element recommendations below)

<sup>&</sup>lt;sup>4</sup> See SSMP Development Guide, available for download on the State Water Board's Spill Reduction Website, available at: <a href="https://www.waterboards.ca.gov/water\_issues/programs/sso/">https://www.waterboards.ca.gov/water\_issues/programs/sso/</a>



5.	FAILURE TO DEVELOR	AND IMPLEMENT	PROCEDURES FOR	UPDATING SEWER MAPS

✓ Violations: No

Areas of Concern: No

6. <u>FAILURE TO PROVIDE APPROPRIATE NARRATIVE DESCRIPTIONS DESCRIBING PROCEDURES FOR PRIORITIZATION OF SYSTEM REPAIRS AND MAINTENANCE TO PREVENT SPILLS.</u>

✓ Violations: No

Areas of Concern: No

## 7. FAILURE TO DESCRIBE TECHNOLOGIES AND PRACTICES TO REDUCE SPILLS

✓ Violations: No

Areas of Concern: No



### **ELEMENT 2 – ORGANIZATION**

### **REQUIREMENTS**

"The Plan must identify organizational responsible and integral for implementing the local Sewer System Management Plan through an organizational chart of other similar narrative documentation that includes:

- The name of the Legally Responsible Official as required in section 5.1 (Designation of a Legally Responsible Official) of this General Order.
- The position titles, telephone numbers, and email addresses for management, administrative, and maintenance positions responsible for implementing specific Sewer System Management Plan elements.
- Organizational lines of authority.
- Chain of communication for reporting spills from receipt of complaint or other information, including the person responsible for reporting spills to the State and Regional Water Boards and other agencies, as applicable. (For example, county health officer, county environmental health District/CSAs, and State Office of Emergency Services)."





# **FINDINGS (Element 2: Analysis)**

SSMP Element Att. D-2

### **COMPLIANCE**



To improve compliance, the District/CSAs should address the following finding revealed during the Audit prior to completing its 2025 SSMP Update (see Appendix 1A-1D).

### WDR CONFORMANCE - AREA OF CONCERN

	Assess adequacy of current sewer system staffing resources for O/M and emergency response operations Improve methods for greater transparency between management and field staff Improve narrative for this element in 2025 SSMP Update
IMPLEMENTATION	
	Address WDR Conformance above to improve current SSMP

### **EFFECTIVENESS**



### WDR RECOMMENDATION

Improve testing (at least annually) and documentation for after-hours spill notification system for 2025 SSMP Update

To help measure effectiveness and align with <u>available industry standard guidance</u>, the District/CSAs should check/verify the following, make adjustments as necessary, and include any changes in the next required SSMP update:

Ц	Have there been instances when a service call for a spill was not properly routed to
	response personnel?
	Was all spill response activity documented/prepared for LRO?
	Have there been any changes in assigned responsibilities for implementing the Sewer System Management Plan?
	Is there a process in place for ensuring all contact information remains up to date?
	Is a process established for ensuring that org. chart is current?



### **RESILIENCE**



### WDR RECOMMENDATION

To provide resilience and align with <u>available industry standard guidance</u>, the District/CSAs should check/verify the following data, make adjustments as necessary, and include any changes in the next required SSMP update:

Designate more than one LRO to help ensure full and continuous coverage of duties.
Ensure more than one staff member can implement and be responsible for specific Sewer
System Management Plan elements.
Periodically review contact information throughout this element for ensuring data is up to date

# FINDINGS (ELEMENT 2: WDR Violations/Areas of Concern Evaluation)

1.	FAILURE	10	PROPERLY	SECURE	LEGALLY	RESPONSIBLE	OFFICIAL	WIIH	APPROPRIATE	TRAINING	<u>AND</u>
	EXPERIEN	ICE.									

✓ Violations: No
✓ Areas of Concern: No



### WDR RECOMMENDATION

Utilize Appendix 3 checklist for revising current SSMP and improving narration for this element

2. FAILURE TO ESTABLISH AND UPDATE ALL RELATED NECESSARY RESPONSIBLE STAFF AND LINES OF AUTHORITY.

✓ Violations: No

Areas of Concern: No

3. FAILURE TO ESTABLISH AND UPDATE CHAIN OF COMMUNICATION FOR REPORTING SPILLS.

✓ Violations: No

Areas of Concern: No



### **ELEMENT 3 – LEGAL AUTHORITY**

### REQUIREMENTS<sup>5</sup>

"The District/CSAs Sewer System Management Plan must include copies or an electronic link to the Enrollee's current sewer system use ordinances, service agreements and/or other legally binding procedures to demonstrate the Enrollee possesses the necessary legal authority."

- "Prevent illicit discharges into its sanitary sewer system from inflow and infiltration (I&I); unauthorized stormwater; chemical dumping; unauthorized debris; roots; fats, oils, and grease; and trash, including rags and other debris that cause blockages."
- "Collaborate with storm sewer agencies to coordinate emergency spill responses, ensure access to storm sewer systems during spill events, and prevent unintentional cross connections of sanitary sewer infrastructure to storm sewer infrastructure."
- "Require that sewer system components and connections be properly designed and constructed."
- "Ensure access for maintenance, inspection, and/or repairs for portions of the service lateral owned and/or operated by the Enrollee."
- "Enforce violation(s) of ordinances, service agreements, or other legally binding procedures."
- "Obtain easement accessibility agreements for locations requiring sewer system operations and maintenance, as applicable."

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<sup>&</sup>lt;sup>5</sup> See Attachment D-3 of Reissued WDR (page D-4)



# **FINDINGS (Element 3: Analysis)**

SSMP Element - Att. D-3

### **COMPLIANCE**

To improve compliance, the District/CSAs should address the following finding revealed during the Audit prior to completing its 2025 SSMP Update (see Appendix 1A-1D).



### WDR COMPLIANCE - AREAS OF CONCERN

Improve periodic review of ordinances
Improve the narrative for this element in 2025 SSMP Update

### **IMPLEMENTATION**

Address WDR Conformance above to improve current SSMP implementation deficiencies

### **EFFECTIVENESS**



### WDR RECOMMENDATION

To measure effectiveness and ensure alignment with <u>available industry standard guidance</u>, the District/CSAs should check/verify the following data for inclusion in its next required SSMP update:

- Annually review District/CSAs codes and ordinances to ensure they are adequate in fulfilling all required legal requirements.
- Check for instances when the code/ordinance did not address a specific need/circumstance.

### **RESILIENCE**



### WDR RECOMMENDATION

To provide resilience and align with <u>available industry standard guidance</u>, the District/CSAs should check/verify the following data, make adjustments as necessary, and include any changes in the next required SSMP update:

Monitor performance of ordinances, codes, and agreements for deficiencies and omissions.
Perform periodic review of ordinances, codes, and service agreements.
Stay abreast of industry trends and local ordinances that Aug affect operations.



# FINDINGS (Element 3: WDR Violations/Areas of Concern Evaluation)

1. FAILURE TO ESTABLISH PROPER CODES, STANDARDS, LEGAL AGREEMENTS, AND PROCEDURES FOR ENSURING CONFORMANCE TO REQUIREMENTS.

✓ Violations: No

Areas of Concern: No



### WDR RECOMMENDATION

Utilize Appendix 3 checklist for revising current SSMP and improving narration for this element





### **ELEMENT 4 – OPERATIONS AND MAINTENANCE PROGRAM**

### 4.1. UPDATED MAP OF SEWER SYSTEM REQUIREMENTS <sup>6</sup>

"The Plan must include the items listed below that are appropriate and applicable to the Enrollee's system.

An up-to-date map(s) of the sanitary sewer system, and procedures for maintaining and providing State and Regional Water Board staff access to the map(s). The map(s) must show gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities within the sewer system service area boundaries."

### 4.2. PREVENTIVE OPERATION AND MAINTENANCE ACTIVITIES REQUIREMENTS

"A scheduling system and a data collection system for preventive operation and maintenance activities conducted by staff and contractors.

The scheduling system must include:

- Inspection and maintenance activities, Higher-frequency inspections
- Maintenance of known problem areas including areas with tree root problems
- Regular visual and closed-circuit television (CCTV) inspections of manholes and sewer pipes.

The data collection system must document the data from system inspection and maintenance activities, including system areas/components prone to root-intrusion resulting in system backup and/or failure."

### 4.3. TRAINING REQUIREMENTS

"In-house and external training provided on a regular basis for sanitary sewer system operations and maintenance staff and contractors.

The training must cover the requirements of this General Order; the Enrollee's Spill Emergency Response Plan procedures and practice drills, skilled estimation of spill volume for field operators, and electronic CIWQS reporting procedures for staff submitting data."

### 4.4. EQUIPMENT INVENTORY REQUIREMENTS<sup>1</sup>

"An inventory of sewer system equipment, including identification of critical replacement/spare parts."

<sup>&</sup>lt;sup>6</sup> See Attachment D-4.1 of Reissued WDR (page D-4)



# **FINDINGS (Element 4: Analysis)**

SSMP Element - Att. D-4

### **COMPLIANCE**



WDR CONFORMANCE (AREAS OF CONCERN):

	WBN CO.	TOTAL PROPERTY.
	•	ve compliance, the District/CSAs should address each of the following Areas of Concern realed during the Audit prior to completing its 2025 SSMP Update (see Appendix 1A-1D).
		Improve pump station odor control systems
		Improve/update all existing outdated/poor performing equipment
		Review/update existing Standard Operating Procedures (SOPs) and update training to ensure consistency; improve narrative in 2025 SSMP Update
		Improve work order system (Lucity) and training for better tracking of labor/time/materials and improve data transparency between management/staff
		Improve force main inspections and maintenance (and focus on areas not completed to date)
		Improve pump station Emergency Response Plans (ERPs) with separation of pump and electrical information for each station in manuals
		Improve monitoring Supervisory Control and Data Acquisition (SCADA) software
		Improve the narrative for this element in 2025 SSMP Update
IMPLEMENT	TATION	
		Address WDR Conformance above to improve current SSMP implementation deficiencies
EFFECTIVEN	ESS	
<b>-8</b>	WDR REC	COMMENDATION
		ure effectiveness and ensure alignment with <u>available industry standard guidance</u> , the SAs should check/verify the following data for inclusion in its next required SSMP update:
		Were all map updates completed in a timely manner?
		Are staff trained to provide map update information?
		Are newly installed assets incorporated into maps?
		Are District/CSAs maintenance, operations, engineering work orders periodically reviewed for completeness?
		Does the District/CSAs monitor "open" or "overdue" work orders?
		Are inspection and maintenance activities reducing the number and volume of spills?
		Is maintenance work being completed as scheduled?
		Are inspections of pipes, manholes, and lift stations completed?
		Does the District/CSAs have a proactive root control program?
		Has all training been completed as scheduled?
		Have consistent training records been maintained?



Ч	Have staff demonstrated ability/knowledge after training?
	Have contractors received, at a minimum, directions for 1) reporting spills, containment, securing sites?
	Has the inventory list been audited as scheduled?
	Have any inventory deficiencies or omissions been discovered?

### **RESILIENCE**



### WDR RECOMMENDATION

To provide resilience and align with <u>available industry standard guidance</u>, the District/CSAs should check/verify the following data, make adjustments as necessary, and include any changes in the next required SSMP update:

ill eu c	Sivir update.
	Develop a Standard Operating Procedure (SOP) for updating maps when errors are discovered.
	Develop and use forms (paper or electronic) for data collection through inspections to ensure all pertinent information is consistently collected.
	Periodically evaluate inspection intervals to help ensure they are optimized.
	Require staff to demonstrate ability and/or knowledge for all training activities.
	Monitor equipment and critical spare parts usage for and trends.
	Ensure cross-training for CIWQS Data Submitters for ensuring more than one staff member can collect/manage all required spill data and meet all required deadlines specified in Attachment E1 of the Reissued WDR.



1.

2.

3.

4.

### FINDINGS (Element 4: WDR Violations/Areas of Concern Evaluation)

FAILURE <sup>-</sup>	TO ESTABLISH PROCESS FOR ENSURING SEWER MAPS ARE UP TO DATE.
<b>☑</b>	Violations: No Areas of Concern: No
	WDR RECOMMENDATION  Utilize Appendix 3 checklist for revising current SSMP and improving narration for this element
FAILURE T	TO ESTABLISH AND REVIEW REQUIRED MAINTENANCE PROGRAM ACTIVITIES (CCTV, ETC.)
<b>☑</b>	Violations: No Areas of Concern: No
FAILURE <sup>-</sup>	TO ESTABLISH ADEQUATE TRAINING PROGRAM FOR STAFF AND CONTRACTORS.
	Violations: No Areas of Concern: No
FAILURE T	TO ESTABLISH EQUIPMENT INVENTORY INCLUDING IDENTIFICATION OF CRITICAL SPARE PARTS.
V V	Violations: No Areas of Concern: No



### **ELEMENT 5 – DESIGN AND PERFORMANCE PROVISIONS**

### 5.1. UPDATED DESIGN CRITERIA AND CONSTRUCTION STANDARDS REQUIREMENTS 7

"The Plan must include the following items as appropriate and applicable to the Enrollee's system."

"Updated design criteria, and construction standards and specifications, for the construction, installation, repair, and rehabilitation of existing and proposed system infrastructure components, including but not limited to pipelines, pump stations, and other system appurtenances. If existing design criteria and construction standards are deficient to address the necessary component-specific hydraulic Capacity as specified in section 8 (System Evaluation, Capacity Assurance and Capital Improvements) of this Attachment, the procedures must include component-specific evaluation of the design criteria."

### 5.2. PROCEDURES AND STANDARDS REQUIREMENTS

"Procedures, and standards for the inspection and testing of newly constructed, newly installed, repaired, and rehabilitated system pipelines, pumps, and other equipment and appurtenances."

FINDINGS (Element 5: Analysis)  SSMP Element Att. D-5							
COMPLIANCE							
		To improve compliance, the District/CSAs should improve the narrative for this element in 2025 SSMP Update					
IMPLEMENTAT	ION						
None							

<sup>&</sup>lt;sup>7</sup> See Attachment D-5.1 of Reissued WDR (page D-5)



### **EFFECTIVENESS**



#### WDR RECOMMENDATION

To measure effectiveness and ensure alignment with <u>available industry standard guidance</u>, the District/CSAs should check/verify the following data for inclusion in its next required SSMP update:

Does the District/CSAs implement its current design and construction standards
specifications, and inspection procedures?
Does the District/CSAs periodically review design and construction standards
specifications, and inspection procedures for ensuring conformance to requirements?
Does the District/CSAs have a review process for its standards and procedures?
Were any design or installation deficiencies found during warranty inspections?
Are hydraulic model findings included in the design process?
Does the District/CSAs stay abreast of industry design standards?

### RESILIENCE



#### WDR RECOMMENDATION

To provide resilience and align with <u>available industry standard guidance</u>, the District/CSAs should check/verify the following data, make adjustments as necessary, and include any changes in the next required SSMP update:

Staying abreast of industry trends and standards.
 Performing warranty inspections of newly installed or repaired assets to evaluate design and installation practices.
 Evaluating as-built changes for trends and areas for design and performance improvements.

### FINDINGS (Element 5: WDR Violations/Areas of Concern Evaluation)

1. <u>Failure to establish, implement, and maintain appropriate sewer standards and procedures for inspections, and testing.</u>

✓ Violations: No

Areas of Concern: No

### WDR RECOMMENDATION

Utilize Appendix 3 checklist for revising current SSMP and improving narration for this element

2. Failure to establish process for ensuring sewer maps are up to date.

✓ Violations: No

☑ Areas of Concern: No



### **ELEMENT 6 – SPILL EMERGENCY RESPONSE PLAN**

### **REQUIREMENTS**<sup>8</sup>

"The Plan must include an up-to-date Spill Emergency Response Plan to ensure prompt detection and response to spills to reduce spill volumes and collect information for prevention of future spills. The Spill Emergency Response Plan must include procedures to meet all the following.

- "Notify primary responders, appropriate local officials, and appropriate regulatory agencies of a spill in a timely manner.
- Notify other ly affected entities (for example, health agencies, water suppliers, etc.) of spills that ly affect public health or reach waters of the State.
- Comply with the notification, monitoring and reporting requirements of this General Order, State law and regulations, and applicable Regional Water Board Orders.
- Ensure that appropriate staff and contractors implement the Spill Emergency Response Plan and are appropriately trained.
- Address emergency system operations, traffic control and other necessary response activities.
- Contain a spill and prevent/minimize discharge to waters of the State or any drainage conveyance system.
- Minimize and remediate public health impacts and adverse impacts on beneficial uses of waters of the State.
- Remove sewage from the drainage conveyance system.
- Clean the spill area and drainage conveyance system in a manner that does not inadvertently impact beneficial uses in the receiving waters.
- Implement technologies, practices, equipment, and interagency coordination to expedite spill containment and recovery.
- Implement pre-planned coordination and collaboration with storm drain agencies and other utility agencies/departments prior, during, and after a spill event.
- Conduct post-spill Guidance of spill response activities.
- Document and report spill events as required in this General Order.
- Annually, review and assess effectiveness of the Spill Emergency Response Plan, and update the Plan as needed."

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<sup>&</sup>lt;sup>8</sup> See Attachment D-6 of Reissued WDR (page D-6)



### **FINDINGS (Element 6: Analysis)**

SSMP Element - Att. D-6

### **COMPLIANCE**

To improve compliance, the District/CSAs should address the following findings revealed during the Audit prior to completing its 2025 SSMP Update (see Appendix 1A-1D).



### WDR CONFORMANCE (AREAS OF CONCERN):

Improve SERP and General Order training; improve spill report documentation								
Improve pump station Emergency Response Plans (ERPs) with separation of pump and								
electrical information for each station in manuals								

### Improve narrative in 2025 SSMP Update

### **IMPLEMENTATION**

Address WDR Conformance above to improve current SSMP implementation deficiencies



#### WDR RECOMMENDATION

Refer to Compliance recommendations above for further improving implementation.

### **EFFECTIVENESS**



### WDR RECOMMENDATION

To measure effectiveness and ensure alignment with available industry standard guidance, the District/CSAs should check/verify the following data for inclusion in its next required SSMP update:

- Check to ensure the District/CSAs is implementing all recommendations for spill emergency response plans incorporated in SSMP Guidance Manual (see pages 35-39).
- Does the agency implement an effective Spill Emergency Response Plan?



### **RESILIENCE**



#### WDR RECOMMENDATION

To provide resilience and align with <u>available industry standard guidance</u>, the District/CSAs should check/verify the following data, make adjustments as necessary, and include any changes in the next required SSMP update:

Provide training on a regular basis for all spill response staff. Training should include:
Determining Spill Start Time
Determining spill volume and volume recovered.
Data Collection (forms)
Containment and clean up.
CIWQS Data Submitting
Develop a training plan for contracted services.
Periodically review post-spill assessments/trends.

### FINDINGS (Element 6: WDR Violations/Areas of Concern Evaluation)

1.	FAILURE TO DEVELOP AND IMPLEMENT A SPILL EMERGENCY RESPONSE PLAN THAT MEETS ALL REQUIREMENTS.

✓ Violations: No

Areas of Concern: No



### WDR RECOMMENDATION

Utilize Appendix 3 checklist for revising current SSMP and improving narration for this element

2. <u>FAILURE TO TEST/EVALUATE EMERGENCY PROCEDURES DURING INCLUDING DEPLOYING CONTRACTED SERVICES WHERE NECESSARY.</u>

✓ Violations: No.

Areas of Concern: No

3. FAILURE FOR ENSURING SUPPLY OF ADEQUATE CRITICAL/IDENTIFIED SPARE PARTS/EQUIPMENT PRIOR TO SPILLS.

✓ Violations: No

Areas of Concern: No

4. FAILURE TO PROPERLY NOTIFY APPROPRIATE OUTSIDE AGENCIES/OFFICIALS.

✓ Violations: No

☑ Areas of Concern: No



### **ELEMENT 7 – SEWER PIPE BLOCKAGE CONTROL PROGRAM**

### REQUIREMENTS 9

"The Sewer System Management Plan must include procedures for the evaluation of the Enrollee's service area to determine whether a sewer pipe blockage control program is needed to control fats, oils, grease, rags, and debris. If the Enrollee determines that a program is not needed, the Enrollee shall provide justification in its Plan for why a program is not needed. The procedures must include, at minimum:

- An implementation plan and schedule for a public education and outreach program that promotes proper disposal of pipe-blocking substances.
- A plan and schedule for the disposal of pipe-blocking substances generated within the sanitary sewer system service area. This includes a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of substances generated within a sanitary sewer system service area.
- The legal authority prohibits discharges to the system and identifies measures to prevent spills and blockages.
- Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, best management practices requirements, recordkeeping, and reporting requirements.
- Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the fats, oils, and grease ordinance.
- An identification of sanitary sewer system sections subject to fats, oils, and grease blockages and establishment of a cleaning schedule for each section; and
- Implementation of source control measures for all sources of fats, oils, and grease reaching the sanitary sewer system for each section identified above."

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<sup>&</sup>lt;sup>9</sup> See Attachment D-7 of Reissued WDR (page D-7)



### ELEMENT 8 – SYSTEM EVALUATION, CAPACITY ASSURANCE, CAPITAL IMPROVEMENTS

### **FINDINGS (Element 7: Analysis)**

SSMP Element - Att. D-7

$\cap$	NΛ	DI	IΑ	N	CF

To improve compliance, the District/CSAs should improve the narrative for this element in 2025 SSMP Update



### WDR CONFORMANCE (AREAS OF CONCERN):

- Improve collaboration between operations and environmental compliance where FOG problems are discovered throughout system
- Improve narrative in 2025 SSMP Update

#### **IMPLEMENTATION**

Address Water Board concerns with environmental compliance and food service establishment inspections (see Appendix 1D)

### **EFFECTIVENESS**



### WDR RECOMMENDATION

To measure effectiveness and ensure alignment with <u>available industry standard guidance</u>, the District/CSAs should check/verify the following data for inclusion in its next required SSMP update:

- Have there been any blockages/spills from any identified problem area?
- Is the agency receiving feedback on public outreach efforts?
- Is the debris and other sewage solids collected during cleaning activities being disposed of appropriately?
- Does the agency have a plan and schedule for inspection of grease producing facilities? Was the schedule adhered to?
- Have there been spills due to excessive fats, oil, or grease in the system?
- Are Source Control staff included in the plan check process?



### ELEMENT 8 - SYSTEM EVALUATION, CAPACITY ASSURANCE, CAPITAL IMPROVEMENTS

### **RESILIENCE**



### WDR RECOMMENDATION

To provide resilience and align with <u>available industry standard guidance</u>, the District/CSAs should check/verify the following data, make adjustments as necessary, and include any changes in the next required SSMP update:

Inspect assets directly downstream of grease producing businesses to- ensure source control is effective.
Develop outreach doorhangers or flyers to perform targeted outreach when discoveries are made in the field.
Perform regular assessments of system assets to monitor performance.
Establish a QA/QA process for evaluating pipe cleaning effectiveness.

### FINDINGS (Element 7: WDR Violations/Areas of Concern Evaluation)

✓ Violations: No

Areas of Concern: No



### WDR RECOMMENDATION

Utilize Appendix 3 checklist for revising current SSMP and improving narration for this element

1. FAILURE TO IDENTIFY APPROPRIATE NEEDS FOR PIPE BLOCKAGE PROGRAM.

✓ Violations: No

Areas of Concern: No

2. FAILURE FOR ENSURING ADEQUATE PIPE BLOCKAGE CONTROL ENFORCEMENT AUTHORITY.

✓ Violations: No

Areas of Concern: No

3. FAILURE TO ESTABLISH RESIDENTIAL FOG OUTREACH

✓ Violations: No

☑ Areas of Concern: No

4. FAILURE TO ENFORCE REQUIREMENTS FOR INSTANCES OF NONCOMPLIANCE.

✓ Violations: No

Areas of Concern: No

### ELEMENT 8 - SYSTEM EVALUATION, CAPACITY ASSURANCE, CAPITAL IMPROVEMENTS

# ELEMENT 8– SYSTEM EVALUATION, CAPACITY ASSURANCE, CAPITAL IMPROVEMENTS

#### 8.1. REQUIREMENTS

"The Plan must include procedures and activities for

- Routine evaluation and guidance of system conditions,
- Capacity guidance and design criteria.
- Prioritization of corrective actions.
- Capital improvement plan."

### 8.2. SYSTEM EVALUATION AND CONDITION GUIDANCE REQUIREMENTS 10

"The Plan must include procedures to:

- Evaluate the sanitary sewer system assets utilizing the best practices and technologies available.
- Identify and justify the amount (percentage) of its system for its condition to be assessed each year.
- Prioritize the condition Guidance of system areas that:
- Hold a high level of environmental consequences if vulnerable to collapse, failure, blockage, Capacity issues, or other system deficiencies.
- Are in or within the vicinity of surface waters, steep terrain, high groundwater elevations, and environmentally sensitive areas.
- Are within the vicinity of a receiving water with a bacterial-related impairment on the most current Clean Water Act section 303(d) List.
- Assess the system conditions using visual observations, video surveillance and/or other comparable system inspection methods.
- Utilize observations/Audit Findings/Recommendations of system conditions that contribute to exiting of sewage from the system which can reasonably be expected to discharge into a water of the State.
- Maintain documents and recordkeeping of system evaluation and condition Guidance inspections and activities,
- Identify system assets vulnerable to direct and indirect impacts of climate change, including but not limited to sea level rise; flooding and/or erosion due to increased storm volumes, frequency, and/or intensity; wildfires; and increased power disruptions."

<sup>&</sup>lt;sup>10</sup> See Attachment D-8.1 of Reissued WDR (pages D-7 and D-8)

### ELEMENT 8 - SYSTEM EVALUATION, CAPACITY ASSURANCE, CAPITAL IMPROVEMENTS

### **FINDINGS (Element 8: Analysis)**

SSMP Element - Att. D-8

### **COMPLIANCE**

To improve compliance, the District/CSAs should address the following finding revealed during the Audit prior to completing its 2025 SSMP Update (see Appendix 1A-1D).



### WDR CONFORMANCE (AREAS OF CONCERN):

To improve compliance, the District/CSAs should address the following Area of Concern (AOC) revealed during the Audit prior to completing its 2025 SSMP Update (see Appendix 1A-1D). Expedite identified capital projects and funding for known capacity areas (especially D.A. Porath/Rodeo/Soquel pump stations) Develop climate resilience plan for 2025 SSMP Risk evaluations for capital improvements should be conducted for all critical pump stations and force mains for ensuring highest priority maintenance/improvements/CIP plans to help reduce/prevent future spills including areas with high environmental sensitivity (see Appendix 1B). Address Water Board concerns of corrosion in Moran station wet well (see Appendix 1A) Address Water Board concerns of addressing gravity sewer asset age > 50 years old (see Appendix 1A) Improve narrative in 2025 SSMP Update **IMPLEMENTATION** Address WDR Conformance above to improve current SSMP implementation deficiencies **EFFECTIVENESS** 



### WDR RECOMMENDATION

To measure effectiveness and ensure alignment with <u>available industry standard guidance</u>, the District/CSAs should check/verify the following data for inclusion in its next required SSMP update:

Number of Capacity-related spills or surcharge condition during the audit period?
Has the system responded to rain events as indicated by the hydraulic model?
Has there been any changes to zoning designations (residential, commercial, industrial)?
Rain event trends: Has there been changes in rain event occurrences, intensity, and duration?
Has the agency's capital improvement plan been adhered to?
Is there an annual review of the Capital Improvement Plan by all necessary individuals?
Has the District/CSAs adhered to its system evaluation/condition assessment efforts? Measured by annual review and update of system inspections/evaluations procedures.



### ELEMENT 8 – SYSTEM EVALUATION, CAPACITY ASSURANCE, CAPITAL IMPROVEMENTS

			Capacity	improv	ement/	projec	its prioriti ts? Mea rocedures.	sured		e actions for nual revie		•
FII	NDINGS (	Elemer	nt 8: W	DR Viol	ations	/Area	s of Con	cern E	valuati	on Evalua	ation)	
1.	FAILURE IMPROVEN				MENT S	SYSTEM	EVALUAT	ION, C	APACITY	ASSURANC	E, AND	CAPITAL
	_	Violation Areas of		Yes (see a	above)							
		▶ WDR I				list for r	revising cu	rrent S	SMP and	improving	narratio	n for this
2.	FAILURE TO									NSEQUENC ENCIES.	ES IF VUI	LNERABLE
	_	Violation Areas of		Yes (see a	above)							
3.	FAILURE T									ACE WATER	<u>S, STEEP</u>	TERRAIN,
	_	Violation Areas of		Yes (see a	above)							
4.	FAILURE T							NG WAT	ER WITH	POTENTIAL	<u>IMPAIR</u>	MENT ON
	_	Violation Areas of		Yes (see a	above)							
5.	FAILURE T REPAIRS A								(CIP) FO	r Necessaf	RY SEWE	R SYSTEM
		Violation Areas of	s: No Concern:	No								



### **ELEMENT 9 – MONITORING, MEASUREMENT, PROGRAM MODIFICATIONS**

### REQUIREMENTS 11

"The Plan must include an Adaptive Management section that addresses Plan-implementation effectiveness and the steps for necessary Plan improvement, including:

- Maintaining relevant information, including audit findings, to establish and prioritize appropriate Plan activities.
- Monitoring the implementation and measuring the effectiveness of each Plan Element.
- Assessing the success of the preventive operation and maintenance activities.
- Updating Plan procedures and activities, as appropriate, based on results of monitoring and performance evaluations; and
- Identifying and illustrating spill trends, including spill frequency, locations, and estimated volumes."

### **FINDINGS (Element 9: Analysis)**

SSMP Element - Att. D-9

COMPLIANC	Έ	
		To improve compliance, the District/CSAs should improve the narrative for this element in 2025 SSMP Update
IMPLEMENT	ATION	
		Address WDR Conformance above to improve current SSMP implementation deficiencies
EFFECTIVENI	ESS	
	To measi	OMMENDATION  are effectiveness and ensure alignment with available industry standard guidance, the SAs should check/verify the following data for inclusion in its next required SSMP update:  Are trends being monitored and corrective action taken as necessary?  Have Key Performance Indicators been developed to measure the effectiveness of each Sewer System Management Plan element?  Has a plan and schedule been established to address audit findings/deficiencies?  Have changes been made to work programs and procedures because of monitoring efforts?

<sup>&</sup>lt;sup>11</sup> See Attachment D-9 of Reissued WDR (page D-9)



### **RESILIENCE**



#### WDR RECOMMENDATION

To provide resilience and align with <u>available industry standard guidance</u>, the District/CSAs should check/verify the following data, make adjustments as necessary, and include any changes in the next required SSMP update:

- Develop key performance indicators to measure effectiveness of the Sewer System Management Plan.
- Perform periodic reviews of the Sewer System Management Plan to help ensure the plan is being properly implemented.
- Develop and adhere to a timeline to correct deficiencies found during the audit process.
- Periodically evaluate work programs to help ensure effectiveness.

### FINDINGS (Element 9: WDR Violations/Areas of Concern Evaluation)

- 1. FAILURE TO COLLECT/MAINTAIN AND EVALUATE RELEVANT DATA FOR MONITORING, MEASURING, AND ASSESSING PREVENTIVE MAINTENANCE PROGRAM EFFECTIVENESS.
  - ✓ Violations: No
  - Areas of Concern: No



### WDR RECOMMENDATION

- Utilize Appendix 3 checklist for revising current SSMP and improving narration for this element
- 2. FAILURE TO UPDATE/MODIFY AGENCY SEWER SYSTEM MANAGEMENT PLAN BASED ON RESULTS FROM AUDITS AND EVALUATION OF DATA REQUIRED FOR THIS ELEMENT.
  - ✓ Violations: Yes (see above)
  - Areas of Concern: No



### **ELEMENT 10 – INTERNAL AUDITS**

### 10.1. REQUIREMENTS 12

"The Plan shall include internal audit procedures, appropriate to the size and performance of the system, for the Enrollee to comply with section 5.4 (Sewer System Management Plan Audits) of this General Order."

### 10.2. SPECIFICATIONS (SEWER SYSTEM MANAGEMENT PLAN AUDITS)

"The Enrollee shall conduct an internal audit of its Sewer System Management Plan, and implementation of its Plan, at a minimum frequency of once every three years. The audit must be conducted for the period after the end of the Enrollee's last required audit period. Within six months after the end of the required 3-year audit period, the Legally Responsible Official shall submit an audit report into the online CIWQS Sanitary Sewer System Database per the requirements in section 3.10 (Sewer System Management Plan Audit Reporting Requirements) of Attachment E1 of this General Order. Audit reports submitted to the CIWQS Sanitary Sewer System Database will be viewable only to Water Boards staff. The internal audit shall be appropriately scaled to the size of the system(s) and the number of spills. The Enrollee's sewer system operators must be involved in completing the audit. At minimum, the audit must:

- Evaluate the implementation and effectiveness of the Enrollee's Sewer System Management Plan in preventing spills.
- Evaluate the Enrollee's compliance with this General Order.
- Identify Sewer System Management Plan deficiencies in addressing ongoing spills and discharges to waters of the State; and
- Identify necessary modifications to the Sewer System Management Plan to correct deficiencies.
- The Enrollee shall submit a complete audit report that includes:
- Audit findings and recommended corrective actions.
- A statement that sewer system operators' input on the audit findings has been considered; and
- A proposed schedule for the Enrollee to address the identified deficiencies."

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<sup>&</sup>lt;sup>12</sup> See Attachment D-10 of Reissued WDR (page D-10)



### FINDINGS (Element 10: Analysis)

SSMP Element - Att. D-10

### **COMPLIANCE**

To improve compliance, the District/CSAs should address the following finding revealed during the Audit prior to completing its 2025 SSMP Update (see Appendix 1A-1D).

Improve the narrative for this element in 2025 SSMP Update

#### **IMPLEMENTATION**



### WDR CONFORMANCE (AREAS OF CONCERN):

- Address all element previous compliance inspection findings (see Appendix 1A-1D)
  - Address WDR Conformance above to improve current SSMP implementation deficiencies

### **EFFECTIVENESS**



### WDR RECOMMENDATION

To measure effectiveness and ensure alignment with <u>available industry standard guidance</u>, the District/CSAs should check/verify the following data for inclusion in its next required SSMP update:

- Have audits been performed as required?
- Have the audits assessed compliance, implementation, and effectiveness?
- Have deficiencies been identified?
- Has a plan and schedule to rectify the deficiencies been established?

### **RESILIENCE**



#### WDR RECOMMENDATION

To measure effectiveness and ensure alignment with <u>available industry standard guidance</u>, the District/CSAs should check/verify the following data for inclusion in its next required SSMP update:

- Periodically evaluate key performance indicators to assess effectiveness of each Sewer System Management Plan element.
- Evaluate previous audit findings for ensuring deficiencies have all been addressed/rectified.
- Calendar the audit due dates and complete the audit on time.
- Prepare for announced/unannounced compliance inspections by regulators and by proactive with preparing required Audits by completing the State Water Board Pre-Inspection Questionnaire (see Appendix 1).



### FINDINGS (Element 10: WDR Violations/Areas of Concern Evaluation)

1.	FAILURE TO CONDUCT ROUTINE SEWER SYSTEM MANAGEMENT PLAN AUDITS.					
	<ul><li>✓ Violations: No</li><li>✓ Areas of Concern: No</li></ul>					
	<b>└</b> ┻╌	WDR RECOMMENDATION				
		Utilize Appendix 3 checklist for revising current SSMP and improving narration for this element				
2.		TO MEASURE SEWER SYSTEM MANAGEMENT PLAN ELEMENT EFFECTIVENESS (A SIMPLE CHECKLIST T FULFILL THIS OBLIGATION).				
	<b>☑</b>	Violations: Yes Areas of Concern: No				
3.	FAILURE ENHANC	TO IMPLEMENT IDENTIFIED DEFICIENCIES/RECOMMENDATIONS AND COMMIT TO NEW EMENTS VIA A PLAN/SCHEDULE (SHORT AND LONG-TERM).				
	<b>V</b>	Violations: No Areas of Concern: No				



### **ELEMENT 11 – COMMUNICATION PROGRAM**

### REQUIREMENTS 13

"The Plan must include procedures for the Enrollee to communicate with:

- The public for spills and discharges resulting in closures of public areas, or that enter a source of drinking water, and the development, implementation, update of its Plan, including opportunities for public input to Plan implementation and updates.
- Owners/operators of systems that connect into the Enrollee's system, including satellite systems, for system operation, maintenance, and capital improvement-related activities."

Sewer System Management Plan Audit (8/2/21 to 8/2/24)

<sup>&</sup>lt;sup>13</sup> See Attachment D-11 of Reissued WDR (page D-10)



<b>FINDINGS</b>	(Element 11: Analy	/sis)	
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SSMP Element - Att. D-11

COMP	LIANCE

Improve the narrative for this element in 2025 SSMP Update

#### **IMPLEMENTATION**



### WDR RECOMMENDATION

Address WDR Conformance above to improve current SSMP implementation deficiencies

### **EFFECTIVENESS**



### WDR RECOMMENDATION

To measure effectiveness and ensure alignment with <u>available industry standard guidance</u>, the District/CSAs should check/verify the following data for inclusion in its next required SSMP update:

- Does the agency place all Sewer System Management Plan action items on the agenda for regular counsel/board meetings?
- Does the agency have signage, or other means, readily available to notify the public of env. or public risk factors related to a sewage spill?
- Does the agency regularly communicate with other systems connected to the system?
- Was the public afforded the opportunity to provide input as the program was being implemented?
- Does the agency perform outreach to residential customers?



### **RESILIENCE**



### WDR RECOMMENDATION

To measure effectiveness and ensure alignment with <u>available industry standard guidance</u>, the District/CSAs should check/verify the following data for inclusion in its next required SSMP update:

- Maintain a consistent presence in the service area by attending community events or issuing periodic newsletters or other communications to the public.
- Make it clear and easy for the public to contact the agency.

### FINDINGS (Element 11: WDR Violations/Areas of Concern Evaluation)

1.	<b>FAILURE</b>	TO	DEVELOP	AND	IMPLEMENT	Α	<b>PUBLIC</b>	COMMUNICATION	PROGRAM,	ESPECIALLY	DURING
	EMERGE	NCIE	S.								

✓ Violations: No

Areas of Concern: No



### WDR RECOMMENDATION

- Improve narration in 2025 SSMP Update
- 2. FAILURE TO SOLICIT INPUT ON SEWER SYSTEM MANAGEMENT PLAN CONTENT.

✓ Violations: No

Areas of Concern: Yes

3. FAILURE TO COMMUNICATE WITH OWNERS/OPERATORS OF SEWER SYSTEM(S) CONNECTED TO THE AGENCY'S SEWER SYSTEM.

✓ Violations: No

☑ Areas of Concern: No



### Attachment E1 – Notification, Monitoring, Reporting, Record Keeping

### REQUIREMENTS 14

"The Notification Requirements (section 1), Spill-specific Monitoring Requirements (section 2), Reporting Requirements (section 3) and Recordkeeping Requirements (section 4) in this Attachment are pursuant to Water Code section 13267 and section 13383 and are an enforceable component of this General Order.

For the purpose of this General Order, the term:

- Notification means the notifying of appropriate parties of a spill event or other activity.
- Spill-specific Monitoring means the gathering of information and data for a specific spill event to be reported or kept as records.
- Reporting means the reporting of information and data into the online California Integrated Water Quality System (CIWQS) Sanitary Sewer System Database.
- Recordkeeping means the maintaining of information and data in an official records storage system. Failure to comply with the notification, monitoring, reporting and recordkeeping requirements in this General Order Aug subject the Enrollee to civil liabilities of up to \$10,000 a day per violation pursuant to Water Code section 13385; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. Water Code section 13193 et seq. requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Resources Control Board (State Water Board) to collect sanitary sewer spill information for each spill event and make this information available to the public. Sanitary sewer spill information for each spill event includes but is not limited to: Enrollee contact information for each spill event, spill cause, estimated spill volume and factors used for estimation, location, date, time, duration, amount discharged to waters of the State, response and corrective action(s) taken."

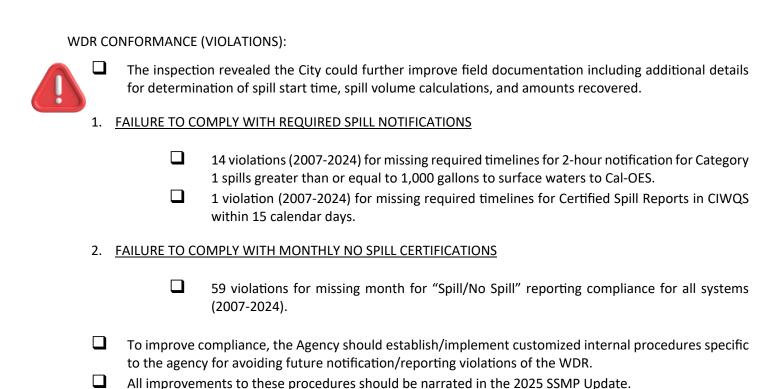
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<sup>&</sup>lt;sup>14</sup> See Attachment D-11 of Reissued WDR (page D-10)

### ATTACHMENT E1 (NOTIFICATION, MONITORING, REPORTING, RECORD KEEPING

### **FINDINGS (Attachment E1: Analysis)**

### SPILL NOTIFICATION/REPORTING COMPLIANCE





### LIST OF APPENDICES

- APPENDIX 1A— Collection System Compliance Evaluation Inspection (CEI) Report by Fischer Compliance LLC (2024)
- APPENDIX 1B— Collection System Compliance Evaluation Inspection (CEI) Report by Fischer Compliance LLC (2023)
- APPENDIX 1C- Pump Station Compliance Evaluation Inspection (CEI) Report by Fischer Compliance LLC (2023)
- APPENDIX 1D— Collection System Compliance Evaluation Inspection (CEI) by State Water Board (2023)
- APPENDIX 2A Certified Spills List (2007-2024)
- APPENDIX 2B Certified Spills (Current Operational Report, 2023-2024)
- APPENDIX 2C Certified Spills (Historic Operational Report, 2007-2023)
- APPENDIX 3 SSMP Audit Implementation Plan and Schedule
- APPENDIX 4 References (Key Performance Indicators, KPIs)



APPENDIX 1A— Collection System Compliance Evaluation Inspection (CEI) Report by Fischer Compliance LLC (2024)



## **COMPLIANCE EVALUATION INSPECTION: 12/10/2024**

Prepared by:



### Sanitary Sewer Collection Systems

Waste Discharge IDs=3SSO10324, 3SSO10263, 3SSO10267, 3SSO10323, 3SSO10326, 3SSO10312

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### 1. Field Operator Audit Input

District field staff personnel were interviewed online for soliciting input into the Audit. A summary of their comments resulting from the interviews are distilled in Table 1 below.

Table 1- Summary of Operations and Maintenance Staff Comments

WDR Element	Description	Operator Comments
Att. D-1	Goals & Intro	None
Att. D-2	Organization	Staff retention issues; data transparency concerns between
		management and field staff; separate staff titles/positions concerning
		for Sanitation and Dispatch positions
Att. D-3	Legal Authority	None
Att. D-4	O/M Program	Outdated/poor performing equipment
Att. D-4	O/M Program	Training (Standard Operating Procedures (SOPs)
Att. D-4	O/M Program	Pump station odor control systems
Att. D-4	O/M Program	Work Order software (Lucity) for better tracking of
		labor/time/materials and improve data transparency between
		management/staff
Att. D-4	O/M Program	Force main inspections and maintenance (some pipelines not
		inspected/cleaned to date)
Att. D-5	Design/Perf	None
Att. D-6	SERP	Change Pump station Emergency Response Plans (ERPs) to separate
		of pump and electrical information
Att. D-6	SERP	Monitoring (SCADA) software
Att. D-6	SERP	General Order training
Att. D-7	Pipe Blockage	Lack of collaboration between operations and environmental
		compliance where problems are discovered in system
Att. D-8	SECAP	Address known capacity areas (Porath/Rodeo/Soquel stations)
Att. D-9	Monitoring	None (recommend review/update element for 2025 SSMP)
Att. D-10	Audits	None (recommend update for 2025 SSMP)
Att. D-11	Communication	None (recommend review/update element for 2025 SSMP)
Att. E1	NMRR (MRP)	None
Specs.	5.1-5.15	None

### 2. <u>Field Inspection (Corporation Yard – Critical Spare Parts)</u>



**Photo 1**: Corp Yard inspection (critical spare parts).



<u>Photo 3:</u> Corp Yard inspection (critical spare parts); Spare Pumps all are labeled for the station and are compatible for most stations (Best Practice).



Photo 2: Corp Yard inspection (critical spare parts).



**Photo 4**: Corp Yard inspection (critical spare parts).



**Photo 5:** Corp Yard inspection (critical spare parts).



Photo 7: Corp Yard inspection (critical spare parts).



Photo 6: Corp Yard inspection (critical spare parts).



**Photo 8:** Corp Yard inspection (critical spare parts).



<u>Photo 9:</u> Corp Yard inspection (critical spare parts including check valves, isolation valves, and air release valves).



**Photo 11:** Corp Yard inspection (3,000-gallon combination truck -3 in service and ready for deployment).



**Photo 10:** Corp Yard inspection (utility truck with crane).



<u>Photo 12:</u> Corp Yard inspection (combination vehicle)

Appendix 1A (Page 6)



Photo 13: Corp Yard inspection (manhole castings)



<u>Photo 15:</u> Corp Yard inspection (containment items including pneumatic plugs and sandbags ready for deployment).



<u>Photo 14:</u> Corp Yard inspection (containment items).



Photo 16: Corp Yard inspection (absorbent)

Appendix 1A (Page 7)



**Photo 17:** Corp Yard inspection (portable generators)



**Photo 18:** Corp Yard inspection (portable generators)

### 3. Field Inspection (36-inch Force Main System)

The focus of this inspection was to follow-up to gain more information about the system and to follow-up on the District's plans to implement a new capital project to replace the system. The inspection was limited to assessing the general force route of the pipeline and also locate existing flow valves in the system.



**Photo 19:** Inspection of 36-Inch Force Main (WWTP location where force main enters City of Santa Cruz Wastewater Treatment Plant at end of pipe)



<u>Photo 21:</u> Inspection of 36-Inch Force Main (abandoned odor control facility)



<u>Photo 20:</u> Inspection of 36-Inch Force Main (siphon location)



<u>Photo 22:</u> Inspection of 36-Inch Force Main (standpipe for odor control and highest point of force main)



<u>Photo 23:</u> Inspection of 36-Inch Force Main (access to force main, inside is blind flange Tee that allows access into force main



<u>Photo 25:</u> <u>Photo 24:</u> Inspection of 36-Inch Force Main (example of alignment route in service area (view 3)



<u>Photo 24:</u> Inspection of 36-Inch Force Main (example of alignment route in service area (view 2)



<u>Photo 26:</u> Inspection of 36-Inch Force Main (example of alignment route in service area (view 4)

Appendix 1A (Page 10)



<u>Photo 27:</u> Inspection of 36-Inch Force Main (example of alignment route in service area (view 5)



<u>Photo 29:</u> Inspection of 36-Inch Force Main (Valve and crossover line to allows portions of the FM sewage to divert to the gravity system)



<u>Photo 28:</u> Inspection of 36-Inch Force Main (example of alignment route in service area (view 6)



<u>Photo 30:</u> Inspection of 36-Inch Force Main (example of inside of typical valve box, with several of these located on force main route; according to operations staff, these valves have not been exercised in approximately 20 years)

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### 4. <u>Inspection Findings</u>

# Table 2- Key Findings (Best Practices)

Key Observations	SSS WDRs Citation(s)	Observations/Comments
1. Vehicles	Provisions D.8, D.11, D.13	Extensive cleanliness and organization of vehicles and equipment.
2. Equipment	Provisions D.8, D.11, D.13	Extensive backup supplies in several separate storage sheds/buildings throughout yard.
Backup parts, spill     response readiness and     supplies	Provisions D.8, D.11, D.13	<ul> <li>Extensive spare parts with some critical parts inventory flagged.</li> <li>All equipment observed in readiness state.</li> </ul>

Table 3–Key Findings (Violations, Areas of Concern, Recommendations)

WDR Element	Description	Findings	Details
Prohibition 1	Discharges	Violations	19 individual spills (518,796 gallons reportedly discharged
(2006 WDR)	(Waters of US)		to surface waters, Category 1 spills and 2 percent
			recovered during Audit period , 8/2/21 to 8/2/24).
Att. D-1	Goals & Intro	Recommendation	Improve narrative in 2025 SSMP Update
Att. D-2	Organization	Area of Concern	Investigate ways for improving transparency between
			management and field staff; investigate restructuring
			staff to improve effectiveness
Att. D-2	Organization	Recommendation	Improve narrative in 2025 SSMP Update
Att. D-3	Legal Authority	Area of Concern	Improve periodic review of ordinances
Att. D-3	Legal Authority	Recommendation	Improve narrative in 2025 SSMP Update
Att. D-4	O/M Program	Area of Concern	Improve Pump Station odor control systems
Att. D-4	O/M Program	Area of Concern	Improve/update all existing outdated/poor performing
			equipment
Att. D-4	O/M Program	Recommendation	Review/update existing Standard Operating Procedures
			(SOPs) and update training to ensure consistency;
			improve narrative in 2025 SSMP Update
Att. D-4	O/M Program	Area of Concern	Improve work order system (Lucity) and training for
			better tracking of labor/time/materials and improve data
			transparency between management/staff
Att. D-4	O/M Program	Area of Concern	Improve force main inspections and maintenance (and
			focus on areas not completed to date)
Att. D-4	O/M Program	Area of Concern	Improve monitoring software
Att. D-4	O/M Program	Recommendation	Improve narrative in 2025 SSMP Update
Att. D-5	Design/Perf	Recommendation	Improve narrative in 2025 SSMP Update
Att. D-6	SERP	Area of Concern	Improve SERP and General Order training; improve spill
			report documentation
Att. D-6	SERP	Area of Concern	Improve pump station Emergency Response Plans (ERPs)
			with separation of pump and electrical information for
			each station in manuals
Att. D-6	SERP	Recommendation	Improve narrative in 2025 SSMP Update
Att. D-7	Pipe Blockage	Area of Concern	Improve collaboration between operations and
			environmental compliance where FOG problems are
			discovered throughout system
Att. D-7	Pipe Blockage	Recommendation	Improve narrative in 2025 SSMP Update
Att. D-8	SECAP	Area of Concern	Ensure all identified capital projects and funding for
			known capacity areas (especially Porath/Rodeo/Soquel
			stations) are completed as scheduled.
Att. D-8	SECAP	Recommendation	Improve narrative in 2025 SSMP Update
Att. D-9	Monitoring	Recommendation	Improve narrative in 2025 SSMP Update
Att. D-10	Audits	Recommendation	Improve narrative in 2025 SSMP Update
Att. D-11	Communication	Recommendation	Improve narrative in 2025 SSMP Update

WDR Element	Description	Findings	Details
Att. E1	Notification,	Violations	Review/update existing Standard Operating Procedures
	Monitoring,		(SOPs) and update training to ensure consistency;
	Reporting,		improve narrative in 2025 SSMP Update
	Records		
Att. E1	Notification,	Recommendation	Improve narrative in 2025 SSMP Update
	Monitoring,		
	Reporting,		
	Records		
Specs.	5.1-5.15	See Audit report	See Audit report
Total Violations = 2 Total Areas of Concern = 11 Total Recommendations = 13			

### 5. <u>List of Attachments</u>

Attachment 1 (District Staff Interviews Group 1) Attachment 2 (District Staff Interviews Group 2)



APPENDIX 1B— Collection System Compliance Evaluation Inspection (CEI) Report by Fischer Compliance LLC (2023)



# **COMPLIANCE EVALUATION INSPECTION REPORT**

FACILTY INSPECTED:	INSPECTED BY:		
Santa Cruz County Sanitation District 2750 Lode Street Santa Cruz, CA 95062	James Fischer, P.E.  NPDES Compliance Inspector <sup>1</sup> Principal, FISCHER COMPLIANCE, LLC  James Fischer, P.E.  Date: 1/20/2023		
SANITARY SEWER COLLECTION SYSTEM (WASTEWATER)	Waste Discharge ID (WDID) #3SSO10324		
Water Quality Order(s)	2022-0103-DWQ		
CIWQS Place ID	631759		
Regional Water Board	3		
County	Santa Cruz		
Population/Area	72,200/17.13 sq. miles		
Miles of Sewers (gravity)	186.42		
Miles of Sewers (force mains)	14		
Sewer Connections (#)	36,000		
Lift Stations (#)	35		
Final wastewater disposal	Santa Cruz City Wastewater Treatment Plant		
FACILITY REPRESENTATIVES	TITLE CONTACT (831) 477-3907		
Beatriz Barranco	Senior Civil Engineer/Operations Manager		
Ramon Sandoval	Assistant Superintendent (831) 477-3977		

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<sup>&</sup>lt;sup>1</sup> Credentialed, U.S EPA (2017)

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#### PURPOSE OF INSPECTION

Fischer Compliance LLC (FCL) with assistance from Sam Rose Consulting and Andy Morrison Consulting (hereafter, inspection team) conducted a "simulated" regulatory Compliance Evaluation Inspection (CEI, hereafter inspection)<sup>2</sup> to evaluate the Santa Cruz County Sanitation District (District) Sewer System Management Plan (SSMP) effectiveness, compliance, and quality of "self-reporting" with the Sanitary Sewer Systems Waste Discharge Requirements (SSS WDRs) Order, No. 2006-003-DWQ/Monitoring and Reporting Program Order No. 2013-0058-EXEC<sup>3</sup>. This inspection report culminates observations and findings covering review of core required regulatory elements in the above cited Orders.

# 1. Pre-Inspection "Desktop Review"

To prepare for the inspection, a "desktop review" was conducted by FCL including review of the following information for the District.

- CIWQS<sup>4</sup> Sanitary Sewer Overflow (SSO) reports certified by District.
- Amended MRP Notification and reporting compliance (Category 1, 2 and 3 spills).
- Regional Board historic enforcement actions and details.
- Answers and information provided in the State Water Board Pre-Inspection Questionnaire" completed by the District<sup>5</sup> (Attachment 1).

### 2. Pre-Inspection Conference

On 5/27/2022, an online Pre-Inspection Conference was conducted by FCL and AMConsulting to further prepare the District for the inspection. A summary of key areas reviewed is listed in Table 1, below:

 $<sup>^2 \</sup> See \ \underline{https://www.epa.gov/compliance/compliance-compliance \ inspection-manual-national-pollutant-discharge-elimination-system}$ 

<sup>&</sup>lt;sup>3</sup> See <a href="https://www.waterboards.ca.gov/water">https://www.waterboards.ca.gov/water</a> issues/programs/sso/docs/2006-003-dwq-sanitary-sewer-systems-waste-discharge-requirements remediated.pdf

<sup>&</sup>lt;sup>4</sup> California Integrated Water Quality System, CIWQS:

https://www.waterboards.ca.gov/water issues/programs/ciwqs/publicreports.html

<sup>&</sup>lt;sup>5</sup> See: https://www.waterboards.ca.gov/water\_issues/programs/sso/docs/bmp/6piq2.pdf

Table 1 - Pre-Inspection Conference Areas Reviewed.

Questionnaire Area		SSWDRs References	Elements Reviewed
1.	System Management	D.11, D.13	District O/M programs and improvements.
			Work programs, crew responsibilities and shifts.
2.	O/M	D.11, D.8, D.13	Planning and execution of and capital improvement programs (CIP) including areas of focus.
			Sewer maps/updates.
			<ul> <li>Locations and strategies with level sensors installed throughout the system.</li> </ul>
			<ul> <li>Cleaning, inspection, equipment, and effectiveness of these programs.</li> </ul>
			Satellite/neighboring systems and agreements.
			Peak wet weather flows and capacity.
			Critical spare parts inventory.
			Training program/documentation.
			Pump station inspections/assessments.
			Previous SSMP Audit findings.
3.	None	N/A	• N/A
4.	Mapping	D.13(iv)(a)	Procedures for updating maps.
5.	Financial Information	D.8, D.9	Number of billed connections.
			Sewer rates and fundings including any planned rate increase(s).
6.	Ordinances	D.13(iii)	Frequency of reviews/updates.
7.	Capital Improvements	D.11, D.8, D.13	Historic budgets/spending and complete projects.
8.	O/M, SOPs, critical parts	D.8, D.13(iv)	Effectiveness of current procedures; review of any planned updates.
9.	OERP	D.8, D.13(vi)	Training, SOPs, and documentation.
10.	None	N/A	• N/A
11.	Training	D.11, D.8, D.13	Documentation and competency reviews.
12.	Equipment	D.11, D.8, D.13	Major equipment, portable generators, and pumps.
13.	Communications	D.11, D.8, D.13(xi)	Satellite communications/agreements.
14.	Notification/Reporting	Amend. MRP	Documentation in place and SOPs.
15.	SSO Prevention	D.6, D.8, Amend. MRP	Documentation in place and SOPs.

# 3. Compliance Evaluation Inspection

On 09/29/20222, an onsite compliance evaluation inspection (CEI) was conducted at the following locations (A-E) to further evaluate District SSMP effectiveness, compliance, and level of implementation. Key information and documentation reviewed during the inspection is summarized in Table 2 below.

- 1. Site A1: Interviews with Sanitation Management, engineering, and field staff (Lode Street).
- 2. Site A2: Interviews with dispatch operations (Lode Street).
- 3. Site A3: Inspection of District Corporation Yard (Lode Street).
- 4. Site A4: Inspection of Lode Street Pump Station Inspection (Lode Street).
- 5. Site B1: Inspection at Hidden Beach Pump Station (south of 797 17th Ave).
- 6. Site B2: Operator interviews at Hidden Beach Pump Station (south of 797 17th Ave).
- 7. Site C: Inspection of bypass manhole site at Capitola Beach Pump Station (San Jose Ave & Esplanade).

Table 2 – Summary of Key Information and Documentation Reviewed during Inspection (Sites A1-A4)

Key Area		Key WDRs Reference(s)	Items Discussed	
	ic Regional Board iance/enforcement rs.	SSS WDRs, Water Quality Enforcement Policy	<ul> <li>Review of historic compliance inspections and findings within region.</li> <li>Review of historic enforcement actions within region.</li> <li>Areas of focus recommended for interviews/asset inspections.</li> </ul>	
	and objectives; enance programs.	SSS WDRs, D.13(iv) and D.13(viii).	<ul> <li>District best practices in place for reducing spills.</li> <li>Cleaning program effectiveness.</li> <li>CCTV program effectiveness.</li> <li>CIP budgets, spending and completed projects.</li> <li>"Hot Spot" maintenance program.</li> <li>Flow level sensors and strategy.</li> <li>Pump stations, bypassing, and upgrades underway.</li> <li>Siphon O/M.</li> <li>SOPs and training.</li> <li>Record keeping practices.</li> <li>Detailed spills response/mitigation.</li> <li>FOG program.</li> <li>Staffing and shifts.</li> <li>Recommendations for exceeding minimum compliance requirements of SSS WDRs.</li> </ul>	

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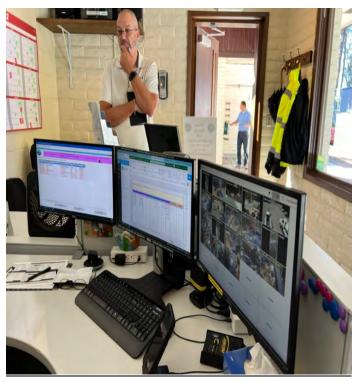
<u>SITE A1 (Photo 1):</u> Pre-inspection conference with District management, engineering, and field staff (view 1).



<u>SITE A1 (Photo 3):</u> Dispatch center interviews with District operations staff (view 1).

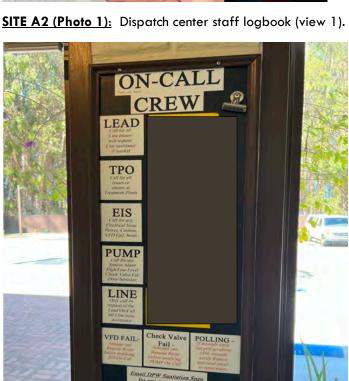


**SITE A1 (Photo 2):** Pre-inspection conference with District management, engineering, and field staff (view 2).

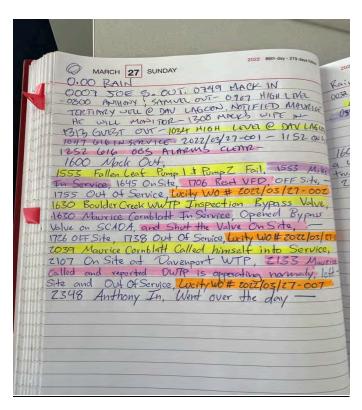


<u>SITE A1 (Photo 4):</u> Dispatch center interviews with District operations staff (view 2).

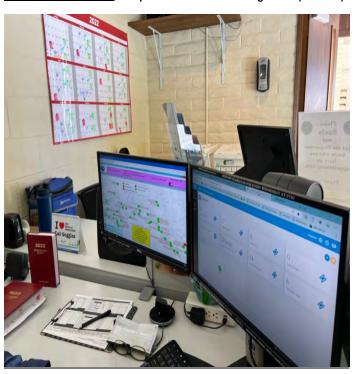




**SITE A2 (Photo 3):** Dispatch center on-call crew list.



SITE A2 (Photo 2): Dispatch center staff logbook (view 2).



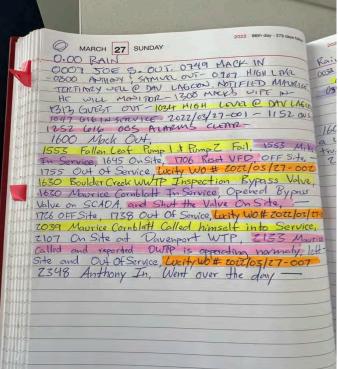
**SITE A2 (Photo 4):** Dispatch center system alarms display.

<u>SITE A3: DISTRICT CORPORATION YARD (Lode Street):</u> To further evaluate and assess the District SSMP effectiveness, compliance, quality of operations and maintenance programs, and spill response readiness, the following key observations, comments, and photos were documented during the inspection.

Table 3 – Summary of Key Observations/Comments (Sites A1-A4).

Key Observations	SSS WDRs Citation(s)	Observations/Comments
1. Vehicles	Provisions D.8, D.11, D.13	Extensive cleanliness and organization of vehicles and equipment.
2. Equipment	Provisions D.8, D.11, D.13	Extensive backup supplies in several separate storage sheds/buildings throughout yard.
Backup parts, spill response readiness and supplies	Provisions D.8, D.11, D.13	<ul> <li>Extensive spare parts with some critical parts inventory flagged.</li> <li>All equipment observed in readiness state.</li> </ul>





**SITE A3 (Photo 1):** Inspection of District corporation yard.

**SITE A3 (Photo 2):** Inspection of sewer cleaning vehicles and equipment.







**SITE A3 (Photo 4):** Inspection of system spare parts and equipment.

<u>SITE B: EAST CLIFF PUMP STATION (Lode Street):</u> To further evaluate and assess the District pump station readiness and maintenance, the following key observations, comments, and photos were documented during the inspection.

Table 4 – Summary of Key Observations/Comments (Site A4).

Key Observations	SSS WDRs Citation(s)	Observations/Comments
1. Spare pumps/parts	Provisions D.8, D.11, D.13	<ul> <li>Backup generator observed in readiness state with full diesel fuel level in day/storage tanks.</li> <li>One flygt spare station pump in readiness state on crate.</li> </ul>
2. O/M	Provisions D.8, D.11, D.13	One lockout/tagout tag on motor control center (MCC) switch indicates "4-25-17 Not Working; field operations staff interviewed said they were not aware of the tag in place.
3. Operations, bypass readiness, interviews with field staff	Provisions D.8, D.11, D.13	<ul> <li>Bypass valve installed outside station locked in fully open position; District has new project to replace valve within the next year.</li> <li>Field staff knowledgeable and familiar with systems and equipment with exception of backup generator.</li> </ul>



SITE A4 (Photo 1): Inspection of dedicated onsite diesel backup generator for station (view 1); field staff were not comfortable simulating readiness scenario for failed power failure, so simulation was not conducted during inspection.



**SITE A4 (Photo 2):** Inspection of dedicated onsite diesel backup generator for station (view 2)



**SITE A4 (Photo 3):** Inspection of dedicated onsite diesel backup generator data plate.



SITE A4 (Photo 4): Inspection of dedicated onsite diesel backup generator operator control panel; battery tender used on generator battery; digital gauge level on panel read "0" for oil and fuel, however day tank control panel levels read "full."



**SITE A4 (Photo 5):** Inspection of day tank generator fuel control station with fuel level observed at full capacity.



<u>SITE A4 (Photo 7):</u> Inspection of hazardous gas detection control panel inside station.

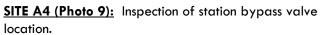


**SITE A4 (Photo 6):** Inspection of Flygt backup pump in readiness state at station.



<u>SITE A4 (Photo 8):</u> Inspection of operator motor control panel on MCC; all pumps in readiness state.







<u>SITE A4 (Photo 10):</u> Inspection of station bypass valve; the valve was observed in full-open position; District is aware of the issue and currently in design on a new project to replace valve and upgrade bypass capabilities.

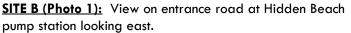
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<u>SITE B1: HIDDEN BEACH LIFT STATION (660 Cliff Drive):</u> To further evaluate and assess the District pump station readiness and maintenance, the following key observations, comments, and photos were documented during the inspection.

Table 5 – Summary of Key Observations/Comments (Site B1).

Key Observations	SSS WDRs Citation(s)	Observations/Comments
<ol> <li>Operations overview; potential spill overflow point(s).</li> </ol>	Provisions D.8, D.11, D.13	<ul> <li>Lowest upstream manhole location.</li> <li>Location of bypassing connections/equipment.</li> </ul>
Motor control center     (MCC) and alarms	Provisions D.8, D.11, D.13	Ongoing checks, SOPs, and logs/documentation in place.
3. Backup power/generator	Provisions D.8, D.11, D.13	<ul><li>Ongoing checks, SOPs, and logs/documentation in place.</li><li>Fuel level confirmed at "full" level.</li></ul>
4. Operator maintenance/SOPs	Provisions D.8, D.11, D.13	<ul><li>Weekly periodic checks (twice/week) currently in place.</li><li>Annual valve exercising program in place.</li></ul>
5. Operator Training and safety SOPs	Provisions D.8, D.11, D.13	Field staff demonstrate safe procedures, extensive pump/system knowledge, and understanding of maintenance best practices.



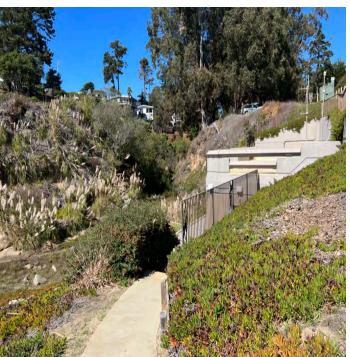




**SITE B (Photo 2):** View on entrance road at Hidden Beach pump station looking southeast.



**SITE B (Photo 3):** Inspection of pump station looking west.



**SITE B (Photo 4):** View of pump station entrance walkway looking northwest.



**SITE B (Photo 5):** View of pump station emergency notification signage.



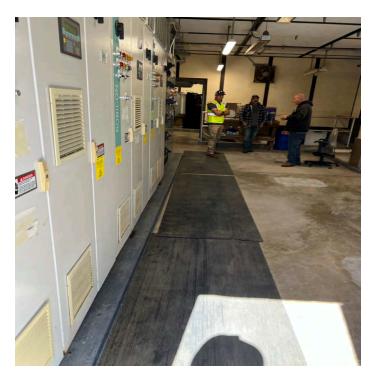
**SITE B (Photo 6):** View of maintenance manholes installed on beach looking west.



**SITE B1 (Photo 7):** View of maintenance manholes installed on beach looking east.



**SITE B1 (Photo 8):** Inspection of motor control center (MCC) and interviews with field operations staff.



<u>SITE B1 (Photo 9):</u> Interviews with field staff operators inside station building.



**SITE B1 (Photo 10):** Station SCADA system control screen.



**SITE B1 (Photo 11):** Inspection of station alarm panel (view 1).



**SITE B1 (Photo 12):** Inspection of station alarm panel (view 2).



SITE B1 (Photo 13): Inspection of electronic valve controls.



**SITE B1 (Photo 14):** Inspection of station dry well area; no "high water marks" observed on station walls in pit area.



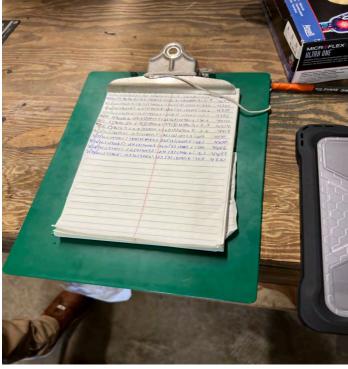
<u>SITE B1 (Photo 15):</u> Inspection of station hazardous gas monitor.



<u>SITE B1 (Photo 16):</u> Inspection of pumps/air release valves inside dry well.



**SITE B1 (Photo 17):** Inspection of station wet well; no significant buildup of debris/grease observed.



**SITE B1 (Photo 18):** Inspection of station operator log sheet.

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<u>SITE B2: FIELD STAFF INTERIVEWS:</u> To further assess District SSMP effectiveness, compliance, and level of implementation, District field staff were interviewed at Hidden Beach Lift Station. Table 5 below provides a summary of the questions and observations/comments obtained from the field staff interviews.

Table 6 – Summary of Observations and Comments from District Field Staff (Site B2).

Field Staff Operator Interviews			
Questions	SSS WDRs Citation(s)	Observations/Comments	
1. Training/safety	Provisions D.8, D.13(vi)	Field staff training/procedures in place are only implemented "on-the-job" with verbal (not written) procedures with senior staff.	
		Suggested more field training/exercises could further improve existing training quality.	
		Said District has a strong safety culture with comprehensive training for all crews.	
2. Field Documentation	Provisions D.8, D.11, D.13	Suggested additional training on documentation could improve quality of existing practices.	
3. Field spill response times/readiness.	Provisions D.8, D.11, D.13	Separate department in place for handling all standby generator/electrician needs; operations said this could delay some field response times with emergencies.	
		Said additional planning and training exercises could further improve spill response readiness.	
4. Resources	Provisions D.8, D.9, D.11, D.13	Suggested they need additional staff to keep up with workloads.	

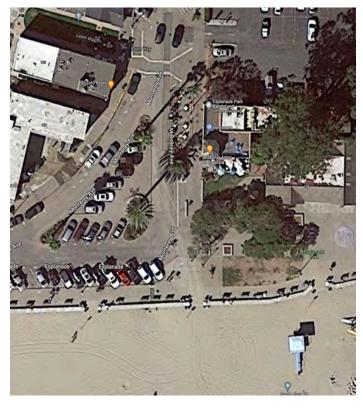
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<u>SITE C: CAPITOLA PUMP STATION (San Jose and Esplanade):</u> To further asses the District Sanitary District SSMP effectiveness, compliance, and level of implementation, the following key items, observations, and photos were documented.

Table 7 – Summary of Observations/Comments (Site C).

Key Observations	SSS WDRs Citation(s)	Observations/Comments
Station bypass valve readiness.	Provisions D.8, D.11, D.13	Bypass valves blocked by vehicles parked in lot adjacent to pump station; management commented they would like to pursue temporary parking at this location to ensure adequate access to bypass valves installed in manholes at this location.



**SITE C (Photo 7):** Satellite view Capitola Beach Pump Station site location.



**SITE C (Photo 8):** View of Capitola Beach parking lot with parked vehicles preventing access to station bypass valves.

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### 4. Post-Inspection Conference

A post-compliance virtual inspection conference was conducted with District on 10/19/2022 to review the details of the inspection and preliminary findings. The following information was reviewed and discussed.

- Review of office and field inspection tasks completed.
- Review of field asset inspections.
- Review of field staff interviews.
- Preliminary findings.

#### 5. Inspection Conclusions

- The inspection revealed many of the District's best practices including its dedication to continuous improvements and
  ongoing spill reduction strategies. The inspection also revealed several compliance findings for addressing
  outstanding violations/areas of concern to be addressed for further improving the District compliance posture,
  operational effectiveness, and launching improvements to be addressed during its next SSMP Audit cycle (see
  Attachment 2).
- To be proactive, the inspection findings were assessed against SSMP requirements for the reissued WDR (Order 2022-0103-DWQ, effective 6/5/2023) for helping the District visualize its current compliance posture, improve effectiveness, prepare for its next SSMP update, and provide added resilience for future scrutiny by compliance inspectors (see Attachment 3).

### List of Attachments

Attachment 1 – SWRCB Pre-Inspection Questionnaire Completed by District

Attachment 2 – District Compliance (WDR 2006-003-DWQ)

Attachment 3 – District Compliance (WDR 2022-0103-DWQ)

Attachment 4 - District Spill Performance Report

Attachment 5 - Central Coast Regional Board letter rescinding suspended liability



APPENDIX 1C- Pump Station Compliance Evaluation Inspection (CEI) Report by Fischer Compliance LLC (2023)



# **COMPLIANCE EVALUATION INSPECTION REPORT**

FACILTY INSPECTED:	INSPECTED BY:	
Santa Cruz County Sanitation District 2750 Lode Street Santa Cruz, CA 95062	James Fischer, P.E.  NPDES Compliance Inspector <sup>1</sup> Principal, FISCHER COMPLIANCE, LLC  James Fischer  Date: 12/5/2022	
SANITARY SEWER COLLECTION SYSTEM (WASTEWATER)	Waste Discharge ID (WDID) #3SSO10324	
Water Quality Order(s)	2006-003-DWQ/2013-0058-EXEC	
CIWQS Place ID	631759	
Regional Water Quality Control	3	
Board	Santa Cruz	
County		
Population/Area	72,200/17.13 sq. miles	
Miles of Sewers (gravity)	186.42	
Miles of Sewers (force mains)	36,000	
Sewer Connections (#)	35	
` '	an ordinate (ii)	
Final wastewater disposal	Sania Croz District Wasiewater Treatment Flant	
FACILITY REPRESENTATIVES	TITLE	CONTACT
Beatriz Barranco	Senior Civil Engineer/Operations Manager	(831) 477-3907
Ramon Sandoval	Assistant Superintendent (831) 477-3977	

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<sup>&</sup>lt;sup>1</sup> Credentialed, U.S EPA (2017)

Compliance Evaluation Inspection Report (Santa Cruz County Sanitation District): WDID#3SSO10324 1-30-23 Pg. 2/17

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Compliance Evaluation Inspection Report (Santa Cruz County Sanitation District): WDID#3SSO10324 1-30-23 Pg. 3/17

#### PURPOSE OF INSPECTION

Fischer Compliance LLC (FCL) with assistance from Sam Rose Consulting and Andy Morrison Consulting (hereafter, inspection team) conducted a "simulated" regulatory Pump Station Compliance Evaluation Inspection (PS Inspection)<sup>2</sup> to evaluate the Santa Cruz County Sanitation District (District) compliance with the SSS WDRs for pump station emergency response spill readiness and maintenance programs<sup>3</sup>.

#### 1. Compliance Evaluation Inspection

On 12/5/20222, an onsite pump station Compliance Evaluation Inspection (CEI) was conducted at the following locations (A-E below) to further evaluate District compliance with the Sanitary Sewer Systems Waste Discharge Requirements (SSS WDRs), State Water Board Order No. 2006-003-DWQ for its pump station assets.

- 1. Site A: Interviews with Sanitation Management, engineering, and field staff (Lode Street).
- 2. Site B: Inspections/operator interviews (Capitola Pump Station, 110 Monterey Avenue).
- 3. Site D: Inspections/operator interviews (Aptos Esplanade Pump Station, 104 Marina Ave).
- 4. Site E: Inspections/operator interviews (Soquel Pump Station, 809 Bay Ave).
- 5. Site F: Inspections/operator interviews (Rodeo Pump Station, 1400 Block, Richmond Dr).

Key information and documentation reviewed at Site A is summarized in Table 1 below.

Table 1 - Summary of key information and documentation reviewed (Site A).

Elements Reviewed	WDR/Reference(s)	Items Reviewed/Discussed
Pre-inspection     questions covering     pump station     operations,     maintenance, and     emergency response     readiness.	<ul> <li>Provision D.8</li> <li>Provision D.10</li> <li>WDRs, D.13(iv)</li> <li>SWRCB Pre-Inspection Questionnaire (sections 4,8,9,15)</li> </ul>	<ol> <li>Historic failures/spills</li> <li>Risk assessments for most critical stations.</li> <li>Maintenance/asset management/inspection intervals</li> <li>Condition assessments (force mains) and redundancies</li> <li>Critical spare parts</li> <li>Spill containment/emergency spill response readiness</li> <li>Emergency response procedures</li> <li>Bypass operations, readiness, training</li> <li>Safety program</li> <li>Inflow/infiltration reduction program</li> <li>Alarms, SCADA controls</li> <li>Cathodic protection of force main</li> <li>Vandalism controls</li> <li>Backup power</li> <li>Wet well holding times (no power/pumps)</li> </ol>

<sup>&</sup>lt;sup>2</sup> See <a href="https://www.epa.gov/compliance/compliance-compliance inspection-manual-national-pollutant-discharge-elimination-system">https://www.epa.gov/compliance/compliance-compliance inspection-manual-national-pollutant-discharge-elimination-system</a>

<sup>&</sup>lt;sup>3</sup> Pump stations inspected include most critical stations identified by the District (Capitola, Aptos Esplanade, Soquel and Rodeo).

Compliance Evaluation Inspection Report (Santa Cruz County Sanitation District): WDID#3SSO10324 1-30-23 Pg. 4/17

<u>SITE B: CAPITOLA PUMP STATION (110 Monterey Avenue):</u> To further evaluate and assess the existing District pump station emergency response spill readiness and maintenance programs, the following key observations, comments, and photos were documented during the inspection.

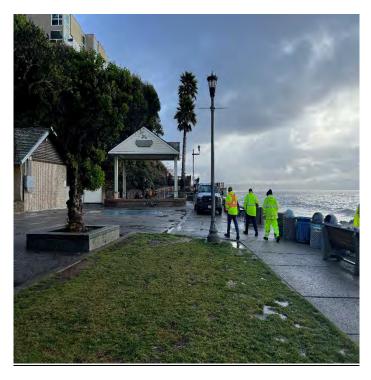
Table 2 – Summary of key information and documentation discussed (Site B).

Element Reviewed	SSS WDRs Citation(s)	Observations/Comments
1. Capacity	Provisions D.8, D.11, D.13	<ul> <li>1 million gallons per day (MDG)</li> <li>Wet well sewage holding times without power/pumps are estimated at 60 minutes (highest wet weather flows) and 120 minutes (lowest dry weather flows).</li> </ul>
2. Historic spills	Provisions D.8, D.11, D.13	<ul> <li>Reviewed the 2019 incident that caused a sewage overflow to reach Soquel Creek and a storm drain inlet that discharged to the Capitola Beach.</li> </ul>
Most likely receiving water impacts for spills from station	Provisions D.8, D.11, D.13	Soquel Creek and Lawnway Stormwater Pump Station.
4. Inspections and maintenance	Provisions D.8, D.11, D.13, Amended MRP section E	<ul> <li>Current logbook entries/data are not currently being recorded in District CMMS<sup>4</sup></li> <li>District electricians periodically measuring pump health</li> </ul>
		<ul><li>(voltage, amperage, run times, etc.)</li><li>Monthly valve exercising</li></ul>
5. Safety		Operational safety data sheets field at station.
Backup parts, spill     response readiness     and supplies	Provisions D.8, D.11, D.13	Some backup parts/supplies for station are stored onsite.
7. Operator Training and safety SOPs	Provisions D.8, D.11, D.13	Field staff demonstrate safe procedures, extensive pump/system knowledge.

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<sup>&</sup>lt;sup>4</sup> Computerized Maintenance Management System (CMMS)

Compliance Evaluation Inspection Report (Santa Cruz County Sanitation District): WDID#3SSO10324 1-30-23 Pg. 5/17



<u>SITE B (Photo 1):</u> View of entrance to Capitola Pump Station located approximately 100 feet from the Pacific Ocean.



<u>SITE B (Photo 2):</u> Inspection of force main/bypass connection manifold in beach parking area (view 1).



**SITE B (Photo 3):** Inspection of force main/bypass connection manifold in beach parking area (view 2).



<u>SITE B (Photo 4):</u> View inside force main/bypass connection manifold vault.

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**SITE B (Photo 5):** View of motor control center (MCC).



**SITE B (Photo 6):** View of backup critical spare parts.



**SITE B (Photo 7):** Inspection of operator controls at station; a successful "simulated high float" alarm test was conducted by station operator.



<u>SITE B (Photo 8):</u> View of float elevated by operator for simulated alarm test.

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<u>SITE C: APTOS ESPLANADE PUMP STATION (104 Marina Ave)</u>: To further evaluate and assess the existing District pump station emergency response spill readiness and maintenance programs, the following key observations, comments, and photos were documented during the inspection.

Table 3 – Summary of elements reviewed, citations and observations/comments (Site C).

Element Reviewed	SSS WDRs Citation(s)	Observations/Comments
1. Capacity	Provisions D.8, D.11, D.13	<ul> <li>(verify) million gallons per day (MDG)</li> <li>(verify) Wet well sewage holding times without power/pumps are estimated at 60 minutes (highest wet weather flows) and 120 minutes (lowest dry weather flows).</li> </ul>
2. Historic spills	Provisions D.8, D.11, D.13	No historic spills at station (verify).
3. Most likely receiving water impacts for spills from station	Provisions D.8, D.11, D.13	Pacific Ocean.
4. Inspections and maintenance	Provisions D.8, D.11, D.13, Amended MRP section E	<ul> <li>Current logbook entries/data are not currently being recorded in District CMMS<sup>5</sup></li> <li>District electricians periodically measuring pump health (voltage, amperage, run times, etc.)</li> <li>Monthly valve exercising</li> </ul>
5. Safety		Operational safety data sheets field at station are out of date.
6. Backup parts, spill response readiness and supplies	Provisions D.8, D.11, D.13	Some backup parts/supplies for station are stored onsite.
7. Operator Training and safety SOPs	Provisions D.8, D.11, D.13	<ul> <li>Field staff demonstrate safe procedures, extensive pump/system knowledge.</li> </ul>

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<sup>&</sup>lt;sup>5</sup> Computerized Maintenance Management System (CMMS)

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**SITE C (Photo 1):** Entrance to station with public signage.

**SITE C (Photo 2):** Force main valve box array location.



<u>SITE C (Photo 3):</u> Inspection of station controls and motor control center (MCC).



**SITE C (Photo 4):** Inspection of backup pump.

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**SITE C (Photo 5):** Inspection of backup generator (Cummins model QST30-G5, rated at 1000 KWe<sup>6</sup>).



<u>SITE C (Photo 6):</u> Inspection of completed generator log sheets.



**SITE C (Photo 7):** Inspection of station controls/motor control center (MCC) with station operator.



<u>SITE C (Photo 8):</u> Inspection of pumps/valves/force main; one gate valve auto system was observed out of service (operators currently manually open/close valve, 80 turns).

 $<sup>^{6} \</sup> See \ generator \ spec \ sheet, \ available \ at: \ \underline{https://www.cummins.com/sites/default/files/2018-10/QST30-G5.pdf}$ 

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<u>SITE D: SOQUEL PUMP STATION (809 Bay Ave)</u>: To further evaluate and assess the District existing pump station emergency response spill readiness and maintenance programs, the following key observations, comments, and photos were documented during the inspection.

Table 4 – Summary of elements reviewed, citations and observations/comments (Site D).

Element Reviewed	SSS WDRs Citation(s)	Observations/Comments
1. Capacity	Provisions D.8, D.11, D.13	<ul> <li>(verify) million gallons per day (MDG)</li> <li>(verify) Wet well sewage holding times without power/pumps are estimated at (verify) minutes (highest wet weather flows) and (verify) minutes (lowest dry weather flows).</li> </ul>
2. Historic spills	Provisions D.8, D.11, D.13	No historic spills at station (verify).
3. Most likely receiving water impacts for spills from station	Provisions D.8, D.11, D.13	Soquel Creek.
4. Inspections and maintenance	Provisions D.8, D.11, D.13, Amended MRP section E	<ul> <li>Current logbook entries/data are not currently being recorded in District CMMS<sup>7</sup></li> <li>District electricians periodically measuring pump health (voltage, amperage, run times, etc.)</li> <li>Monthly valve exercising completed but not recorded in CMMS.</li> </ul>
5. Safety		Operational safety data sheets field at station are out of date.
6. Backup parts, sp response reading and supplies		Some backup parts/supplies for station are stored onsite.
7. Operator Training and safety SOPs	-	Field staff demonstrate safe procedures, extensive pump/system knowledge.

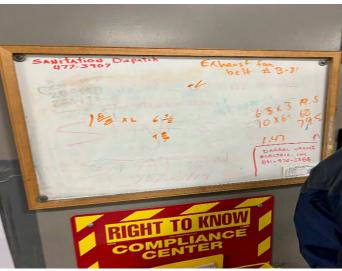
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<sup>&</sup>lt;sup>7</sup> Computerized Maintenance Management System (CMMS)

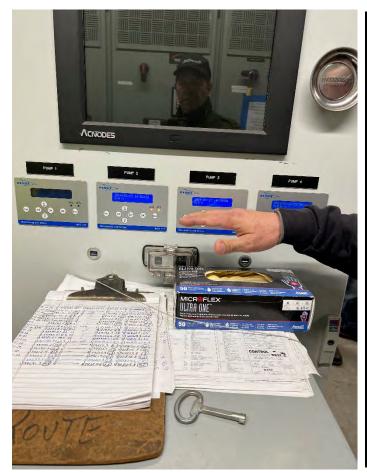
Compliance Evaluation Inspection Report (Santa Cruz County Sanitation District): WDID#3SSO10324 1-30-23 Pg. 11/17



<u>SITE D (Photo 1):</u> View of pump station located adjacent to Peery Park/Soquel Creek in a large public shopping center.



**SITE D (Photo 2):** Inspection of station maintenance activities logged on board.

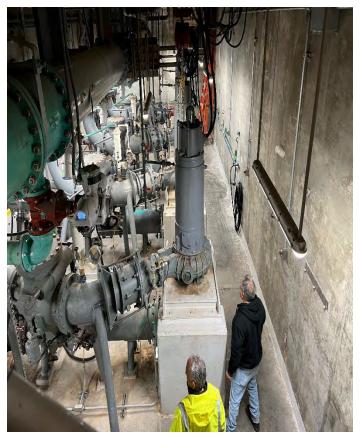


<u>SITE D (Photo 3):</u> Inspection of station operator station and log sheets.



SITE D (Photo 4): Inspection of wet well.

Compliance Evaluation Inspection Report (Santa Cruz County Sanitation District): WDID#3SSO10324 1-30-23 Pg. 12/17



**SITE D (Photo 5):** Inspection of pumps/valves/force main.



<u>SITE D (Photo 6):</u> Inspection of Flygt backup pump in readiness state at station.



**SITE D (Photo 7):** View of station control room.



SITE D (Photo 8): View of public signage at station.

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<u>SITE E: RODEO PUMP STATION (1400 Block, Richmond Drive):</u> To further asses the existing District pump station emergency response spill readiness and maintenance programs, the following key items, observations, and photos were documented.

Table 5 - Summary of elements reviewed, citations and observations/comments (Site E).

Element Reviewed	SSS WDRs Citation(s)	Observations/Comments
1. Capacity	Provisions D.8, D.11, D.13	<ul> <li>1 million gallons per day (MDG)</li> <li>Wet well sewage holding times without power/pumps are estimated at (verify) minutes (highest wet weather flows) and (verify) minutes (lowest dry weather flows).</li> </ul>
2. Historic spills	Provisions D.8, D.11, D.13	No historic spills at station (verify).
Most likely receiving     water impacts for     spills from station	Provisions D.8, D.11, D.13	Corcoran Lagoon.
4. Inspections and maintenance	Provisions D.8, D.11, D.13, Amended MRP	Current logbook entries/data are not currently being recorded in District CMMS <sup>8</sup>
	section E	<ul> <li>District electricians periodically measuring pump health (voltage, amperage, run times, etc.)</li> <li>Monthly valve exercising</li> </ul>
5. Safety		Operational safety data sheets field at station are out of date.
6. Backup parts, spill response readiness and supplies	Provisions D.8, D.11, D.13	<ul> <li>Some backup parts/supplies for station are stored onsite.</li> <li>New variable frequency drives (VFDs), primary logic controller (PLC), grinder, and force main components recently completed at station.</li> </ul>
7. Operator Training and safety SOPs	Provisions D.8, D.11, D.13	<ul> <li>Field staff demonstrate safe procedures, extensive pump/system knowledge.</li> </ul>

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<sup>&</sup>lt;sup>8</sup> Computerized Maintenance Management System (CMMS)

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**SITE E (Photo 1):** Entrance to station with public signage.



**SITE E (Photo 2):** Inspection force main valve box.



**SITE E (Photo 3):** Inspection of force main air release valve.



**SITE E (Photo 4):** Inspection of force main creek crossing.

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# 2. <u>Post-Inspection Conference</u>

A post-compliance virtual inspection conference was conducted with District on 10/19/2022 to review the details of the inspection and preliminary findings. The following information was reviewed and discussed.

- Review of office and field inspection tasks completed.
- Review of field asset inspections.
- Review of field staff interviews.
- Preliminary findings.

# 3. Inspection Conclusions

- The inspection further revealed many of the District's best practices including dedication to continuous improvements and ongoing spill reduction strategies.
- A summary of key findings and recommendations are included in **Table 6** below.
- A summary of areas of concern identified during the inspection are included in **Table 7** below.

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# Table 6 (Summary of Key Findings and Recommendations)

Elen	nent Reviewed	Finding	Recommended Actions
1.	Historic station failures/spills	Brommer pump station spill (2017)	<ul> <li>Review all historic root causes/failures at most critical stations; adjust maintenance and spill reduction strategies as necessary.</li> </ul>
2.	Risk assessment for most critical stations	Improvements should be considered	<ul> <li>Schedule/complete assessment as soon as practical.</li> <li>Continue with risk mitigations with stations within 100 feet of surface waters including 15th Avenue, A1, A3, Aptos Esplanade, Arana, Brommer, Capitola, D.A Porath, Courtside, Chaminade, Dolphin, Grove, Harbor View, Hidden Beach, Moran, Pine Knoll, Potbelly, Rodeo, Schwann, Soquel, Spreckels, Tannery, and Via Palo Alto.</li> </ul>
3.	Maintenance/asset management/inspection intervals	<ul> <li>Improvements should be considered</li> </ul>	<ul> <li>Schedule/complete ongoing field data collection upgrades for CMMS.</li> <li>Confirm number/maintenance of all force main air release valves (ARVs) in system</li> </ul>
4.	Condition assessments (force mains) and redundancies	<ul> <li>Improvements should be considered</li> </ul>	<ul> <li>Schedule/complete assessment(s) as soon as practical.</li> </ul>
5.	Critical spare parts	<ul> <li>Improvements should be considered</li> </ul>	Schedule/complete as soon as practical
6.	Spill containment/emergency spill response readiness	<ul> <li>Improvements should be considered</li> </ul>	<ul> <li>Re-evaluate critical stations for containment equipment/readiness</li> </ul>
7.	Emergency response procedures	<ul> <li>Improvements should be considered</li> </ul>	Schedule/complete project in progress
8.	Bypass operations, readiness, training	<ul> <li>Improvements should be considered</li> </ul>	<ul> <li>Ensure staff are trained and competent to bypass all critical stations</li> </ul>
9.	Safety program	<ul> <li>Safety data sheet updates needed</li> </ul>	<ul> <li>Update safety sheets as soon as practical</li> <li>Check lockout/tagout labels at stations.</li> </ul>
10.	Inflow/infiltration reduction program	Previous I/I study completed	<ul> <li>Continue evaluating capacity needs for 9 stations identified with issues in 2019 study</li> </ul>
11.	Alarms, SCADA controls	<ul> <li>Satisfactory</li> </ul>	o None
12.	Cathodic protection of force main	Satisfactory	o None
13.	Vandalism controls	<ul> <li>Satisfactory</li> </ul>	o None
14.	Backup power	<ul> <li>Satisfactory</li> </ul>	o None
15.	Wet well holding times (no power/pumps) and lowest upstream manholes	<ul> <li>Improvements should be considered</li> </ul>	<ul> <li>Schedule/complete wet well holding time studies at all critical stations; check/verify upstream manhole locations at each station.</li> </ul>

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# Table 7 (Findings: Areas of Concern, AOC)

Ar	eas of Concern	WDR Citation(s)	Recommendations/Action				
0	Improvements should be implemented for identification of critical parts/inventory including having "shelf-ready" components such as ultrasonic transducers, fuses, capacitors, pumps, motor controls and other necessary parts deemed critical).	Provisions D.8, D.13	<ul> <li>Previously cited (see system-wide Compliance Evaluation Inspection, "AOC 8".</li> <li>Schedule/complete as soon as practical.</li> </ul>				
0	Improvements should be implemented for condition assessment/access on East Cliff pump station force main sewer line).	Provisions D.8, D.13	<ul> <li>Previously cited (see system-wide Compliance Evaluation Inspection, see "AOC11".</li> <li>Schedule/complete as soon as practical.</li> </ul>				
0	Risk evaluations should be conducted for all critical pump stations and force mains for ensuring highest priority maintenance/improvements/CIP plans to help reduce/prevent future spills).	Provisions D.8, D.13	<ul> <li>Previously cited (see system-wide Compliance Evaluation Inspection, "AOC12".</li> <li>Schedule/complete as soon as practical.</li> </ul>				
0	Improvements should be implemented for obtaining reasonable access to the pump station bypass valves located in parking lot manholes at Capitola Pump Station).	Provisions D.8, D.13	<ul> <li>Previously cited (see system-wide Compliance Evaluation Inspection, see "AOC13".</li> <li>Schedule/complete as soon as practical.</li> </ul>				
0	District should follow-through with improvements to existing standard/emergency operating procedures, pump station emergency response plans for most critical stations, and improve ongoing field trainings to minimize future spills and improve readiness/operator competency	Provisions D.8, D.13	<ul> <li>Previously cited (see system-wide Compliance Evaluation Inspection, "AOC15".</li> <li>Schedule/complete as soon as practical.</li> </ul>				



APPENDIX 1D— Collection System Compliance Evaluation Inspection (CEI) by State Water Board (2023)

# SANTA CRUZ COUNTY COLLECTION SYSTEM COMPLIANCE EVALUATION INSPECTION REPORT

# Name/Location of Facility Inspected:

Santa Cruz County Collection System 701 Ocean Street, Suite 410 Santa Cruz, CA 95060

### Date:

January 25, 2023 Start: 0800 hours End: 1651 hours

### **Inspected By:**

German Myers, WRCE<sup>1</sup>, SWRCB<sup>2</sup> Jamie Johnson, WRCE, SWRCB Jennifer McGovern, ES<sup>3</sup>, SWRCB Deler Ghazi, WRCE, SWRCB Peter VonLangen, EG<sup>4</sup>, CCRWQCB<sup>5</sup>

### Prepared By:

German Myers, WRCE



### Reviewed By:

Tomas Eggers, PE, Senior WRCE

Tomas Eggers, Digitally signed by Tomas Eggers, PE Date: 2023.03.15 13:57:41 -07'00'

WDID Number: 3SSO10324 Orders: 2006-0003-DWQ and WQ 2013-0058-EXEC

Legally Responsible Official (LRO): Beatriz Barranco

### **FACILITY REPRESENTATIVES**

Name	Title	Contact Information
Beatriz Barranco	Sanitation Operations Manager	beatriz.barranco@santacruzcounty.us
Ashleigh Trujillo	Sanitation Engineering Manager	ashleigh.trujillo@santacruzcounty.us
Kent Edler	Asst. Director of Public Works	kentedler@santacruzcounty.us
Ray Sandoval	Assistant Superintendent	ray.sandoval@santacruzcounty.us
Sean Mathis	Public Works Supervisor	sean.mathis@santacruzcounty.us
Daniel Ortega	Public Works Supervisor	daniel.ortega@santacruzcounty.us
Rene Hernandez	Senior Engineering Associate	rene.hernandez@santacruzcounty.us
Monica Tomlinson	Env. Programs Coordinator	monica.tomlinson@santacruzcounty.us

Inspection Consent Approved By: Kent Edler Date: 01-25-23 Time: 0808 hours

### **FACILITY DESCRIPTION**

The Santa Cruz County Sanitation District (hereafter, County or Santa Cruz) owns and operates the Santa Cruz County Collection System which has approximately 186 miles of gravity sewers, 14 miles of force mains, and 35 pump stations, serving approximately 72,200 customers. All wastewater is conveyed to the City of Santa Cruz's wastewater treatment plant (WWTP).

<sup>&</sup>lt;sup>1</sup> Water Resource Control Engineer

<sup>&</sup>lt;sup>2</sup> State Water Resources Control Board

<sup>&</sup>lt;sup>3</sup> Environmental Scientist

<sup>&</sup>lt;sup>4</sup> Engineering Geologist

<sup>&</sup>lt;sup>5</sup> Central Coast Regional Water Quality Control Board

Santa Cruz is located within the jurisdiction of the Central Coast Regional Water Quality Control Board (Regional Board or CCRWQCB) and operates under SWRCB Order No. 2006-0003-DWQ "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems" (SSS WDRs) and SWRCB Order No. 2013-0058-EXEC "Amending Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems" (Amended MRP).

### **PURPOSE OF INSPECTION**

On May 12, 2022, the Office of Enforcement (OE) sent a Notice of Inspection (Notice) to Mr. Matthew Machado, District Engineer (Attachment A – Notice of Inspection). The Notice informed the County that OE staff would be conducting a compliance evaluation inspection (CEI) to evaluate overall compliance with the SSS WDRs and Amended MRP. The Notice also requested a variety of information which was all provided by the County on June 1, 2022 (Attachment B – Pre-Inspection Questionnaire Response). OE reached out to Ms. Beatriz Barranco, Sanitation Operations Manager, on January 11, 2023, to schedule a field inspection of the collection system for January 25, 2023.

# PRE-INSPECTION "DESKTOP" REVIEW

Prior to the inspection, OE reviewed information uploaded to the California Integrated Water Quality System (CIWQS), information available on the County's website<sup>6,7</sup>, and information provided by the County. Documents and information reviewed are listed below, along with a list of key items noted during the "desktop review" to prepare for the inspection:

- Pre-Inspection Questionnaire
  - Have been proactive since the last enforcement action including updating the Capital Improvement Program, purchasing new equipment, financing numerous projects, developing a manhole inspection program, and implementing new training programs.
  - Power shortage in 2019 at the Hidden Beach Pump Station resulted in 12 corrective action measures.
  - The County oversees five other districts and community service areas (CSAs).
  - o 10 notices of violation and three administrative citations issued in the last three years.
  - o Flow study done in 2019 indicated nine pump stations may have capacity issues.
  - Plans to develop overflow emergency response procedures (OERPs) for each pump station.
- 2017 Sewer System Management Plan (SSMP)
  - o 220 miles of gravity sewers.
  - o "Hot Spot" locations are cleaned on a 30-day and 90-day frequency.
  - o 10-year cycle for closed circuit televised inspections (CCTV).
  - o Large force mains are cleaned annually.
  - o Pump stations are visually inspected weekly.
  - o Air relief valves (ARVs) are inspected and maintained annually.
  - Gravity sewer lines less than 12 inches in diameter are proactively cleaned every three years and lines greater than 12 inches are inspected and cleaned as needed every three years.
- CIWQS Collection System Questionnaire

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<sup>&</sup>lt;sup>6</sup> The Santa Cruz County Sanitation District's website can be found at: <a href="https://sccsd.wpcomstaging.com">https://sccsd.wpcomstaging.com</a>

<sup>&</sup>lt;sup>7</sup> The County of Santa Cruz Public Works website can be found at: https://dpw.co.santa-cruz.ca.us

- \$23 million operation and maintenance (O/M) annual budget.
- \$31 million capital expenditure annual budget.
- o 186 miles of gravity sewers.
- 14 miles of force mains.
- o Three miles of pipeline not accessible to maintenance.
- County is not responsible for laterals.
- CIWQS Sanitary Sewer Overflow (SSO) Reports/Violations
  - o Five SSOs in 2022, nine in 2021, six in 2020, and eight in 2019.
  - Mostly Category 3.
  - No repeat locations.
  - o Approximately 4,600-gallon spill on 01/08/23, 144,000-gallon spill on 01/16/23, and 377,000-gallon spill on 01/16/23.
  - o Significant decrease in SSOs from 2014 to present. 17 SSOs in 2014 to five in 2022.
- CIWQS No Spill Reports
  - No missing No Spill Reports.
- 2019 Flow Monitoring Study
  - o 69 pipeline and nine pump station improvement projects identified.
  - More targeted flow in the coming years.
- Capital Improvement Projects
  - o Approval for \$100 million to replace aging infrastructure over the next 10 years.
    - Addresses 95% of known deficiencies.
  - o 27 identified capital improvement projects for fiscal year (FY) 2018/2019 to 2021/2022.
  - Currently three projects: East Cliff sewer replacement, Rodriguez Street sewer rehabilitation, and Rio Sands sewer replacement.
- 2019 and 2021 SSMP Audits
  - There is hydraulic deficiency in the Rodeo Gulch area.
    - Projects are included in the 5-year capital improvement plan to address deficiencies.
  - Pump station improvements are included in the 5-year capital improvement plan which includes valve, pump, and programmable logic controller (PLC) upgrades.

### PRE-FIELD CONFERENCE

The inspection team arrived at the County's operations facility, the D.A Porath Pump Station, located at 2750 Lode Street, Santa Cruz, CA 95062, at approximately 0800 hours and met with the facility representatives listed above. I, German Myers, began with introductions and passed around a sign-in sheet (Attachment C – Sign-In Sheet). I stated that the purpose of the inspection was to begin the CEI process and delineated the responsibilities between the Regional and State Boards, explaining that while the State Board was conducting the audit and inspection, our findings would be provided to the Regional Board and further action, if any, would likely come from the Regional Board. At 0808 hours, Mr. Kent Edler, Assistant Director of Public Works, verbally gave consent to conduct the inspection, which included asking questions, taking notes, and taking photos.

I began the questions by asking how many employees the County has for the collection system. Mr. Ray Sandoval, Assistant Superintendent, stated that there are approximately 46-47. Mr. Edler explained that this number is only for operations. Ms. Ashleigh Trujillo, Sanitation Engineering Manager, stated that there are 10 employees for engineering. Ms. Barranco explained that they filled the vacancies that were listed in the pre-inspection questionnaire, but that with new retirements and

promotions, they currently have three to four vacancies. Mr. Edler confirmed that the collection system goes to the City of Santa Cruz WWTP and is not owned or operated by them.

I then asked what type of training is done. Ms. Barranco stated that they do trainings for SSO volume estimation and electrical equipment. Mr. Sandoval added that they are NASSCO PACP8 trained and do confined space, cardiopulmonary resuscitation (CPR), pump station bypassing, and safety trainings. Ms. Barranco stated that an equipment trainer will train the supervisors on the equipment and then the supervisors will train the employees. I then asked what is done during the SSO volume estimation training. Ms. Barranco explained that they will train on responding to SSOs, volume estimation, and documentation. She stated that they do a full on-site simulation as well as classroom training. Mr. Sandoval stated that they break into small groups for the training and will hold the training at least once a year but are trying to hold the training more often with new hires.

I then asked what training is done for the engineering side. Ms. Trujillo stated that on the engineering side they are NASSCO PACP trained, have confined space and safety trainings, and will have in house AutoCAD training. I then asked if operations and engineering hold regular meetings. Ms. Trujillo stated that they meet every other week. Mr. Barranco explained that they discuss projects, issues with operations, and their budget. Ms. Trujillo explained that they coordinate sewer inspections, which manholes need repairs, and that engineering coordinates the lateral program. She stated that the County is not responsible for the laterals and explained that they are rewriting their code to make it clearer who owns the laterals. She explained that they require inspections upon sale and will go back to the homeowners and let them know what needs to be fixed. Ms. Barranco stated that they have had issues with roots and fats, oils, and grease (FOG) in laterals and that their environmental compliance team reach out and work with engineering on how to move forward with repairs. Ms. Trujillo added that if there is a root issue, they will require the homeowners to use cured-in-place-pipe (CIPP) liner or repair the lateral.

I then asked about the discrepancy in the total miles of gravity sewers, explaining that the pre-inspection questionnaire states 186 miles, while the SSMP states 220 miles. Ms. Barranco explained that the County is not responsible for private systems, so their Geographic Information Systems (GIS) analyst has been working on removing private collection systems. I then asked about the three miles of pipe not accessible for maintenance as listed in the pre-inspection questionnaire. Mr. Sean Mathis, Public Works Supervisor, stated that the County has difficult terrain and homes that obstruct access, so getting equipment to some areas is difficult. Mr. Daniel Ortega, Public Works Supervisor, stated that there is a deck that is built over a manhole. Mr. Trujillo added that there is another manhole with a mobile home built over it. Mr. Mathis stated that they try to flush these difficult areas from an upstream or downstream location and do a lot of CCTV.

We then discussed the County's aging infrastructure. Ms. Trujillo stated that 50% of their gravity sewers are over 50 years old. She explained that they are replacing old pipes and are working with their GIS analyst on mapping areas with defects based on CCTV. Ms. Trujillo stated that they use an info asset manager to review information to be strategic when planning. She explained that their board approved \$114 million for rehabilitation projects over the next 10 years but also approved an additional \$100 million for other projects. She added that they are prioritizing Grade 5 defects, old pipes, and pipes with a lot of preventative maintenance (PM).

<sup>&</sup>lt;sup>8</sup> National Association of Sewer Service Companies: Pipeline Assessment Certification Program

I then asked how the County prioritizes cleanings and CCTV. Ms. Barranco explained that cleanings are prioritized based on CCTV. She stated that they have some pipes in known problem areas that are on a 30-day schedule. She added that they have encountered issues with jetting the lines since the old pipes are asbestos cement pipe (ACP) and vitrified clay pipe (VCP). Mr. Sandoval stated that they are currently using JetBugs<sup>9</sup> to break up grease in the pipes. Mr. Mathis explained that they have several gravity sewers under freeways and that JetBugs has been very successful at breaking down the grease and allowing for better flow. He stated that they are currently using 5-gallon buckets to treat areas with the JetBugs but that they want to outfit a jet truck with a permanent injection system. Ms. Monica Tomlinson, Environmental Programs Coordination, stated that they had JetBugs approved by the WWTP. Mr. Sandoval stated that outside their 30-day and 90-day cleaning schedules, their prioritization is to go from basin to basin and follow with CCTV.

I then asked what type of pipe is being used for newer pipes. Ms. Trujillo stated that they use polyvinyl chloride (PVC) pipe for open trench installation and high-density polyethylene (HDPE) pipe for pipe bursting. She stated that they had one pipe going through a hotel patio and could not flush it because of the damage it caused, so they are replacing the pipe.

I then asked about the other systems that the County manages. Ms. Barranco stated that they manage other CSAs and districts but that the WWTP operators for those areas work on those collection systems and that they let the County know if assistance is needed. Mr. Edler added that those WWTPs are also in charge of the odor control program.

I then asked about the number of complaints that are received. Mr. Ortega stated that they received 110 complaints in 2022. Mr. Sandoval added that they have a 24/7 dispatch and track complaints through Lucity<sup>10</sup>. I then asked about the type of complaints that are received. Ms. Tomlinson stated that they get illicit discharge complaints. Mr. Sandoval added that during the summer they will get odor complaints and often get complaints regarding blockages in the laterals. He explained they will often go out and do a courtesy flush for the laterals.

I then asked about the County's root control program. Mr. Mathis stated that they use Duke's for root control and have for the last 15-20 years. He explained that they have had good success with Duke's but will sometimes need multiple treatments in heavy root areas. He added that they will always verify with spot checks. He stated that they were just approved for Root X and will use it in house if needed but will primarily rely on Duke's. Mr. Mathis explained that Duke's guarantees for three years, so they have a schedule of what areas are treated. I then asked how many miles are treated for root control. Mr. Mathis was able to look up that 48,000 linear feet of pipe is treated over three years. Mr. Langen asked if the County observes differences in root issues during dry and wet seasons. Mr. Ortega stated that in the last 10 years, and during the drought, they have seen an increase and suspect it is roots looking for water, growing towards the moist clay pipes. Mr. Sandoval added that they have root issues in the laterals. Ms. Tomlinson stated that they have the ability to issue corrective actions to homeowners to address issues in the laterals.

I then asked about the County's computerized maintenance management system (CMMS). Ms. Trujillo stated that they have two Innovyze programs. She explained that they use InfoSWMM for flow modeling, flow monitoring, inflow and infiltration (I/I), etc. and use it to look for areas that are susceptible to SSOs and capacity issues. She stated that the other program is Info Asset Planner,

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<sup>&</sup>lt;sup>9</sup> JetBugs is a combined chemical and microbial performance degreaser additive.

<sup>&</sup>lt;sup>10</sup> Lucity is an asset management software.

and it is used for asset management. She explained that they can use the Info Asset Planner to see property boundaries, review CCTV data, and view work orders.

I then asked about force main cleanings. Ms. Barranco stated that the force main at the D.A Porath Pump Station is cleaned twice a year but that the last time they cleaned it they noticed that the valve was making a funny noise. She explained that the valve is old and needs to be replaced so they have not cleaned it and will not clean it until the valve gets replaced. Mr. Ortega added that there are two force mains at the Aptos Pump Station and those both get cleaned annually. I then asked when the County anticipates replacing the valve at the D.A Porath Pump Station. Ms. Trujillo that they hired a consultant for the force main valve replacement and that it is budgeted for FY 2024/2025. Mr. Sandoval added that they want to incorporate a permanent bypass as part of the valve replacement project.

I then asked about the status of their SSMP update, since the previous one was from 2017. Ms. Barranco stated that they just updated the SSMP in December and posted it online the previous week. I asked what changes were made from the 2017 to the 2022 SSMP. Ms. Barranco stated that they removed the OERP from section 6 of the SSMP and made it an appendix. She added that there are also new employees, and they are working more closely with Environmental Health.

I then asked about capital improvement projects and their response to the pre-inspection questionnaire stating that the additional \$100 million in funding will only address 95% of the known deficiencies. Ms. Trujillo explained that the other 5% are less critical pipes and that they keep finding more issues so they will keep prioritizing what is most critical. She stated that the Rio Sands replacement project is on a pipe that runs through a hotel and that the project just started the previous Monday. She explained that another one of their current projects is replacing two parallel lines in the East Cliff area. She stated that it is a \$7 million project and consists of upsizing the sixinch lines to eight-inch lines and replacing the deteriorating ACP. She added that they also have an emergency project from an SSO that was caused by a void in the Capitola area and are currently in the bidding process. She stated that they also want to get a permanent bypass at the Hidden Beach Pump Station.

I then asked about how the recent storms affected their system. Mr. Edler stated that the system did well during the first eight atmospheric rivers but that the ninth one hit them hard. He explained that the Seacliff State Beach seawall was eroding, so they put 113 tons of rip rap to protect their pump station there. Mr. Sandoval stated that they saw two big SSOs from the storms and Ms. Barranco added that they will be writing two technical reports on the SSOs.

I then asked about the flow study completed in 2019 and if the County has started any of the improvement projects listed in the study. Ms. Trujillo stated that they started some of the projects but that some of the listed projects may not be needed. She explained they are getting funding to do more targeted flow monitoring to get a more accurate representation. She stated that some areas may not need to be upsized but just lined. She added that they just put four flow monitors in right before the recent storms. She stated that once they get through their current 10-year projects, they will likely do another full flow study, but until then, will continue doing smaller targeted flow monitoring.

I then asked about the incident that occurred at the Hidden Beach Pump Station in 2019. Mr. Sandoval explained that they received an alarm but assumed everything was fine since the crew had just left. He stated that they had someone go out later that night and found sewage piling up and that they could not get the pumps running. He explained that the suction valves had failed due to the

uninterruptable power supply (UPS) shorting out. Ms. Barranco stated that they made upgrades to the PLCs and variable frequency drivers (VFDs) and are looking at emergency bypass for critical pump stations. Mr. Sandoval stated that if the UPS fails, they have the PLC as backup now. Mr. Edler stated that they are incorporating more UPS and PLC equipment upgrades in their capital improvement projects to get critical equipment replaced and funded. Ms. Barranco explained that they are creating a five-year plan for their most critical pump stations to budget out improvements. She added that all critical pump stations have standby generators, but they are making sure there are backup connections and manual valves. Mr. Sandoval stated that there are 16 critical pump stations near water bodies and bypass projects ongoing. I asked about when the bypass projects are to be completed. Ms. Trujillo stated that Hidden Beach Pump Station and another one are set for FY 2024/2025. Mr. Mathis added that the Capitola Pump Station also has a project coming up to replace the valves and pumps. Ms. Trujillo stated that the equipment has been purchased for the Capitola Pump Station and that the project should be completed this year.

I then asked if OERPs have been completed for each pump station. Ms. Barranco stated that they are working with Fischer Compliance to put together OERPs for each pump station starting with the Soquel, Capitola, and Rodeo Pump Stations, which should be completed in February. I then asked what is done during pump station inspections. Mr. Mathis explained that they do daily inspections for critical pump stations during the work week and check for FOG in the wet well, inspect the grinders, check for ragging issues, and view the pump logbooks. Mr. Ortega added that they clean and exercise the check valves monthly.

I then asked about the County's FOG program. Ms. Tomlinson explained that they do approximately 300 annual food service establishment (FSE) inspections and typically 50-100 follow-up inspections. She stated that the follow-up inspections are typically due to FSEs not implementing best management practices (BMPs) and not maintaining the cleaning cycle. She explained that they do a lot of public outreach for commercial and residential areas and distribute flyers. She stated that they will obtain the pump out records from the pumping companies and distribute a BMP list to the restaurants. She added that they work with engineering on new design standards such as using composite tanks for better hydrogen sulfide (H<sub>2</sub>S) control. She stated that they participate in community events, such as Earth Day, advertise in the local newspaper, air commercials around the holidays, and send mailers or go door to door if they are seeing FOG issues. Ms. Barranco added that they are working with the City of Santa Cruz on a radio announcement.

I then asked what the typical process is when they see issues. Ms. Tomlinson explained that they issue corrective action forms with a deadline to comply and issued 42 correction action forms last year. If further action is needed, she stated that they then issue a letter of violation and escalate to an administrative order if needed. She added that they have never issued a FOG related administrative order. Ms. Tomlinson stated that they do stormwater citations in addition to FOG compliance and have issued numerous \$200 fines. She explained that they are currently rewriting their code, so they do not have to go to their board for approval on the citations. I then asked at what percent solids the County requires the grease interceptors to be pumped out. Ms. Tomlinson stated that 25% solids is the requirement for pump out.

I then asked how SSOs are responded to. Mr. Sandoval stated that their required response time is one hour but they typically respond within 30-45 minutes. Ms. Barranco explained that during the recent storm events, they had staff come in earlier to be ready for potential issues and had staff posted in critical areas. Mr. Sandoval stated that the lead or supervisor will get the initial call from dispatch and will then notify maintenance workers. He stated that the lead will go to the site to identify

if the spill is wastewater. Once they confirm if the spill is wastewater, they will start notifying others and start placing straw waddles to contain the spill. Mr. Ortega added that they keep some emergency vehicles in the southern service area for quicker response times. Mr. Sandoval stated that staff are equipped with tablets with GIS to try to track the spill to see if it enters a storm drain. If they determine that it reaches a storm drain, they will try to recover the spill at the catch basin. I then asked how the volume of the spill is determined. Ms. Barranco stated that they use the volume estimation worksheets included in the SSMP.

At approximately 1000 hours, we ended the pre-field conference.

### FIELD INSPECTIONS

### **Location 1: D.A. Porath Pump Station**

We began the field portion of the inspection at 1018 hours and started at the D.A. Porath Pump Station, also called the East Cliff Pump Station. Mr. Mathis stated that they are looking to replace their hydraulic grinders with electric ones. He explained that during the storms, the grinders would create stoppages, so to help relieve flows they lifted the grinders out, because it was not ragging concerns but flow concerns (**Photo 1**). Mr. Sandoval explained that one of the SSOs during the storm was at the D.A. Porath Pump Station and first occurred at the low point manhole.

We then moved to the upstream manhole feeding into the D.A. Porath Pump Station. There was good flow observed in the channel and the bench was observed to be wet **(Photo 2)**. The manhole cover was a composite cover which is to help with H<sub>2</sub>S.

We then moved to the downstream manhole of the Moran Pump Station, which feeds directly into the D.A. Porath Pump Station. Mr. Sandoval stated that it is this manhole that is the typical starting location for an SSO as it is the lowest point. The manhole was observed to have very fast flow (**Photo 3**).

We then moved inside the control room for the D.A. Porath Pump Station. Mr. Mathis stated that the electrical crew maintains the control panels. He explained that they are removing the microaeration system and have been using Bioxide instead but are having coagulation issues and want to figure something else out. We observed that there was a spare pump at the pump station (**Photo 4**). I then asked if they could trigger one of their alarms. Mr. Sandoval turned off the pumps so the water level in the wet well could rise. The pump fail alarm turned on and the control screen (**Photo 5**) showed that the water level was rising. Mr. Sandoval explained that an alarm would go off at 13.3 feet, 13.7 feet, and then the high-level alarm at 14 feet. The alarms were triggered on screen, however the alarm light on the control panel did not turn on. Overall, the control room appeared to be cleaned and well maintained.



**Photo 1:** Crane attached to the grinders at the D.A. Porath Pump Station.



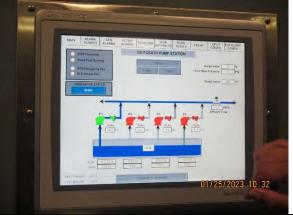
**Photo 2:** Manhole upstream of the D.A. Porath Pump Station with an observed wet bench.



**Photo 3:** Manhole downstream of the Moran Pump Station leading to the D.A. Porath Pump Station with an observed high flow.



**Photo 4:** Spare pump for the D.A. Porath Pump Station located in the control room.



**Photo 5:** Control screen located in the D.A. Porath Pump Station control room.

### **Location 2: Moran Pump Station**

We then moved to the Moran Pump Station which is next to a stormwater basin that flows to Moran Lake. Emergency signage was observed on the door to the pump station. Mr. Sandoval stated that the Moran Pump Station has the electric grinders (**Photo 6**) which are much quieter and require less maintenance since they do not require oil hydraulics. I then asked to look inside the wet well. The water level in the wet well was low, there was a FOG mat in the wet well, and there was rust and corrosion on the pipes and interior wall (**Photo 7**).



**Photo 6:** Electric grinder controls (left side of photo) in the control room of the Moran Pump Station.



**Photo 7:** Wet well of the Moran Pump Station with a visible FOG mat and rusted/corroded components.

### **Location 3: Hidden Beach Pump Station**

We then traveled to the Hidden Beach Pump Station which is located directly on the beach. We met with Mr. Ben Zarillo, who is a Pump Station Lead. Emergency signage was displayed at the pump station. Mr. Sandoval stated that they have a Pulsar with a separate power source for redundancy. I then asked where maintenance logs are kept. Mr. Zarillo explained that the maintenance logs are on the tablets that the crew carry. Mr. Mathis stated that this pump station will also get the electrical grinders this year. He explained that they have a carbon system for odor control and an aeration system to assist with breaking up the FOG. He added that they are working to finalize the odor system at the Capitola Pump Station. Ms. Barranco explained that after the power failure at the pump station in 2019, they moved the controls to the second floor to accommodate for any future flooding that might occur. High flow was observed in the channel leading to the wet well (**Photo 8**) and the wet well was observed to have some FOG (**Photo 9**).

Mr. Sandoval stated that there is a high float alarm in the wet well that will turn on the pumps when triggered. Mr. Zarillo added that there is also a channel and bar screen alarm. Mr. Sandoval stated that they clean and maintain the low-level floats once a month. Mr. Zarillo stated that they used to have to break up and clean the grease mat daily but now they only have to do it once a month. Ms. Barranco pointed out that all pump stations that have a second level have a gas monitor that will notify dispatch. She added that all operators are required to carry handheld monitors. I asked where spare parts are stored. Ms. Barranco stated that large pump space parts are at the pump stations but that they also have spare parts at their yard. She added that they did a better job on inventory in their newest SSMP.



**Photo 8:** High flow in channel leading to the wet well of the Hidden Beach Pump Station.



**Photo 9:** Wet well of the Hidden Beach Pump Station with some FOG buildup.

# Location 4: Rio Sands Hotel - Pipe Replacement Project

We then traveled to the location of the Rio Sands pipe replacement project, located at the Rio Sands Hotel in Aptos. Ms. Trujillo explained that the pipe is old VCP that has a lot of root intrusion. She stated that they could not clean or CCTV the line and that it goes through the courtyard of the hotel. She explained that they are installing new eight-inch HDPE and are using Trenchless Titan as the contractor. Ms. Trujillo stated that the contractor started just the previous Monday and anticipate a week to completion. During the inspection, a portion of the trench was open, and roots were visible (Photo 10). I asked how they are bypassing the line during the construction. Ms. Trujillo explained that the hotel has enough capacity to contain the flow and that they just blocked the flow from entering the pipe. She added that they are watching the upstream manhole for any backups.



**Photo 10:** Open trench for the Rio Sands pipe replacement. Visible roots seen in trench.

### **Location 5: A1 Pump Station**

We then traveled to the A1 Pump Station located at the Seacliff State Beach in Aptos. Ms. Trujillo explained the recent storms destroyed the parking area and pedestrian walkways, so they were worried about the pump station (**Photo 11**). She stated that they hired a contractor to install a rock barrier to protect the pump station (**Photo 12**). She explained that the pump station services small, gated community on the beach, approximately 30 homes, and some of the homes on the bluff. Ms. Barranco stated that they want to install a new pump station on top of the bluff for the homes up there. At approximately 1250 hours, we broke for lunch.



**Photo 11:** Parking lot and walkway at the A1 Pump Station, destroyed by the recent storms.



**Photo 12:** Rock barrier placed at the A1 Pump Station to protect the pump station from the storms.

# **Location 6: Capitola Pump Station**

We regrouped at the Capitola Pump Station at approximately 1410 hours. Ms. Trujillo explained that they will be replacing their pumps (**Photo 13**) to help standardize them with the other pump stations. Mr. Sandoval added that they are also installing a new flow meter. Ms. Barranco stated that they have the parts for the replacement (**Photo 14**) and that the replacement will be done this year. I then asked to see the wet well, which was located in a gated area outside the main control room (**Photo 15**). There were sandbags surrounding the area of the wet well. Staff explained that they put the sandbags in place during the storms but that water levels did not reach the wet well. The wet well was observed to have some cobwebs but was otherwise in good condition with minimal FOG (**Photo 16**). I then asked about backup and emergency generators. Ms. Barranco stated that they have five to six diesel portable generators and that all pump stations aside from one have backup power. I asked how often maintenance is done on the generators. Staff confirmed that the mechanics do load testing on the generators every six months. The generator for the Capitola Pump Station was in good condition (**Photo 17**) and had a screen that showed the fuel level was at 92% (**Photo 18**). I asked how often the fuel level is maintained and Mr. Sandoval stated that the fuel is topped off after each use.



**Photo 13:** Old pumps at the Capitola Pump Station.



**Photo 14:** Replacement pumps for the Capitola Pump Station.



**Photo 15:** Wet well behind gate at Capitola Pump Station. Sandbags seen to the left used to protect wet well from recent storms.



**Photo 16:** Wet well at Capitola Pump Station with some cobwebs and minimal FOG.



**Photo 17:** Generator at the Capitola Pump Station.



**Photo 18:** Screen on generator showing 92% fuel level at the Capitola Pump Station.

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### **Location 7: Capitola Diner**

We then traveled to the Capitola Diner, located at 1900 41st Street, Capitola, for a FSE FOG inspection where we met up with Ms. Leslie Rios and Ms. Marisol Goulett, FOG Inspectors, as well as Ms. Tomlinson. Ms. Tomlinson explained that they have had issues with stormwater at the diner but that the diner is within the jurisdiction of the City of Capitola, and they have to work with the City to issue stormwater citations. The FOG inspectors informed us that the grease interceptor is old and that the last time they inspected the diner, in May 2022, the diner's interior drains were clogged. I observed that the interior drains were still clogged, and the FOG inspectors handed a BMP handbook to a diner employee. We then went outside to the back of the diner to look at the storm drain and grease interceptor. The FOG inspectors reiterated that they have had issues with the storm drain and at the time of the inspection, the storm drain appeared to have some type of soap in it (**Photo 19**).

The FOG inspectors then opened the grease interceptor. The interceptor was observed to have a high solids content and the FOG inspectors stated that the interceptors appeared to need pump out (Photo 20). I then asked how the FOG inspectors measure the solids percent. The FOG inspectors stated that they have a sludge dredge but that they typically rely on reviewing pumping records and will sometimes use a screwdriver to poke the FOG mat. Ms. Tomlinson explained that during the COVID-19 pandemic, some of the pumping cycles were changed due to fewer customers or business closures. Ms. Goulett stated that if they know a FSE is consistent and have recent pump out records, they may not open the interceptor as they try to be considerate with how busy the FSE is and the time of day. Ms. Tomlinson explained that corrective action forms are typically issued for failure to maintain their pumping cycle. Ms. Goulett stated that they will have the FSE increase their pump out frequency if needed and have a database with all the FSE pump out schedules. I then asked what a typical follow-up inspection looks like. Ms. Goulett explained that it depends on the violation, but they will usually follow-up with calls and emails. Directly adjacent to the interceptor was a container for used oil (Photo 21). The container had no secondary containment and was open. Oil from the container could be seen on the ground in front of the container. Ms. Goulett stated that the containers are required to be in a covered area, although it is difficult for many existing buildings. She explained that the container used to be near the storm drain but has since moved. We then looked at two manholes downstream of Capitola Diner. Both manholes were observed to have good flow with minimal debris and FOG (Photos 22 & 23).



**Photo 19:** Storm drain located outside, in the back of Capitola Diner.



**Photo 20:** Grease interceptor for the Capitola Diner with a visible high solids content.



**Photo 21:** Used oil container near the grease interceptor of Capitola Diner, visible spill on ground.



**Photo 22:** Manhole downstream of Capitola Diner with good flow and minimal FOG.



**Photo 23:** Manhole downstream of Capitola Diner with good flow and minimal FOG.

### **Location 8: Kristie Court Manhole**

We then drove over to Kristie Court, located in the Rodeo Gulch area. I confirmed with the County that the Rodeo Gulch area is their known capacity constrained area. Mr. Edler stated that no more than four new residential connections are allowed to be connected to existing lines. Ms. Trujillo explained that they will be lining the upper Rodeo line, upsizing the lower Rodeo line, and rehabilitating some of the manholes. We traversed through the backyard of one of the homes to a manhole directly adjacent to the gulch. Mr. Mathis explained that this is one of the manholes that is hard to access as they cannot access it with trucks. He explained that this location used to be constantly partially surcharged but that they are using JetBugs at this location, which has been a success. The manhole was observed to have some rust and corrosion but had good flow (Photo 24). Mr. Sandoval stated that they have a sign next to the manhole so residents can call them if they observe any issues (Photo 25).



**Photo 24:** Hard to access manhole near Kristie Court and the Rodeo Gulch. Location of JetBugs application.



**Photo 25:** Signage posted near the hard to access manhole.

# **Location 9: Rodeo Pump Station**

We then traveled to the Rodeo Pump Station. Ms. Trujillo stated that they will be building an auxiliary wet well for added capacity, which will be completed in FY 2024/2025. She explained that currently they have a response time of 15 minutes, so by building the auxiliary wet well, they will have more time to respond. There was an orange safety gate over the wet well. The wet well was deep and had minimal FOG (Photo 26). Staff informed us that they add Bioxide to the wet well for odor and corrosion control. I asked if staff could trigger the alarms. A pump station operator tripped the high-level alarm, and the alarms and lights went off as expected. The pump station had an onsite generator (Photo 27), and the fuel was approximately 75% full (Photo 28).



**Photo 26:** Safety gate over wet well at the Rodeo Pump Station. Minimal FOG observed.



**Photo 27:** Generator at the Rodeo Pump Station observed to be in great condition



**Photo 28:** Fuel level on generator indicating approximately 75% full.

### **Location 10: East Cliff Sewer Project**

We then traveled to the last location for the inspection which was the East Cliff sewer project. The project is located on a busy road and Ms. Trujillo stated that they have a blog on their website for road closures. Mr. Edler explained that they are also Public Works, so they coordinate with the road crew to evaluate pavement conditions. Ms. Trujillo explained that the pipe was in bad shape, and they are replacing it using open trench and PVC. She stated that once the pipe goes in, they will rehabilitate the manholes, since they are old, brick manholes. One of the manholes near the replacement project was observed to be clean and had exposed wire (**Photo 29**). Ms. Trujillo stated that the wires would be cleaned up when they replace the manhole.



**Photo 29:** Manhole near the East Cliff replacement project with exposed wire.

### **Inspection Debrief**

We returned to the operations facility located at the D.A. Porath Pump Station for a debrief. I thanked the County for accommodating us for the inspection and informed them that we would write an inspection report. I stated that, depending on our findings, there could be additional action or follow-up. I informed the County that there are concerns about the aging infrastructure but that it is good the County is addressing it in their budget and upcoming projects, and overall, the County has a well-run program for their system.

The inspection ended at approximately 1651 hours.

### POST-INSPECTION DOCUMENT REVIEW

After the inspection, OE reviewed the 2022 SSMP, SSO volume estimation worksheets, and the two technical reports for the large SSOs caused by the January 2023 storms. Documents and information reviewed are listed below along with a list of key items noted below:

### 2022 SSMP

- Notable changes to the 2022 SSMP from the 2017 version are as follows:
  - Moved Element 6: OERP to an appendix and added sample warning signs.
  - Added additional appendix to Element 4: O/M for contractor commitment.
  - Updated SSMP to reflect 186 miles of gravity sewers.
  - Added a Chain of Communications chart for reporting SSOs to Element 2: Organization.
  - Added use of Root X for root control and information on siphons, manhole inspections, CCTV, and odor control in Element 4: O/M.
  - Added language for CCTV and siphons in Element 4: O/M.
  - More frequent CCTV inspections for Grade 1-3 defects.
  - Incorporated the 2019 Flow Study into Element 8: System Evaluation and Capacity Assurance Plan.

- SSO Volume Estimation Worksheets
  - The County uses multiple worksheets created by DKF Solutions Group, LLC, to estimate SSO volumes.
    - Eyeball Estimation Method (<200 gallons spills).</li>
    - Drop Bucket Estimation Method (small spills where entire flow can be captured in a bucket).
    - Duration and Flow Rate Photo Comparison.
    - Area/Volume Method for Ponded Sewage.
    - Area/Volume Method for Sewage Contained in Storm Drain System.
    - Area/Volume Method for Sewage Contained in Roadway Gutter.
    - Flow Calculation Method.
    - Lift Station Estimation.
- SSO Technical Reports
  - o D.A Porath Facility SSO Event ID 885587
    - Technical report was submitted on March 1, 2023, 45 days after the spill event.
    - Storm event on January 16, 2023, resulted in a surge of I/I into the collection system causing the sonic head to be submerged, resulting in the D.A Porath Pump Station to go into emergency mode.
    - Total volume spilled of 376,764 gallons with 7,500 gallons recovered.
    - Spill did not result in beach closures and samples revealed no contamination for the Moran Lagoon and Moran County Beach.
    - Corrective actions include:
      - Installed a pressure transducer on February 8, 2023, allowing for a more accurate reading of the wet well elevations and allowing the transducer to be submerged.
      - Planned upgrades to develop a more robust SCADA system.
  - o 24th Avenue and Portola SSO Event ID 885563
    - Technical report was submitted on March 1, 2023, 45 days after the spill event.
    - Storm event on January 16, 2023, resulted in a surge of I/I into the collection system causing the sonic head to be submerged, resulting in the Rodeo Pump Station to go into emergency mode.
    - Total spill volume of 144,134 gallons with 0 gallons recovered.
    - Spill did not result in beach closures and samples revealed no contamination at the sampling locations.
    - Corrective actions include:
      - Planned upgrades to develop a more robust SCADA system.
      - Construct auxiliary wet well at the Pump Station for additional storage for current and wet weather flows.
      - Capital improvement projects for the Lower Rodeo Trunkline Replacement and Upper Rodeo Gulch Trunkline and Soquel Bridge Sewer Replacement to reduce I/I.

### 20

### **FINDINGS**

Based on a review of publicly available records, documents submitted by the County, and the observations of OE staff during the field inspection, OE staff identified the following areas of concern:

- 1. Corrosion or other damage to the metal components was observed in the Moran Pump Station wet well.
- 2. 50% of the County's gravity sewers are over 50 years old and consist of deteriorating ACP and VCP.
- 3. Multiple concerns regarding the environmental compliance program and FSE inspections.
  - a. Coordinating with the City of Capitola makes enforceability difficult for stormwater citations. Capitola Diner has a history of issues with their storm drain and citations have not been administered.
  - b. The County has a 25% allowable solids content numerical standard for FSE grease interceptors; however, the County conducts qualitative inspections. The County should have a way to determine compliance with their numerical standard.
  - c. Concerns that the County may not conduct sufficient follow-up inspections based on the amount of time that elapsed between inspections for the Capitola Diner, a known problematic FSE, and the fact that the County mostly relies on calls and emails for follow-up inspections.

### LIST OF ATTACHMENTS

Attachment A – Notice of Inspection

Attachment B – Pre-Inspection Questionnaire Response

Attachment C – Sign-In Sheet



APPENDIX 2A - List of Spills (2007-2024)

# Spill Public Report - Spill Event ID(s) Page

Here is the detail page of your Sanitary Sewer System Spill Report search for selected Regional Board, county, responsible agency, or sanitary sewer system. These results correspond to the following search criteria:

#### **SEARCH CRITERIA:** [REFINE SEARCH]

- WDID (3SSO10324)
- Spill Type (Category 1; Category 2; Category 3))
- Agency (Santa Cruz County Public Works)
- Agency (Santa Cruz County Public Works)

The table below presents important details from Enrollee-submitted certified spill events, as submitted through individual spill reports, which meet the search criteria selected on the Sanitary Sewer System (SSS) Spill Report Form. If data is not shown for a particular field, it means the Enrollee did not provide the information and was not required to do so. To view the entire spill report, select the corresponding "Spill Event ID".

### **DRILLDOWN HISTORY:**

REGION: 3

Event R	Region	Responsible Agency	Sewer System	WDID	Spill Category	Spill Start Date	Spill Vol (gal)	Spill Vol Recovered (gal)	Spill Vol Reached Surface Water (gal)	System Failure Location	Spill Appearance Point
<u>651932</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2007- 06-09 00:00	300	100	0	Main	Manhole
<u>653545</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 1	2007- 07-03 12:51	200	0	200	Main	Gravity sewer
<u>653646</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2007- 07-01 00:00	30	30	0	Main	Manhole
<u>655016</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2007- 07-24 16:45	800	0	0	Main	Manhole
<u>704887</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 1	2007- 09-23 15:55	340	0	340		Manhole
<u>708361</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2007- 11-26 18:10	50	0	0		Manhole
708362	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2007- 11-26 18:10	50	0	0		Manhole
<u>727063</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2008- 09-26 16:38	50	50	0	Main	Manhole
<u>727365</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2008- 10-02 00:00	40	40	0	Main	Manhole
<u>734966</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2009- 03-11 10:35	125	0	0		Manhole
<u>735109</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 1	2009- 03-13 12:42	225	0	225		Manhole
<u>735427</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2009- 03-23 12:50	75	0	0	Anne	Manhole

Appendix 2A (Page 1)

10/24, J.17 MVI		ciwqs.watero	varus.ca.ş	30 V/CIWq3/ICad	omy/r done.	керопо	SOSCI VICE.	reportid=sso_	overview_i	egioneereport/retion	-generatewregion-swagene
<u>736549</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 1	2009- 04-19 10:32	240	0	240		Manhole
<u>742347</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2009- 08-01 14:20	66	0	0		Gravity sewer
<u>744184</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2009- 08-31 00:00	50	0	0		Other sewer system structure
<u>746790</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2009- 11-15 07:57	200	0	0		Manhole
<u>747359</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2009- 12-07 08:55	20	0	0		Other sewer system structure
<u>748216</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 1	2010- 01-04 07:37	150	0	150		Gravity sewer
<u>757184</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2010- 09-25 14:00	20	0	0	Main	Gravity sewer
<u>757993</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 1	2010- 10-19 11:00	900	620	280	Main	Gravity sewer
<u>758366</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 1	2010- 11-03 08:11	100	0	100	Main	Gravity sewer
<u>759559</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2010- 12-16 12:45	200	100	0	Main	Gravity sewer
759642	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 1	2010- 12-19 10:04	500	0	500	Main	Gravity sewer
<u>759710</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2010- 12-20 16:08	150	0	0	Main	Manhole
<u>764868</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 1	2011- 03-26 10:48	100,000	0	100,000	At barscreen going into wet well causing all surround ing manholes to overflow.	Gravity sewer
<u>764947</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2011- 03-28 16:08	100	0	0	Main	Gravity sewer
<u>765071</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2011- 03-31 00:00	200	0	0	Main	Gravity sewer
<u>765092</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2011- 04-01 12:17	200	0	0	Main	Gravity sewer
<u>765265</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2011- 04-04 10:27	50	0	0	Main	Gravity sewer;Manhole
<u>765674</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 1	2011- 04-18 00:00	25,000	0	25,000	Main	Gravity sewer
<u>766468</u>	3	Santa Cruz County Public Works	Santa Cruz	3SSO10324		2011- 05-12 08:43	300	300	0	Main Appei	Gravity sewer andix 2A (Page 2)

			County CS								
<u>766472</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2011- 05-13 07:43	200	0	0	Main	Manhole
<u>770436</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2011- 08-27 09:58	850	850	0	Main	Gravity sewer
<u>771542</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3		60	60	0	Pump House	Building or structure
<u>772041</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2011- 10-11 18:23	60	0	0	Main	Gravity sewer
<u>774756</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3		50	0	0	Main	Gravity sewer
<u>775169</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 2	2011- 12-30 10:23	1,500	1,500	0	Main	Gravity sewer
<u>779312</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 2	2012- 03-31 11:02	1,000	1,000	0	Main	Gravity sewer
<u>781484</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2012- 05-09 07:30	500	0	0	Main	Other sewer system structure
<u>781742</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 2	2012- 05-26 12:05	1,600	0	0	Main	Gravity sewer;Manhole
<u>782027</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 1	2012- 06-06 17:25	3,000	0	1,000	Main	Gravity sewer;Manhole
<u>782529</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2012- 06-23 09:10	36	0	0	Main	Gravity sewer
<u>786193</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 1	2012- 09-04 08:00	100	0	100	Main	Gravity sewer
<u>788890</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 1	2012- 12-05 14:30	1,000	0	500	Main	Gravity sewer
<u>789705</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 1	2013- 01-04 08:52	300	0	300	Main	Gravity sewer
<u>791565</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2013- 02-09 00:00	10	0	0	Main	Manhole
<u>792154</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2013- 02-24 18:00	20	0	0	Main	Building or structure;Gravity sewer
<u>793353</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 1	2013- 04-11 08:15	400	100	100	Main	Gravity sewer
<u>793462</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2013- 04-17 09:00	500	0	0	Main	Gravity sewer;Manhole
<u>793605</u>	3	Santa Cruz County Public Works	Santa Cruz	3SSO10324		2013- 04-23 12:20	200	0	0	Main	Gravity sewer;Manhole ndix 2A (Page 3)
neelleiswae synta	rhoard	e ca govleiwaele	eadOnly/D	PublicReportSS	OServlet?ra	nortId=s	so overvia	w region&re	nort Action—		Sagency-Santa Cruz C

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Gravity sewer;Manhole	Main	90	0	100	2013- 05-02 11:10	Category 1	3SSO10324	CS Santa Cruz County CS	Santa Cruz County Public Works	<u>71</u> 3	<u>793971</u>
Gravity sewer;Manhole	Main	0	0	150	2013- 05-10 06:45	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	<u>57</u> 3	<u>794057</u>
Gravity sewer	Main	0	0	30	2013- 05-15 13:55	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	<u>05</u> 3	<u>794205</u>
Other sewer system structure	Main	0	0	10	2013- 07-04 00:00	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	<u>58</u> 3	<u>796558</u>
Gravity sewer;Manhole	Main	0	0	209	2013- 08-05 15:20	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	<u>39</u> 3	<u>797739</u>
Gravity sewer;Manhole	Main	1,000	0	1,000	2013- 08-18 21:00	Category 1	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	<u>l11</u> 3	<u>798111</u>
Gravity Mainline;Manhole	Manhole	0	0	165	2013- 10-02 15:05	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	<u>79</u> 3	<u>799379</u>
Manhole	Gravity Mainline	0	100	770	2013- 10-10 08:20	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	<u>15</u> 3	<u>800515</u>
Manhole	Gravity Mainline	0	100	975	2013- 10-20 12:00	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	<u>16</u> 3	<u>800516</u>
Manhole	Manhole	0	0	10	2013- 11-28 14:35	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	<u>46</u> 3	<u>801746</u>
Manhole	Gravity Mainline	0	0	120	2013- 12-17 11:45	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	<u>08</u> 3	802108
Gravity Mainline	Gravity Mainline	0	0	23,040	2014- 01-13 14:00	Category 2	355010324	Santa Cruz County CS	Santa Cruz County Public Works	<u>33</u> 3	<u>803433</u>
Gravity Mainline	Gravity Mainline	0	0	23,040	2014- 01-13 14:00	Category 2	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	<u>43</u> 3	<u>803443</u>
Manhole	Manhole	0	0	20	2014- 02-17 00:00	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	<u>00</u> 3	<u>804100</u>
Manhole	Manhole	0	35	35	2014- 02-20 11:55	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	<u>04</u> 3	<u>804104</u>
Manhole	Gravity Mainline	0	3	60	2014- 03-10 08:30	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	<u>311</u> 3	<u>804611</u>
Manhole	Gravity Mainline	0	0	2	2014- 03-22 11:30	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	<u>06</u> 3	<u>804906</u>
Manhole	Gravity Mainline	0	0	50	2014- 03-22 11:35	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	<u>08</u> 3	<u>804908</u>
Gravity Mainline;Manhole endix 2A (Page 4)	Gravity Mainline Appe	4,760	600	9,520	2014- 03-22 13:30		3SSO10324	Santa Cruz	Santa Cruz County Public Works	<u>74</u> 3	805074

		County CS						
<u>805591</u>	Santa Cruz 3 County Public Works	Santa	Category 201 04- 3 19:5	4- 15 20 55	0	0	Gravity Mainline	Manhole
<u>806830</u>	Santa Cruz 3 County Public Works	County 3SSO10324	Category 201 06-0 3 07:2	06 150	150	0	Gravity Mainline	Manhole
<u>807157</u>	Santa Cruz 3 County Public Works	333010324	Category 201 06-3 08:3	14 30	0	0	Gravity Mainline	Manhole
<u>807159</u>	Santa Cruz 3 County Public Works	3SSO10324	Category 201 06- 3 09:5	18 2	0	0	Gravity Mainline	Manhole
807340	Santa Cruz 3 County Public Works	Santa Cruz County CS	Category 201 06-2 10:0	23 20	20	0	Gravity Mainline	Manhole
<u>808275</u>	Santa Cruz 3 County Public Works	Santa Cruz County CS	Category 201 08-0 10:4	03 20	0	0	Lower Lateral (Public)	Inside Building or Structure
<u>809520</u>	Santa Cruz 3 County Public Works	3SSO10324	Category 201 09-2 11:5	26 69	69	0	Gravity Mainline	Manhole
<u>809952</u>	Santa Cruz 3 County Public Works	Santa Cruz County CS	Category 201 10-0 07:5	08 20	10	0	clean out	Lateral Clean Out (Private)
<u>810567</u>	Santa Cruz 3 County Public Works	Santa Cruz County CS	Category 201 10-2 09:5	27 150	150	0	Manhole	Gravity Mainline
<u>812917</u>	Santa Cruz 3 County Public Works	3SSO10324	Category 201 02-0 1 10:0	04 75	0	75	Manhole	Manhole
<u>814293</u>	Santa Cruz 3 County Public Works	Santa Cruz County CS	Category 201 03-2 3 09:2	27 60	30	0	Gravity Mainline	Manhole
<u>815224</u>	Santa Cruz 3 County Public Works		Category 201 05-3 10:0	10 30	0	0	Gravity Mainline	Manhole
<u>815676</u>	Santa Cruz 3 County Public Works	3SSO10324	Category 201 05-2 02:0	23 25	0	0	Public Clean Out	Lateral Clean Out (Public)
<u>816561</u>	Santa Cruz 3 County Public Works	County 3SSO10324	Category 201 07-	12 900	700	0	Air Relief Valve (ARV)/Blow-Off Valve (BOV)	Other sewer system structure
<u>817419</u>	Santa Cruz 3 County Public Works	County 3SSO10324	Category 201 08- 1 09:8	15 325	75	250	Manhole	Manhole
<u>818842</u>	Santa Cruz 3 County Public Works	3SSO10324	Category 201 10- 3 14:3	19 150	150	0	Clean Out	Lateral Clean Out (Private)
<u>819523</u>	Santa Cruz 3 County Public Works	County 3SSO10324	Category 201 3 18:	14 20	20	0	Gravity Mainline	Manhole
<u>821821</u>	Santa Cruz 3 County Public Works	3SSO10324	Category 201 02-0 20:3	07 150	5	0	Manhole	Manhole
822555	3 Santa Cruz County Public Works	Cruz	Category 201 3 03-0 06:0	01	0	0	Air Relief Valve (ARV)/Blow-Off Valve (BOV) Appe	Other sewer system structure ndix 2A (Page 5)

							County CS			
Air Relief Valve 0 (ARV)/Blow-Off Manhole Valve (BOV)	0	0	20	2016- 03-05 11:35	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	3	<u>822748</u>
390 Gravity Mainline Backflow Prevention Device	390	150	540	2016- 03-20 06:30	Category 1	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	3	<u>823114</u>
Pump Station- Controls Pump station	38	15	38	2016- 03-23 10:20	Category 1	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	3	<u>823257</u>
0 Gravity Mainline Lateral Clean Out (Private)	0	5	25	2016- 06-17 13:10	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	3	<u>825571</u>
0 Manhole Manhole	0	15	400	2016- 06-29 10:30	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	3	<u>825806</u>
4,686 Upper Lateral Manhole (Public)	4,686	18	4,686	2016- 09-26 07:30	Category 1	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	3	<u>828572</u>
Air Relief Valve 0 (ARV)/Blow-Off Valve (BOV) Other sewer system structure	0	2	15	2016- 11-16 08:30	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	3	<u>829850</u>
O Pump Station- Pump station Power	0	2	5	2016- 12-14 08:30	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	3	830743
0 Gravity Mainline Gravity Mainline	0	520	546	2017- 02-17 07:30	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	3	<u>833158</u>
Lateral Clean Out 0 Gravity Mainline (Private);Lower Lateral (Private)	0	393	393	2017- 06-28 14:15	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	3	<u>836568</u>
Gravity 6,595 Gravity Mainline Mainline;Manhole;Upper Lateral (Private)	6,595	450	8,466	2017- 08-16 07:30	Category 1	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	3	839050
0 Gravity Mainline Manhole	0	220	220	2017- 08-10 14:30	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	3	<u>840120</u>
0 Gravity Mainline Backflow Prevention Device	0	41	41	2017- 08-27 09:00	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	3	<u>840264</u>
0 Gravity Mainline Lateral Clean Out (Private)	0	19	20	2017- 08-28 10:00	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	3	<u>840265</u>
0 Pump Station- Other sewer system structure	0	51	56	2017- 10-17 09:55	Category 3	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	3	<u>841477</u>
10,880 Pump Station- Controls Pump station	10,880	15,328	10,880	2017- 11-13 10:07	Category 1	3SSO10324	Santa Cruz County CS	Santa Cruz County Public Works	3	<u>841614</u>
O Observed Pump station seepage from the interior of the pump station through the deformed steel cover for the window to the exterior pump room stairwell and around "watertight"ends		100	100	2018- 01-08 21:17	0 ,	3SSO10324		Santa Cruz County Public Works	3	843814

10144, 7.11 ANVI		ciwqs.watert	oaius.ca.g	goviciwysiicau	Omy/Fuone	Keports	SOServiet?re	eportia=sso_o		egion&reportAction= doors after storm	egenerate&region=3&agency
<u>844072</u>	3	Santa Cruz County Public Works	County	3SSO10324	Category 3		287	280	0	water in stairwells was vacuumed. Root intrusion approximately 10' downstream from manhole AL	Manhole
<u>844680</u>	3	Santa Cruz	Santa Cruz County CS	3SSO10324	Category 3	2018-	153	153	0	121 Manhole	Other sewer system structure
<u>844686</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	3SSO10324	Category 3	2018- 01-26 08:55	80	80	0	Manhole	Manhole
<u>846591</u>	3	Santa Cruz County Public Works	Santa	3SSO10324	Category 3	2018- 03-21 10:13	35	34	0	Manhole	Manhole
<u>846793</u>	3	Santa Cruz County Public Works	Santa	3SSO10324	Category 3		18	18	0	Air Relief Valve (ARV)/Blow-Off Valve (BOV)	Other sewer system structure
<u>847486</u>	3	Santa Cruz County Public Works	Santa	3SSO10324	Category 3	2018- 04-18 15:57	99	99	0	Manhole	Manhole
<u>850828</u>	3	Santa Cruz County Public Works	Santa	3SSO10324	Category 3	2018- 08-30 21:10	5	0	0	Gravity Mainline	Inside Building or Structure
<u>854469</u>	3	Santa Cruz County Public Works	Santa	3SSO10324	Category 3	11-//	5	0	0	Gravity Mainline	Lateral Clean Out (Private)
<u>855144</u>	3	Santa Cruz County Public Works	Santa	3SSO10324	Category 1	2019- 01-05 17:15	18,850	100	18,850	Gravity Mainline	Manhole
<u>855181</u>	3	Santa Cruz County Public Works	Santa	3SSO10324	Category 3	2018- 12-19 07:20	1	0	0	Gravity Mainline	Lateral Clean Out (Private)
<u>857481</u>	3	Santa Cruz County Public Works	Santa	3SSO10324	Category 3	2019- 03-14 12:35	50	45	0	Gravity Mainline	Other sewer system structure
<u>857795</u>	3	Santa Cruz County Public Works	Santa	3SSO10324	Category 3	U4-Uh	1	0	0	Gravity Mainline	Lateral Clean Out (Private)
<u>859587</u>	3	Santa Cruz County Public Works	Santa	3SSO10324	Category 1	2019- 07-02 16:45	3,566	2,005	49	Pump Station- Controls	Force Main;Lateral Clean Out (Private)
<u>860028</u>	3	Santa Cruz County Public Works	Santa	3SSO10324	Category 3		76	48	0	Manhole	Manhole
<u>861311</u>	3	Santa Cruz County Public Works	Santa	3SSO10324	Category 3		4	1	0	Gravity Mainline	Manhole
<u>862555</u>	3	Santa Cruz County Public Works	Santa	3SSO10324	Category 3	2019- 09-30 11:29	79	75	0	Air Relief Valve (ARV)/Blow-Off Valve (BOV)	Manhole
862912	3	Santa Cruz County Public Works	Santa	3SSO10324	Category 3		9	0	0	Manhole	Manhole
<u>864672</u>	3	Santa Cruz County Public Works	Santa	3SSO10324	Category 3		325	113	0	Gravity Mainline	Lateral Clean Out (Private)
			33							Appen	ndix 2A (Page 7)

		Santa Cruz	Santa	Catagony	2020-		•			
<u>868030</u>	3	County Public Works	Cruz 3SSO10324 County CS	3	07-09 09:15	75	21	0	Gravity Mainline	Manhole
<u>868102</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 3	2020- 07-19 11:50	2	0	0	Gravity Mainline	Backflow Prevention Device
<u>870096</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 3	2020- 10-12 12:59	209	0	0	Gravity Mainline	Lateral Clean Out (Private)
<u>870431</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 3	2020- 11-04 09:00	46	0	0	Gravity Mainline	Lateral Clean Out (Private)
<u>871036</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 3	2020- 11-21 12:00	29	28	0	Gravity Mainline	Lateral Clean Out (Private)
<u>874354</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 3	2021- 05-06 09:50	122	34	0	Gravity Mainline	Manhole
<u>875348</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 1	2021- 07-17 07:56	897	789	54	Gravity Mainline	Manhole
<u>875620</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 1	2021- 07-29 17:18	1,589	0	1,461	Gravity Mainline	Manhole
<u>875642</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 3	2021- 07-14 19:35	868	0	0	Gravity Mainline	Lateral Clean Out (Private)
<u>875926</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 3	2021- 07-23 17:02	210	3	0	Gravity Mainline	Manhole
<u>876000</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 3	2021- 07-30 19:20	3	0	0	Gravity Mainline	Lateral Clean Out (Private)
<u>876005</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 1	2021- 08-24 10:10	2,536	946	1,268	Gravity Mainline	Lateral Clean Out (Private)
<u>878627</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 3	2021- 12-07 20:00	122	97	0	Gravity Mainline	Manhole
<u>878631</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 3	2021- 12-22 12:29	2	0	0	Gravity Mainline	Manhole
<u>879897</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 3	2022- 02-18 07:50	122	0	0	Gravity Mainline	Lateral Clean Out (Private)
<u>880661</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 3	2022- 03-21 09:30	169	98	0	Gravity Mainline	Manhole
<u>883786</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 3	2022- 09-17 00:00	86	80	0	Gravity Mainline	Inside Building or Structure
<u>884370</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 3	2022- 10-30 08:20	21	5	0	Gravity Mainline	Gravity Mainline
<u>884374</u>	3	Santa Cruz County Public Works	Santa Cruz County CS	Category 1	2022- 11-17 10:48	736	678	671	Gravity Mainline	Manhole

<u>885355</u>	Santa Cruz County Public Works	County 3SSO10324	Category 0	2023- 01-08 00:00	4,601	3,025	1,576	Gravity Mainline	Manhole
<u>885563</u>	Santa Cruz 3 County Public Works	County 3SSO10324	Category 0	2023- 01-16 14 00:00	14,134	0	144,134	Pump Station- Controls	Manhole
<u>885587</u>	Santa Cruz 3 County Public Works	County 3SSO10324	Category 0	2023- 01-16 37 02:47	76,764	7,500	369,264	Pump Station- Controls	Manhole
<u>885661</u>	Santa Cruz 3 County Public Works	County 3SSO10324	Category 1	2022- 12-28 07:30	8	0	0	Gravity Mainline	Inside Building or Structure;Lateral Clean Out (Private)
<u>886307</u>	Santa Cruz 3 County Public Works	County 3SSO10324	Category 0	2023- 01-24 12:32	72	45	0	Air Relief Valve (ARV)/Blow-Off Valve (BOV)	Manhole
<u>887543</u>	Santa Cruz 3 County Public Works	County 3SSO10324	Category 0	2023- 04-04 13:00	273	0	273	Gravity Mainline	Upper Lateral (Private)
<u>887545</u>	Santa Cruz 3 County Public Works	County 3SSO10324	Category 0	2023- 03-08 14:20	17	0	0	Gravity Mainline	Lateral Clean Out (Private)
<u>888256</u>	Santa Cruz 3 County Public Works	County 3SSO10324	Category 0	2023- 05-13 09:31	295	17	278	Gravity Mainline	Gravity Mainline
<u>891376</u>	Santa Cruz 3 County Public Works	3SSO10324	Monthly 2 Category 1 3 Spill 0	11-01	492	293		Gravity Mainline	Manhole
<u>891931</u>	Santa Cruz 3 County Public Works	County 3SSO10324	Monthly 2 Category 1 3 Spill 0	12-13	143	10		Manhole	Inside Building or Structure,Lateral Clean Out (Private)
<u>894825</u>	Santa Cruz 3 County Public Works	County 3SSO10324	Category 2 1 Spill 0	2024- 05-11 07:10	1,332	5	1,332	Gravity Mainline,Other (specify below)	Manhole
<u>897409</u>	Santa Cruz 3 County Public Works	County 3SSO10324	Monthly 2 Category 1 3 Spill 1	10-08	680	67		Gravity Mainline	Lateral Clean Out (Private)

The current report was generated with data as of: Wednesday, December 18, 2024



APPENDIX 2B - State Water Board Collection System Operational Report (2024)

California Home Tuesday, September 30, 2025

[EXPORT THIS REPORT TO EXCEL]

California Integrated Water Quality System Project (CIWQS)

## Spill Public Report - Spill Event ID(s) Page

Here is the detail page of your Sanitary Sewer System Spill Report search for selected Regional Board, county, responsible agency, or sanitary sewer system. These results correspond to the following search criteria:

#### **SEARCH CRITERIA:** [REFINE SEARCH]

- WDID (3sso10267)
- Spill Type (Category 1; Category 2; Category 3))
- Agency (Freedom CSD)

[VIEW PRINTER FRIENDLY VERSION]

The table below presents important details from Enrollee-submitted certified spill events, as submitted through individual spill reports, which meet the search criteria selected on the Sanitary Sewer System (SSS) Spill Report Form. If data is not shown for a particular field, it means the Enrollee did not provide the information and was not required to do so. To view the entire spill report, select the corresponding "Spill Event ID".

DRILLDOWN HISTORY: [GO BACK TO SUMMARY PAGE]

REGION: 3

Event ID	Region	Responsible Agency	Sewer System	WDID	Spill Category	Spill Start Date	Spill Vol (gal)	Spill Vol Recovered (gal)	Spill Vol Reached Surface Water (gal)	System Failure Location	Spill Appearance Point
<u>741219</u>	3	Freedom CSD	Freedom Co Sanitation District CS	3SSO10267	Category 3	2009- 07-14 09:30	90	75	0		Force main or pressure sewer
<u>786716</u>	3	Freedom CSD	District CS	3SSO10267	Category 3	2012- 09-25 15:50	20	20	0	Inside pump station. Hose failure	Building or structure
<u>791758</u>	3	Freedom CSD	Freedom Co Sanitation District CS	3SSO10267	Category 1	2013- 02-14 08:45	40	0	20	Main	Building or structure
<u>811086</u>	3	Freedom CSD	Freedom Co Sanitation District CS	3SSO10267	Category 3	2014- 11-21 16:20	240	240	0	Gravity Mainline	Gravity Mainline
<u>811791</u>	3	Freedom CSD	Freedom Co Sanitation District CS	3SSO10267	Category 3	2014- 12-27 10:30	40	40	0	Gravity Mainline	Manhole
<u>811797</u>	3	Freedom CSD	Freedom Co Sanitation District CS	3SSO10267	Category 3	2014- 12-27 16:30	450	150	0	Gravity Mainline	Manhole
<u>831513</u>	3	Freedom CSD	Freedom Co Sanitation District CS	3SSO10267	Category 3	2016- 12-23 06:00	421	50	0	Gravity Mainline	Lateral Clean Out (Public)
832874	3	Freedom CSD	Freedom Co Sanitation District CS	3SSO10267	Category 1	2017- 02-16 13:28	127	0	103	Force Main	Manhole
<u>845978</u>	3	Freedom CSD	Freedom Co Sanitation District CS	3SSO10267	Category 3	2018- 02-27 10:58	30	28	0	the failure was an electro- mechanical issue on the combination vac/flush truck being used in cleaning operations at our Diamond Estates lift station	Other sewer system structure
<u>858402</u>	3	Freedom CSD	Freedom Co Sanitation District CS	3SSO10267	Category 3	2019- 05-06 07:00	1	0	0	Suction hose on pump # 1 developed a pin hole leak that caused liquid to discharge when pump would start up.	Pump station
<u>858529</u>	3	Freedom CSD	Freedom Co Sanitation District CS	3SSO10267	Category 3	2019- 05-17 10:00	255	255	0	Gravity Mainline	Lateral Clean Out (Private)
870488	3	Freedom CSD	Freedom Co Sanitation	3SSO10267	Category 3	2020- 11-05	3	3	0	Gravity Mainline	Manhole

<u>897120</u>	3	Freedom Co CSD Sanitation 3SSO District CS	0267 Category 2 Spill	2024- 10-19 11:56	1,646	500		Gravity Mainline	Manhole
<u>895247</u>	3	Freedom Co CSD Sanitation 3SSO District CS	0267 Category 1 Spill	2024- 06-08 21:10	528	491	483	Gravity Mainline	Manhole
<u>884373</u>	3	Freedom Co CSD Sanitation 3SSO District CS	0267 Category 3	2022- 10-30 00:00	79	66	0	Gravity Mainline	Manhole
<u>875382</u>	3	Freedom Co CSD Freedom Co Sanitation 3SSO District CS	0267 Category 3	2021- 07-02 17:00	48	41	0	Gravity Mainline	Other sewer system structure
<u>875262</u>	3	District CS Freedom Co Sanitation 3SSO District CS	0267 Category 2	18:59 2021- 07-11 08:44	1,599	165	0	Gravity Mainline	Manhole

The current report was generated with data entered by Enrollees on the previous day.

25 ✓ Records/Page

Go To Page: 1

Page 1 of 1

Back to Main Page Back to Top of Page

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California Home Wednesday, December 18, 2024



California Integrated Water Quality System Project (CIWQS)

#### **COLLECTION SYSTEM OPERATIONAL REPORT**

Please see the <u>Glossary of Terms</u> for explanations of the search results column headings. <u>More information about the report is found at the bottom of this page</u>.

Click to Print This Page (Select Printer as Adobe PDF)

SEARCH CRITERIA: [REFINE SEARCH] [NEW SEARCH] [GLOSSARY]

WDID (3SSO10324)

Date Range: Start\_Date (12/18/2023) End\_Date (12/18/2024)

DRILLDOWN HISTORY: [GO BACK TO LISTING OF COLLECTION SYSTEMS]

Santa Cruz County CS

Agency: Santa Cruz County Public Works

## **General Information**

- +

RegionPlace IDPlace NameCS CategoryPlace AddressPlace County3631759Santa Cruz County CSMunicipal(Public)701 Ocean Santa Cruz CA 95060Santa Cruz



# **Collection System Spill Summary**

Operational Indices: Santa Cruz County CS

	Spill Rate Indice (spills/100mi/yr)											
	Category 1			Categ	ory 2	Category 3						
	Main System	Laterals	Other	Main System	Other	Main System	Other					
Santa Cruz County CS	0.5	N/A	0.0	0.0	0.0	0.5	0.0					
State Municipal(Public) Average	<u>3.14</u>	N/A	0.89	1.74	0.62	<u>3.73</u>	1.29					
Region Municipal Average	<u>2.93</u>	N/A	0.0	2.63	0.0	2.39	1.26					

	Net Volume Spills Indice (gallons/1000 Capita/yr)											
		Category 1		Categ	gory 2	Category 3						
	Main System	Laterals	Other	Main System	Other	Main System	Other					
Santa Cruz County CS	18.33	N/A	0.0	0.0	0.0	8.47	0.0					
<u>State</u> Municipal(Public) Average	<u>-10462.77</u>	N/A	<u>1338.81</u>	<u>496.05</u>	68.28	101.23	<u>5.26</u>					
Region Municipal Average	<u>1811.42</u>	N/A	0.0	<u>503.15</u>	0.0	<u>34.65</u>	11.24					

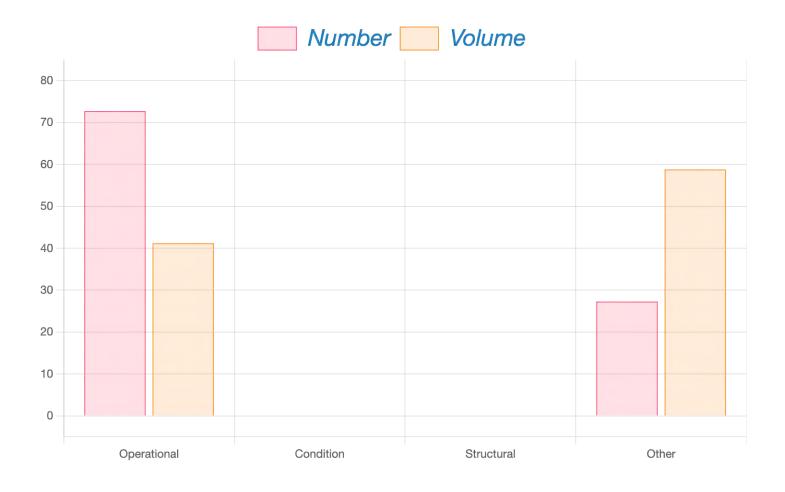
#### Note: Click on hyperlinks to get comparison charts for CS, Region, and State grouped by 'Miles Of Pipe'.

- (1) The number of Category 1, 2 and 3 SSOs resulting from a failure in the Enrollee sewer system per 100 miles sewer system owned by the Enrollee per year.
- (2) Net Volume (volume spilled minus volume recovered) of SSOs, for which the reporting Enrollee is responsible, per capita (i.e. the population served by your agency's sanitary sewer system), per year.
- (3) Value calculated using miles of force mains and other pressure systems and miles of gravity sewers the agency is responsible for.
- (4) Value calculated using miles of laterals the agency is responsible for (Lower Only, UpperLower). For collection systems with no lateral responsibility a N/A is shown.
- (5) Value Calculated using total miles of collection system pipe the agency is responsible for.
- (6) Comparison made between similar collection systems type (e.g. municipal) and lateral responsibility for the entire state over the selected time period. Comparison indices are calculated for all similar collection systems and averaged for comparison.
- (7) Comparison made between similar collection systems type (e.g. Municipal) and lateral responsibility for collection systems in same region (e.g. Region 5S). Collection system indices are calculated for all similar collection systems and averaged for comparison. For airport, hospital, marinas, military, park, port, prison, school, and other collection systems facilities, only state comparison is shown.
- (8) For Criteria used and term definitions refer to the SSO Glossary of Terms.
- (9) Other: Includes spills caused by vandalism, surcharged pipe, operator error, and unknown causes.



## Percentage of total Number and Volume of SSOs by Spill Cause

Collection System: Santa Cruz County CS



# Percentage of total Volume of SSOs by Spill Cause

Operational: Debris from Construction, Debris from Lateral, Debris-General, Debris-Rags, Fats and Oils and Grease, Root Intrusion, Debris-Wipes/Non-Disposable

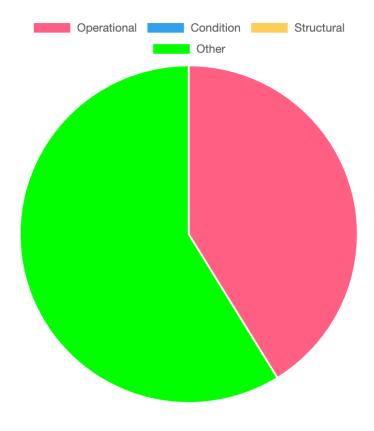
Condition: Flow Exceeded Capacity (Separate CS Only), Natural Disaster, Rainfall Exceeded Design, II (Separate CS Only)

Structural: Air Relief Valve (ARV)/Blow-Off Valve (BOV) Failure , Pipe Structural Problem/Failure, Pipe Structural Problem/Failure - Installation, Pump Station Failure-Controls, Pump Station Failure-Mechanical, Pump Station Failure-Power, Siphon Failure

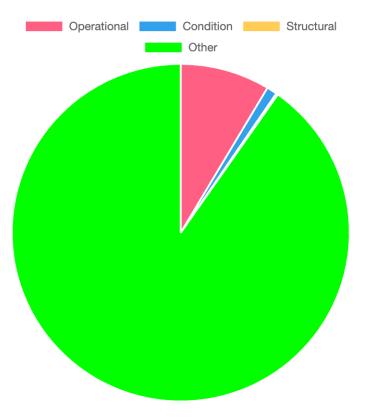
Other: Construction Diversion Failure, CS Maintenance Failure, Damage by Others Not Related to CS Construction/Maintenance (Specify Below), Inappropriate Discharge to CS, Operator Error, Other (specify below), Surcharged Pipe (Combined CS Only), Vandalism

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Santa Cruz County CS

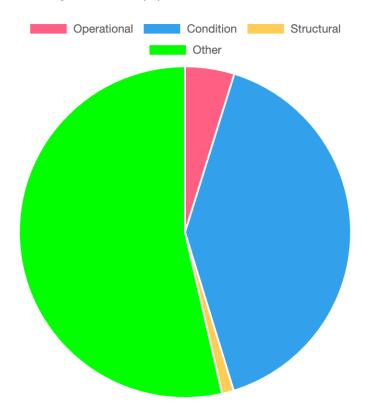


Region 3



State of California

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# Percentage of total Number of SSOs by Spill Cause

**Operational:** Debris from Construction, Debris from Lateral, Debris-General, Debris-Rags, Fats and Oils and Grease, Root Intrusion, Debris-Wipes/Non-Disposable

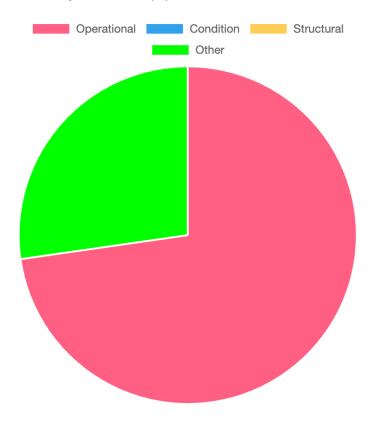
Condition: Flow Exceeded Capacity (Separate CS Only), Natural Disaster, Rainfall Exceeded Design, II (Separate CS Only)

Structural: Air Relief Valve (ARV)/Blow-Off Valve (BOV) Failure , Pipe Structural Problem/Failure, Pipe Structural Problem/Failure - Installation, Pump Station Failure-Controls, Pump Station Failure-Mechanical, Pump Station Failure-Power, Siphon Failure

Other: Construction Diversion Failure, CS Maintenance Failure, Damage by Others Not Related to CS Construction/Maintenance (Specify Below), Inappropriate Discharge to CS, Operator Error, Other (specify below), Surcharged Pipe (Combined CS Only), Vandalism



Santa Cruz County CS

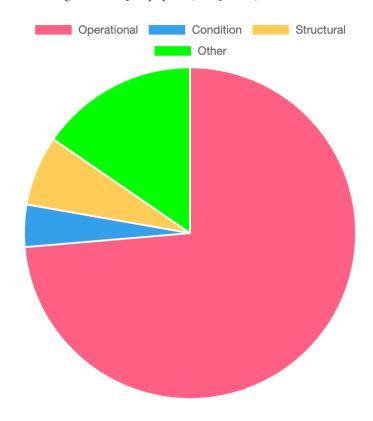


Region 3



State of California

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# **Collection System Annual Report Data(\*)**

Collection System Information: Santa Cruz County CS

Status Last Updated On Population Served Miles of Force Main Miles of Gravity Sewer Portion of Laterals Responsible Miles of Laterals Responsible Number of Lateral Connections Total pumps 2020 Current Total pumps 2020 Current Total pumps 1980 1999 Total pumps 1980 1979 Total pumps 1960 1979 Total pumps 1940 1959 Total pumps 1940 1959 Total pumps 1920 1939 Total pumps 1900 1919 Total pumps Before 1900 Inaccessible Sewer (Miles) Sewer Clear Production (Miles/Yr)	Certified 2024-03-21 12:04:07 72200 14 186 None 0 0 0 6 2 27 0 0 0 0 3 44
Sewer System Inspected (Miles/Yr)	18

(\*) The information presented above was provided by the Enrollee in the Collection System Questionnaire. Enrollees are required to update the questionnaire information at least once a year; therefore, the information presented above may not be the most current.

**Enrollee: Santa Cruz County CS** 

## Sewer System Management Plan (SSMP) Due Dates (\*)

 SSMP Due Date
 Certification Date
 Access SSMP

 08/02/2025
 null
 N/A

 08/02/2031
 null
 Appendix 2B (Place 7)

## Audit Report Due Dates (\*\*)

Audit Period 08/02/2021 to 08/02/2024 08/03/2024 to 08/02/2027 Audit Report Due 02/02/2025 02/02/2028 **Certification Date** 

#### Additional Information:

- Data used for the Operational report is reported by the enrollees through the CIWQS (California Integrated Water Quality System) SSO module.
- Indices are calculated for the date range specified (default is past 4 months) and using data available since reporting was required for all enrollees as specified in the Sanitary Sewer Systems WDR. Reporting was required to begin for Regions 4,8,9 on 1/2/2007, Regions 1,2,3 on 5/2/2007, and, Regions 5,6,7 on 9/2/2007.
- Comparisons are made between similar collection systems type (e.g. Municipal), and lateral responsibility for the entire state and region. Indices are calculated for all similar collection systems and averaged for comparison.
- Category 1 and 2 spills are required to be fully certified 15 calendar days after SSO response conclusion and Category 3 spills are required to be fully certified 30 Calendar days after end of calendar month which SSO occurred. Therefore, spill records for the past approximately 60 days may be incomplete.
- Average Number of Spills per 100 miles: Measures the number of sewer overflows per 100 miles of sewer lines. Notice that
  these indices are strongly influenced by the length of collection system owned by the enrollee.
  - O For instance, an enrollee that owns and operates a collection system of one (1) mile in length having only one (1) spill (analyzing data for ONE year) will have a Operational indice of 100.0 spills/100mi/yr. On the other hand, an enrollee that owns and operates a collection system of one hundred (100) miles in length having only one (1) spill (analyzing data for ONE year) will have a Operational indice of 1.0 spills/100mi/yr.
- Average Net Volume (volume spilled minus volume recovered) of Spills per Capita: Measures the volume in gallons of SSOs, for which the reporting Enrollee is responsible, per capita (the population served by your agency's sanitary sewer system). Where the volume recovered is greater than the volume spilled, the net volume will be considered to be zero.
- The "agency" or Enrollee listed on a SSO report is responsible for the data presented in this report and should be contacted directly for questions related to their Data.
- More information on the Sanitary Sewer Overflow Reduction program is available at: <a href="http://www.waterboards.ca.gov/water">http://www.waterboards.ca.gov/water</a> issues/programs/sso/index.shtml
- The Sanitary Sewer Overflows Incident Map is available at: <a href="http://www.waterboards.ca.gov/water">http://www.waterboards.ca.gov/water</a> issues/programs/sso/sso map/sso pub.shtml
- The Interactive SSO report: <a href="https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?">https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?</a> reportAction=criteria&reportId=sso main

The current report was generated with data as of: Tuesday, December 17, 2024 Regional Boards are in the process of entering backlogged data.

As a result, data may be incomplete.

<sup>\*</sup> A Sewer System Management Plan (SSMP) is a living document an Enrollee develops and implements to effectively manage its sanitary sewer system(s). Section 5.2 and Attachment E1 section 3.11 of the General Order requires an Enrollee to provide and certify the SSMP in CIWQS Sanitary Sewer Systems data base every six years.

<sup>\*\*</sup> The Legally Responsible Official shall upload and certify an audit report into the online CIWQS Sanitary Sewer System Database per the requirements in section 3.10 of Attachment E1 of the General Order.

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California Integrated Water Quality System Project (CIWQS)

#### **Facility At-A-Glance Report**

[VIEW PRINTER FRIENDLY VERSION] [EXPORT THIS REPORT TO EXCEL]

SEARCH CRITERIA: [REFINE SEARCH] [NEW SEARCH] [GLOSSARY]

Place ID **631968** 

- +

sso

В

**General Information** 

RegionPlace IDPlace NamePlace TypePlace AddressPlace County3631968Freedom Co Sanitation District CSCollection System701 Ocean 410 Santa Cruz, CA, 95060Santa Cruz

+

**Related Parties** 

**Total Related Parties: 16** 

Ξ

Regulatory Measures

Reg Measure IDReg Measure TypeRegionProgramOrder No.WDIDEffective DateExpiration DateStatusAmended?301446Enrollee3SSOMUNISML2022-0103-DWQ3SSO1026707/27/2006ActiveN

**Total Reg Measures: 1** 

-

**Violations** 

 Violation ID
 Occurred Date
 Violation Type
 (-) Violation Description
 Corrective Action
 Status
 Classification
 Source

Plan Rehabilitation or

Type: Category 1 Spill; Construction Diversion Failure caused 528 gallons of sewage to spill

Failure caused 528 gallons of sewage to spill Replacement of Sewer. Contractor 1134116 06/08/2024 SSOS from Manhole at Littleway Lane and Roe Avenue installed two bypass pumps and Violation

to Drainage Conveyance System, Paved

to Drainage Conveyance System, Paved added 24hr staff to monitor bypass Surface, Street/Curb and Gutter (2 3) equipment.

Report displays most recent five years of violations. Refer to the <u>Interactive Violation Report</u> for more data.

Total Violations: 1

Priority Violations: 0

\*Click the "(+/-) Violation Description" link to expand and contract the violation description.

\*As of 5/20/2010, the Water Board's Enforcement Policy requires that all violations be classified as 1, 2 or 3, with class 1 being the highest. Prior to this, violations were simply classified as Yes or No. If a 123 classification has been assigned to a violation that occurred before this date, that classification data will be displayed instead of the Yes/No data

**Violation Types** 

SSOS = Sanitary Sewer Overflow/Spill/

-

**Enforcement Actions** 

<u>Enf Id</u> <u>Enf Type</u> <u>Enf Order No.</u> <u>Effective Date</u> <u>Status</u>

Total Enf Actions: 0

Inspections

Inspection ID Inspection Type Lead Inspector Actual End Date Planned Violations Attachment

Total Inspections: 0 Last Inspection: None

The current report was generated with data as of: 09/30/2025 Regional Boards are in the process of entering backlogged data.

As a result, data may be incomplete.

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APPENDIX 2C - Collection System Performance Benchmark Report (2007-2024)



The purpose of this Appendix is to provide a spill benchmarking report to present the Agency's spill metrics and other data for assisting managers and regulators comprehensively assess the system spill reduction performance over time. The report utilizes available data from the State Water Board online database (CIWQS) and Fischer Compliance LLC's customized modeling software including development of comprehensive data visualizations to compare the Agency's benchmarks against other sewer collection system operators located within the same region.

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Figure 4 - Spill recovery metrics (compared with other agencies in region, 2007-2024)	е
Figure 5 - Spill Volumes by year, 2007-2024	
Figure 6 - City Spill Causes by volume compared with other Region 8 agencies (2007-2024)	
Figure 7 - Spill Causes by # of spills (2007-2024)	
Figure 8 - Spill Causes by Volume of spills (compared with other agencies within region, 2007-2024)	10
Figure 9 - Spill Locations Where Failures Occurred (compared to other agencies in region, 2007-2024)	



Figure 1 – Spill Dashboard (2007-2024)

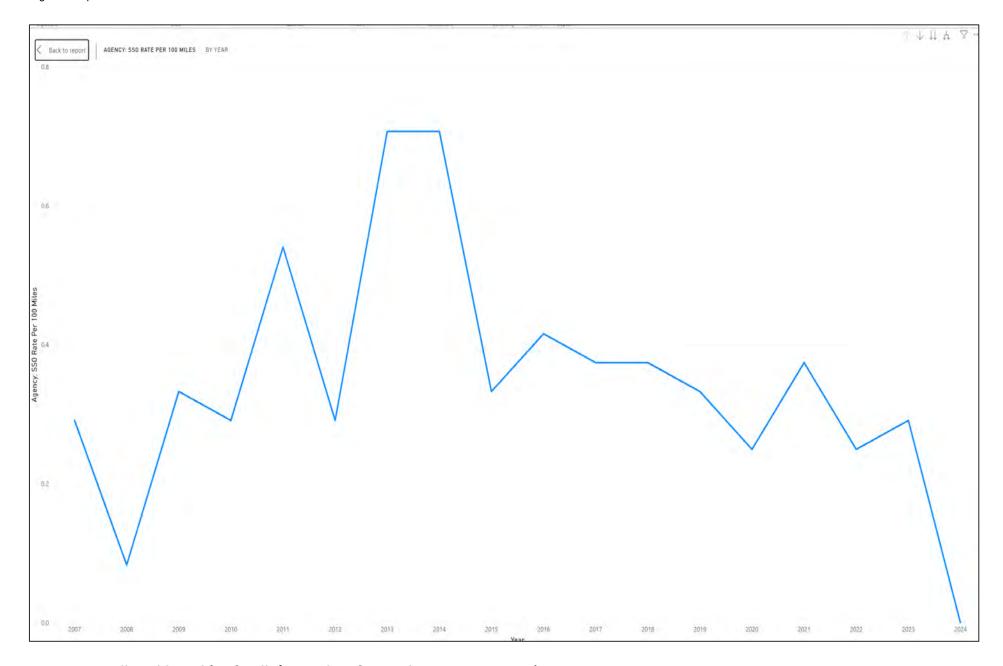


Figure 2 – Spill Dashboard (# of spills/100 miles of sewer by year, 2007-2024)

Observation: The # of spills/100 miles of sewers has significantly decreased since 2022.

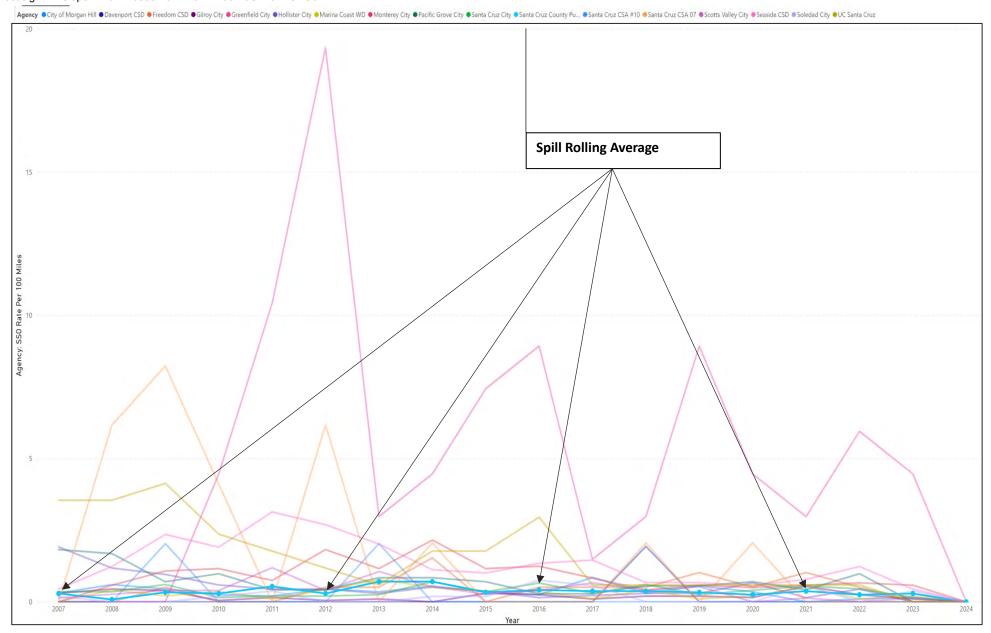


Figure 3 – Spill rolling averages (# of spills/100 miles of sewer compared with other agencies in region, 2007-2024)

Observation: The # of spills/100 miles of sewers is lower than several other agencies within the region.

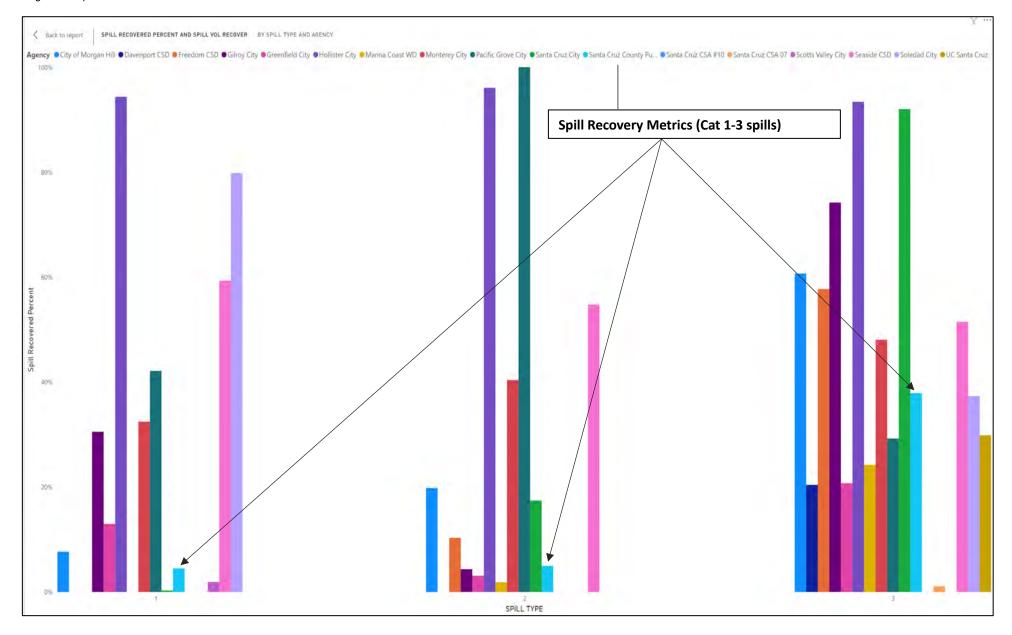


Figure 4 - Spill recovery metrics (compared with other agencies in region, 2007-2024)

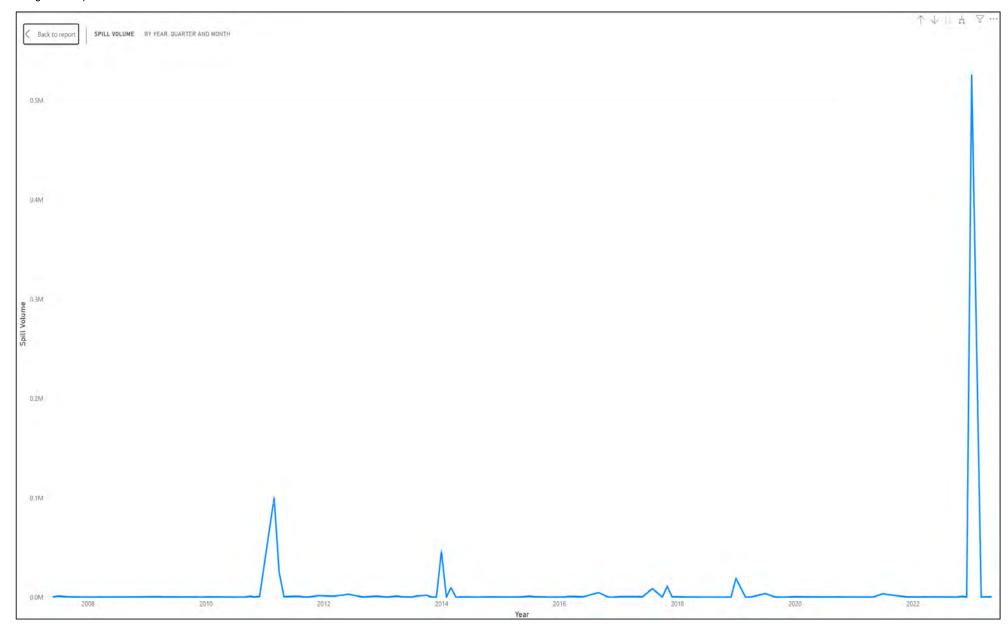


Figure 5 - Spill Volumes by year, 2007-2024

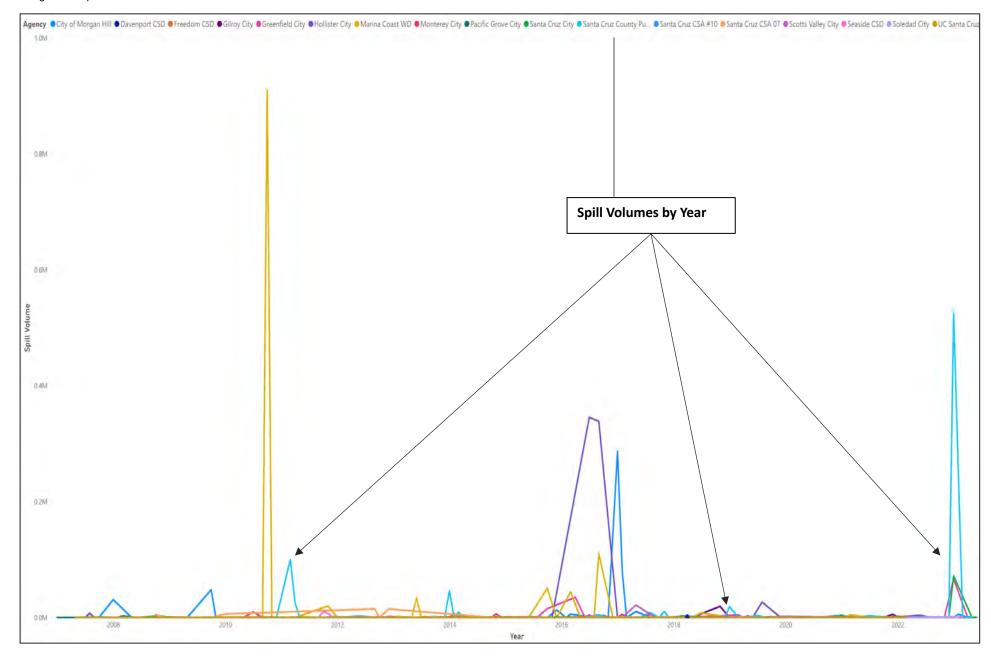


Figure 6 - Spill Volumes by year (compared with other agencies in region, 2007-2024)

<u>Observation:</u> The spill volume overall trend is lower than many other agencies within the region.

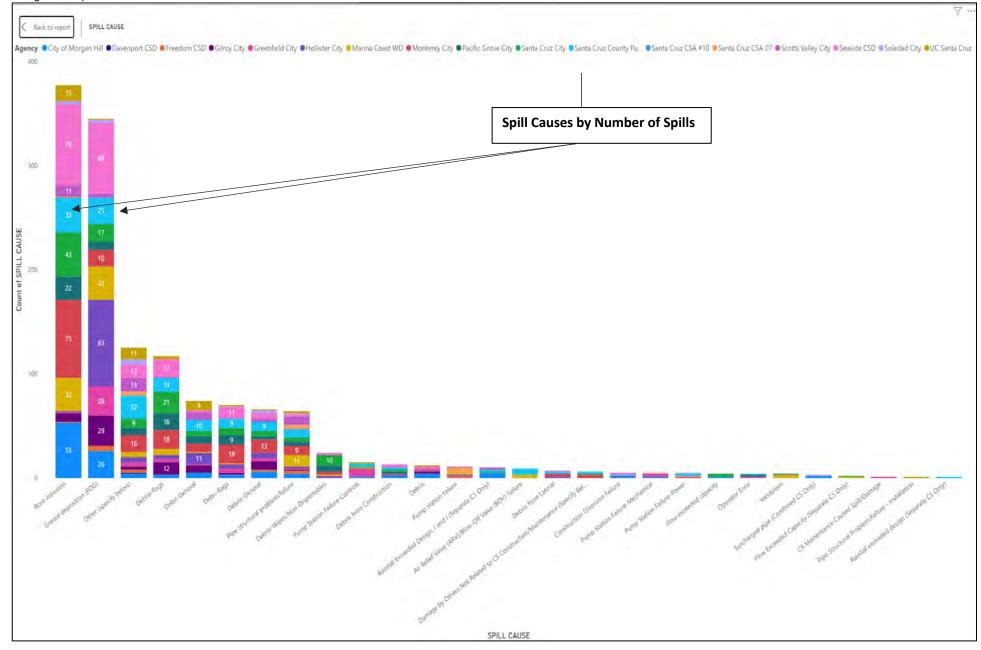


Figure 7 - Spill Causes by # of spills (2007-2024)

Observation: The main spill causes (by # of spills) are Roots and Fats, Oils, and Grease (FOG) by # of spills

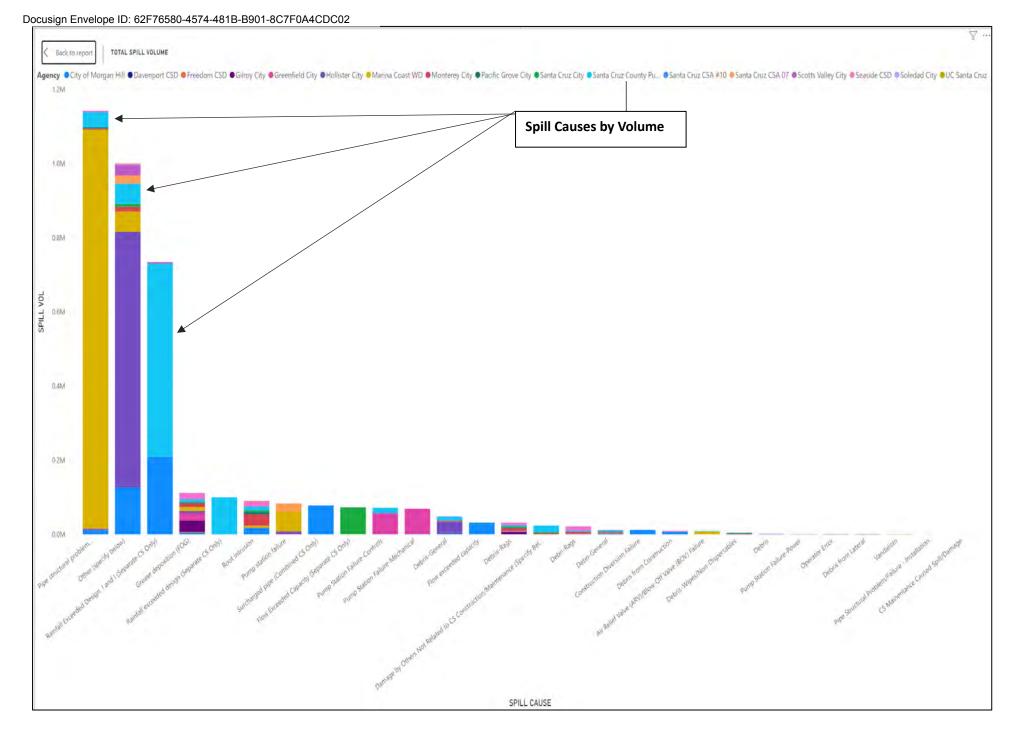


Figure 8 - Spill Causes by Volume of spills (compared with other agencies within region, 2007-2024)

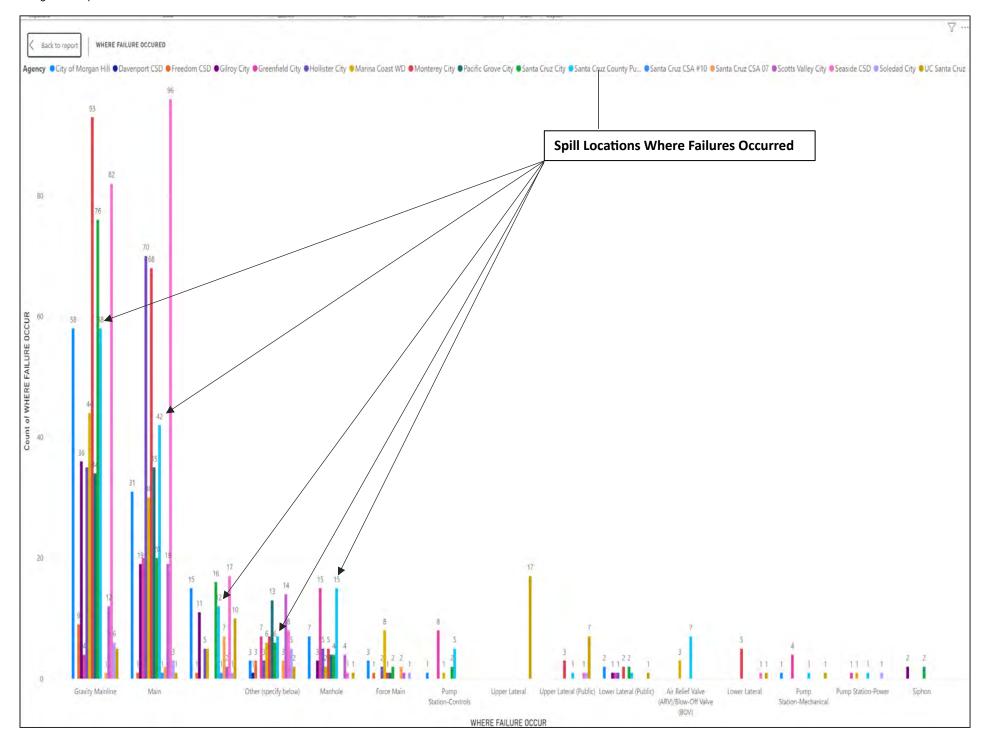


Figure 9 - Spill Locations Where Failures Occurred (compared to other agencies in region, 2007-2024)



APPENDIX 3 — SSMP Audit Implementation Plan and Schedule

	REISSUED WDR ( <u>ATT D:</u> IMPLEMENTATION PLAN/SCHEDULE LOG – 2024 to 2027)									
Requirement	Finding	Agree? (Yes/No)	Proposed Schedule	Date Completed	Implementation Notes	LRO Initials				
Att. D-1										

REISSUED WDR ( <u>ATT D:</u> IMPLEMENTATION PLAN/SCHEDULE LOG – 2024 to 2027)									
Finding	Agree? (Yes/No)	Proposed Schedule	Date Completed	Implementation Notes	LRO Initials				
		Finding Agree?		Finding Agree? Proposed Schedule Date	Finding Agree? Proposed Schedule Date Implementation Notes				

	REISSUED WDR ( <u>ATT D:</u> IMPLEMENTATION PLAN/SCHEDULE LOG – 2024 to 2027)									
Requirement	Finding	Agree? (Yes/No)	Proposed Schedule	Date Completed	Implementation Notes	LRO Initials				
Att. D-3										

	REISSUED WDR ( <u>ATT D:</u> IMPLEMENTATION PLAN/SCHEDULE LOG – 2024 to 2027)									
Requirement	Finding	Agree? (Yes/No)	Proposed Schedule	Date Completed	Implementation Notes	LRO Initials				
Att. D-4										

	REISSUED WDR ( <u>ATT D:</u> IMPLEMENTATION PLAN/SCHEDULE LOG – 2024 to 2027)									
Requirement	Finding	Agree? (Yes/No)	Proposed Schedule	Date Completed	Implementation Notes	LRO Initials				
Att. D-5										

REISSUED WDR ( <u>ATT D:</u> IMPLEMENTATION PLAN/SCHEDULE LOG – 2024 to 2027)							
Requirement	Finding	Agree? (Yes/No)	Proposed Schedule	Date Completed	Implementation Notes	LRO Initials	
Att. D-6							

REISSUED WDR ( <u>ATT D:</u> IMPLEMENTATION PLAN/SCHEDULE LOG – 2024 to 2027)							
Requirement	Finding	Agree? (Yes/No)	Proposed Schedule	Date Completed	Implementation Notes	LRO Initials	
Att. D-7							

REISSUED WDR ( <u>ATT D:</u> IMPLEMENTATION PLAN/SCHEDULE LOG – 2024 to 2027)							
Requirement	Finding	Agree? (Yes/No)	Proposed Schedule	Date Completed	Implementation Notes	LRO Initials	
Att. D-8							

	REIS	SUED W	DR ( <u>ATT D:</u> IMPLEMEN	TATION PL	AN/SCHEDULE LOG – 2024 to 2027)	
Requirement	Finding	Agree? (Yes/No)	Proposed Schedule	Date Completed	Implementation Notes	LRO Initials
Att. D-9						

	REIS	SUED W	DR ( <u>ATT D:</u> IMPLEMEN	TATION PLA	AN/SCHEDULE LOG – 2024 to 2027)	
Requirement	Finding	Agree? (Yes/No)	Proposed Schedule	Date Completed	Implementation Notes	LRO Initials
Att. D-10						

	REIS	SSUED W	DR ( <u>ATT D:</u> IMPLEMEN	TATION PL	AN/SCHEDULE LOG – 2024 to 2027)	
Requirement	Finding	Agree? (Yes/No)	Proposed Schedule	Date Completed	Implementation Notes	LRO Initials
Att. D-11						

	REIS	SSUED W	DR ( <u>SPECIFICATIONS:</u> II	MPLEMENT	ATION PLAN/SCHEDULE LOG – 2024 to 2027)	
Requirement	Finding	Agree? (Yes/No)	Proposed Schedule	Date Completed	Implementation Notes	LRO Initials
Spec 5.1 through Spec. 5-15		(Yes/No)		Completed		



APPENDIX 4 - Key Performance Indicator (KPIs)

APPENDIX 4 - References (Key Performance Indicators, KPIs)

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# 1. <u>ELEMENT I (Goal and Introduction)</u>

## Attach. D-1 (SSMP Goal and Introduction)

SSMP Implementati	<u>ion</u>	
○ KPI D-1(a)	<ul> <li>Are the Agencys goals adequate in maintaining the sewer system, including O&amp;M and spill reduction and response?</li> <li>Does the Agency have established response time goals for customer service response?</li> </ul>	Action:  O Annual review
SSMP Effectiveness		
o KPI D-1(b)	<ul> <li>Are the Agency's Preventative Maintenance work plans being Implemented?</li> </ul>	Element Review Frequency/Tasks:  O Annual review
o KPI D-1(c)	Are Agency spill Reduction Goals being met?	o Annual review
	<ul> <li>What is the Agencys average response time for response?</li> </ul>	o Annual review
	<ul> <li>Total number of spills prevented (plugged mains that were discovered while doing routine PM)</li> </ul>	o Annual review
o KPI D-1(e)	<ul> <li>Are Agency spill event responses effective?</li> </ul>	Element Review Frequency/Tasks: O Annual review
o KPI D-1(f)	<ul> <li>Annual review/update of Agency goals and narrative descriptions</li> </ul>	Element Review Frequency/Tasks: O Annual review
o KPI D-1(g)	<ul> <li>Annual review/update of system performance (wet weather spill/surcharge events).</li> </ul>	Element Review Frequency/Tasks: O Annual review
o KPI D-1(h)	<ul> <li>Does the Agency update its sewer system asset inventory annually?</li> </ul>	o Annual review
SSMP Resilience		
o KPI D-1(h)	o None	o None

# 2. <u>ELEMENT 2 (Organization)</u>

## Attach. D-2 (Organization)

## **SSMP Implementation**

o KPI D-2(a) o Are the Agency's organizational procedures adequate for ensuring full SSMP compliance? <u>Element Review Frequency/Tasks:</u> o Annual review

## **SSMP Effectiveness**

o KPI D-2(b) o Does the Agency SSMP adequately describe SSMP Responsibilities/Tasks for all staffing? Element Review Frequency/Tasks: o Annual review

KPI D-2(c)
 Is Agency Chain of Communication effective and updated?

## **SSMP** Resilience

o KPI D-2(d) o None o None

## 3. ELEMENT 3 (Legal Authority)

## Attach. D-3 (Legal Authority)

## **SSMP Implementation**

o KPI D-3(a)

 Does the Agency implement its existing codes and ordinances?

## **Element Review Frequency/Tasks:**

 Periodic review of sewer use ordinance implementation to ensure adequate required legal authority

## **SSMP Effectiveness**

o KPI D-3(a)

 Are the Agency codes and ordinances adequate for fulfilling the SSMP legal requirements?

## Element Review Frequency/Tasks:

- Annual review/update of review of completed work orders and customer complaints to ensure adequacy of authority
- Annual review/update of any encounters by staff for circumstances where sewer use ordinance was inadequate

## **SSMP** Resilience

KPI D-3(d)

o None

None

# 4. <u>ELEMENT 4 (Operations and Maintenance Program)</u>

## Attach. D-4 (Operations and Maintenance)

SSMP Implementat	<u>ion</u>	
○ KPI D-4(a)	<ul> <li>Are the Agency's organizational procedures adequate for ensuring full SSMP compliance?</li> <li>Are Agency preventative maintenance programs implemented and effective?</li> <li>Is Agency tracking metrics for miles of pipe cleaned, CCTV-inspected, and pump station inspections performed in system?</li> </ul>	<ul> <li>Element Review Frequency/Tasks:</li> <li>Annual review/update of Agency organizational staffing, contacts, and responsibilities</li> <li>Annual review of O/M program</li> <li>Annual review of program metrics</li> </ul>
SSMP Effectiveness		
○ KPI D-4(b)	Are Agency maps up to date?	<ul> <li>Element Review Frequency/Tasks:</li> <li>Annual review/update to ensure all system maps are up to date per change requests submitted by field staff</li> </ul>
○ KPI D-4(c)	<ul> <li>% of new assets added to Agencys sewer mapping system</li> </ul>	<ul> <li>Element Review Frequency/Tasks:         <ul> <li>Annual review/update of requirements to ensure compliance conformance.</li> <li>Annual review/update of current maps to ensure new construction project assets have been added.</li> </ul> </li> </ul>
o KPI D-4(d)	<ul> <li>Does Capital Improvement Plan (CIP) properly address Agency needs?</li> <li>Annual Agency Capital budget for rehabilitation or replacement?</li> </ul>	<ul> <li>Element Review Frequency/Tasks:</li> <li>Is each segment evaluated for capaAgency deficiencies based on projected growth</li> <li>Are system assets evaluated for remaining useful life</li> <li>Is existing CIP plan and schedule being implemented as intended?</li> </ul>
○ KPI D-4(e)	<ul> <li>Are Agency complete maintenance, operations, engineering work orders reviewed for accuracy and completeness?</li> <li>Number of annual PM work orders completed?</li> </ul>	Element Review Frequency/Tasks:  O Annual review
	o Number of annual FW work orders completed:	
○ KPI D-4(f)	<ul> <li>Is Agency Rehabilitation and Replacement (R/R) plan being implemented?</li> </ul>	<ul><li>Element Review Frequency/Tasks:</li><li>Annual review/update of R/R plan to ensure adherence to plan and schedule</li></ul>
○ KPI D-4(g)	<ul> <li>% of Agencys CCTV goal completed</li> <li>Number of annual CCTV work orders completed?</li> </ul>	Element Review Frequency/Tasks:  O
o KPI D-4(h)	<ul> <li>Is Agency critical spare parts adequate and up-to- date.</li> </ul>	Element Review Frequency/Tasks:  O Bi-annual review APPENDIX 4 (Page 7)

% if required critical spare parts in stock?
 Bi-annual review
 KPI D-4(i)
 Has all required Agency staff training been completed?
 Bi-annual review
 Bi-annual review
 Bi-annual review
 Bi-annual review
 Bi-annual review
 KPI D-2jl)
 None
 None

## 5. ELEMENT 5 (Design and Performance Provisions)

## Attach. D-5 (Design and Performance Provisions)

## **SSMP Implementation**

o KPI D-5(a)

 Does the Agency implement its current design and construction standards, specifications, and inspection procedures?

## Element Review Frequency/Tasks:

Annual review

## **SSMP Effectiveness**

o KPI D-5(b)

- Are existing Agency design and construction standards, specifications, and inspection procedures adequate for the collection system?
- Annual review of the Agencys standards and procedures for acceptance and testing of new infrastructure?
- o % of new infrastructure accepted vs inspected

## **Element Review Frequency/Tasks:**

- o Annual review
- o Annual review
- o Annual review

## **SSMP** Resilience

KPI D-5(c)

o None

o None

## 6. ELEMENT 6 (Spill Emergency Response Plan)

## Attach. D-6 (Spill Emergency Response Plan)

## **SSMP Implementation**

- o KPI D-6(a)
- Develop and implement a Spill Emergency Response Plan

## **Element Review Frequency/Tasks:**

- Quarterly review and training on SERP
- Quarterly training/drills on SERP including practice drills with completing field data collection form

#### SSMP Effectiveness

- o KPI D-6(b)
- Were Agency notification procedures outlined in the SERP adhered to for each spill event?
- **Element Review Frequency/Tasks:**
- Annual review

- o KPI D-6(c)
- Procedures reviewed to provide prompt notification to appropriate Agency parties for a spill event?
- **Element Review Frequency/Tasks:**
- Annual review

- o KPI D-6(d)
- Was Agency SERP training performed as prescribed in SSMP?
- % of employees that completed annual training on SERP versus total field staff
- **Element Review Frequency/Tasks:**

- o KPI D-6(e)
- Did the Agency complete a Category 1 spill assessment checklist for all large spills?

## Element Review Frequency/Tasks:

 Annual review of completed checklists for all Category 1 spills >1,000 gallons reaching surface waters

#### **SSMP Resilience**

- KPI D-6(f)
- 0
  - Coordinate meetings to improve mapping and Spill response activities with Kern County
  - % of Bi-annual meetings with Kern County completed
- o None

## 7. ELEMENT 7 (Sewer Pipe Blockage Control Program)

## Attach. D-7 (Sewer Pipe Blockage Control Program)

## **SSMP Implementation**

o KPI D-7(a)

 Is Agency commercial FOG program being implemented and are goals being achieved? Element Review Frequency/Tasks:

Annual review of goals

## **SSMP Effectiveness**

o KPI D-7(b)

 Is Agency residential FOG and root programs being administered and are goals being achieved?

Number of spills caused by hot spots or FOG

% of spills caused by FOG% of spills caused by Roots

 % of spills caused by debris/rags (non-Dispersables)

% of hot spots inspected annually

 Number of hot spots removed from Hot Spot list annually?

Annual review

o Annual review

Annual reviewAnnual review

Annual review

0

Annual review

o Annual review

#### **SSMP** Resilience

o KPI D-7(e)

None

o None

## 8. ELEMENT 8 (System Eval./CapaAgency/Cap. Improvements)

## Attach. D-7 (Sewer Pipe Blockage Control Program)

## **SSMP Implementation**

- o KPI D-8(a)
- Has the Agency been adhered to its system evaluation/condition assessment efforts?

## **Element Review Frequency/Tasks:**

Annual review/update of system inspections/evaluations

## **SSMP Effectiveness**

- o % of sewer system condition assessment completed annually
- # of flowmeters installed to evaluate system capaAgency

to?

○ KPI D-8(b)	<ul> <li>Has the Agency experienced any capaAgency- related spills or surcharge events?</li> </ul>	Element Review Frequency O Annual review
○ KPI D-8(c)	<ul> <li>Have any changes occurred within the Agency service area that might affect the hydraulic model?</li> </ul>	<ul> <li>Annual review</li> </ul>
○ KPI D-8(d)	<ul> <li>Has CIP capaAgency-related projects/schedule been adhered to?</li> </ul>	<ul> <li>Annual review</li> </ul>
○ KPI D-8(e)	<ul> <li>Has the prioritization/corrective actions for sewer repairs been adhered to?</li> </ul>	<ul> <li>Annual review</li> </ul>
○ KPI D-8(f)	o Has the capital improvement plan been adhered	<ul> <li>Annual review</li> </ul>

#### **SSMP Resilience**

KPI D-8(g)
 Improve capaAgency-related investigations and inspections

## Element Review Frequency/Tasks:

- Periodic review of flow/level sensor data (wet weather months)
- Periodic review of goals and KPIs (wet weather months)

## 9. ELEMENT 9 (Monitoring, Measurement, Program Modifications)

## Att. D-9 (Monitoring, Measurement. Program Modifications)

## **SSMP Implementation**

 KPI D-9(a)
 Were Agency KPIs reviewed and evaluated for each element of the SSMP efforts? Element Review Frequency/Tasks:

O Annual review

## **SSMP Effectiveness**

KPI D-9(b)Were annual Agency maintenance/repair

activities including Performance Measures

evaluated/updated?

**Element Review Frequency/Tasks:** 

**Element Review Frequency/Tasks:** 

o Annual review

o Annual review

o KPI D-9(c)

 Were any Agency SSMP program compliance point(s) corrected and/or updated based on

results of performance measures?

Spills per 100 miles of pipe

o Volume of spills per 100 miles of pipe

Number of Category 1 spills

o Number of spills caused by lift station failure

o Number of repeat spills from same location

## SSMP Resilience

o KPI D-9(d) o None

o None

## 10.ELEMENT 10 (Internal Audits)

## Att. D-10 (SSMP Internal Audits)

#### SSMP Implementation

o KPI D-10(a)

o Were SSMP internal program audits completed?

## **Element Review Frequency/Tasks:**

Review of Audit reports

### SSMP Effectiveness

o KPI D-10(b)

 Did the SSMP internal audit evaluate the SSMP for compliance?

o KPI D-10(b)

 Did the SSMP internal audit evaluate the SSMP for effectiveness?

o KPI D-10(c)

 Were all past SSMP internal audit findings and schedule met for incorporating new changes into

SSMP?

o KPI D-10(d)

Were any upgrades made to enhance SSMP work programs? **Element Review Frequency/Tasks:** 

o Review of completed SSMP internal audits

**Element Review Frequency/Tasks:** 

o Review of completed SSMP internal audits

**Element Review Frequency/Tasks:** 

 Review of past SSMP internal audit commitments and priorities, including any outstanding items not captured in SSMP/change log to be flagged for carryover for past SSMP undate.

over for next SSMP update

Element Review Frequency/Tasks:

Review of SSMP/change log

## **SSMP** Resilience

o KPI D-10(e)

o None

None

## 11. ELEMENT 11 (Communication Program)

## Att. D-11 (Communication Program)

## **SSMP Implementation**

- o KPI D-10(a)
- Was the public afforded the opportunity to provide input as the program is being implemented?

### Element Review Frequency/Tasks:

- Periodic review to ensure board has approved latest SSMP.
- Periodic review to verify latest SSMP/docs are posted on website.
- Periodic review of any public comments received via website or direct contact with Agency staff annual review/update of KPIs

## **SSMP Effectiveness**

- o KPI D-10(b)
- Were all outside agency/communications documented?
- Number of annual public outreach events
- Number of Regional Partner meetings
- % of customers receiving public outreach information

## **Element Review Frequency/Tasks:**

 Element Review Frequency periodic review of outside agency/satellite meetings/emails/notices of communications.

#### SSMP Resilience

- o KPI D-10(c)
- o External communications verifications

### Element Review Frequency/Tasks:

 Annual review/update to ensure the general public has access to the Agency SSMP via website with a mechanism to provide input/comments

## 12. SPEC. 5.2 (Designation of LRO)

## Spec. 5.1 (Designation of Legally Responsible Official)

SSMP Imple	ementation
------------	------------

- o KPI 5.1(a)
- Does the Agency LRO and supporting staff possess adequate knowledgeable, training, skills, and abilities for implementing all Reissued WDR requirements?

#### Element Review Frequency/Tasks:

Annual review/update of staff competency checks/tests

#### SSMP Effectiveness

- o KPI 5.1(b)
- Are Agency LRO policies in place adequate, including authorization for making managerial decisions governing operation of the sanitary sewer system, including having the explicit or implicit duty of making major capital improvement recommendations to ensure longterm environmental compliance?

## Element Review Frequency/Tasks:

- Annual review/update of any issues arisen attributable to inadequate LRO oversight, training/competency
- Annual review/update of KPI frequency and success rate/adjust as necessary
- KPI 5.1(c)
   Has the Agency complied with all the ongoing WDR deadlines?
- Annual review/update of Agency compliance performance with spill notification, monitoring, reporting, recordkeeping
- KPI 5.1(d)
   Has the Agency complied with the change notification requirements for its LROs?
- Review of any change(s) in LRO designation(s) and meeting compliance deadlines specified in Attachment E1
- KPI 5.1(e)
   Compliance with SWRCB pre-inspection questionnaire
- Annual review/update of questionnaire, document changes to work programs/accomplishments
- KPI 5.1(f)
   Compliance with internal SSMP Audit findings and recommendations
- Annual review/update of past SSMP Audit findings and recommendations for improving compliance, implementation, and spill reduction performance

## 13. SPEC. 5.2 (Develop/Implement SSMP)

## Spec. 5.2 (Development and Implementation of SSMP)

SSMP	lmp	lementation

- o KPI 5.2(a)
- Are the Agency's existing work programs effective in reducing spills to meet SSMP goals and objectives?

## Element Review Frequency/Tasks:

 Annual review/update of exiting work programs to ensure conformance with SSMP goals and objectives

#### SSMP Effectiveness

- o KPI 5.2(b)
- Does the Agency implement standard operator procedures (SOPs) to measure and support improving SSMP effectiveness?

### Element Review Frequency/Tasks:

Annual review/update of Agency SOPs

- o KPI 5.2(c)
- Does the Agency implement standard operator procedures (SOPs) to measure and support improving SSMP effectiveness?

#### **Element Review Frequency/Tasks:**

Annual review/update of all related SSMP procedures and work programs

- o KPI 5.2(d)
- Does the Agency's existing data collection and work order system adequately allow analysis of potential impacts that could cause spills?

#### Element Review Frequency/Tasks:

 Annual review/update data collection methods and work orders and documentation of accomplishments, including instances where spills were eliminated

- o KPI 5.2(e)
- Do the Agency work programs include procedures for spill containment/recovery, sewer mapping, work order system/tracking, emergency responses, and operator training?

## **Element Review Frequency/Tasks:**

 Annual review/update of Agency work programs

- o KPI 5.2(f)
- Does the Agency meet its proposed objectives with improving its SSMP ranking >80% by October 2024?

## Element Review Frequency/Tasks:

 Annual review/update and assessment/ranking of all SSMP requirements

#### SSMP Resilience

- o KPI 5.2(g)
- Collection system certification (CWEA)

## Element Review Frequency/Tasks:

Annual survey of line staff resources

## 14. SPEC. 5.6 (System Resilience)

#### Spec. 5.6 (Sewer System Resilience)

#### SSMP Implementation

- o KPI 5.6(a)
- Are the Agency's existing efforts in identifying possible spill vulnerabilities effective?

#### Element Review Frequency/Tasks:

 Annual review/update/update of historic spill causes and vulnerabilities

### **SSMP Effectiveness**

- o KPI 5.6(b)
- Does the Agency proactively prioritize its operation and maintenance, condition assessments, and repair, and rehabilitation efforts to help further reduce vulnerabilities for spills??

#### **Element Review Frequency/Tasks:**

Annual review/update of Agency CCTV records and data

### o KPI 5.6(c)

 Does the Agency assess/review its ongoing historic spills, causes, and vulnerabilities?

#### **Element Review Frequency/Tasks:**

 Annual review/update/update of historic spill causes and vulnerabilities; adjust resilience matrix as necessary

### o KPI 5.6(e)

 Does the Agency implement a program to address existing "Hot Spots" to help further reduce vulnerabilities for spills?

#### Element Review Frequency/Tasks:

 Annual review/update/update of "hot spot" implementation plan/schedule conformance

#### o KPI 5.6(f)

 Does the Agency have a "Hot Spot" reduction program to help further reduce vulnerabilities for spills??

## **Element Review Frequency/Tasks:**

 Annual review/update of specific "hot spot" resources (time/labor/materials) spent on cleaning all locations and list of locations repaired, resolved, and eliminated

### SSMP Resilience

o KPI 5.6(h)

o Collection system electronic monitoring

### **Element Review Frequency/Tasks:**

- Evaluation for installation of flow/level sensors in system areas necessary for further reducing risks for future spills and improve monitoring
- Development of Agency "resilience indicators" for measuring how well the collection system can withstand and recovery quickly from real-world stresses, setbacks and /or difficulties including major infrastructure failures

Collection system resilience

## 15. SPEC. 5.7 (Allocate Necessary Resources)

### Spec. 5.7 (Allocate Necessary Resources)

#### **SSMP Implementation**

- o KPI 5.7(a)
- o Are the Agency's existing resources adequate?

### **Element Review Frequency/Tasks:**

 Annual review/update of resource allocations and budgets specific to sewer collection system operations, maintenance, and capital improvements

## **SSMP Effectiveness**

- o KPI 5.7(b)
- Does the Agency maintain adequate means to manage revenues and expenditures for supporting the sewer collection system?

## **Element Review Frequency/Tasks:**

- Annual review/update of Agency budget allocations/funds spent on sewer system
- Long-range review (5-10 years) of Agency financial planning for ensuring adequate budgets/allocations for sewer system operations/maintenance and capital projects

- o KPI 5.7(c)
- Does the Agency maintain adequate sewer fees for supporting its the sewer system requirements?

#### **Element Review Frequency/Tasks:**

Annual review/update of Agency sewer fees

#### **SSMP** Resilience

- o KPI 5.7(d)
- o None

o None

# 16. SPEC. 5.13 (Comply with Attachment E1 Requirements)

## Spec. 5.13 (Compliance with Attachment E1 Requirements)

SSMP Implementat	<u>tion</u>	
○ KPI 5.13(a)	<ul> <li>Are the Agency's data collection efforts (field forms, work order system) adequate for supporting all required information required by Attachment E1?</li> <li>Element Review Frequency Annual review/update collection and reportion Attachment E1 required</li> </ul>	e of Agency data ing efforts against
SSMP Effectiveness	<u>5</u>	
o KPI 5.13(a)	<ul> <li>Do Agency field data collection efforts comply with Attachment E1?</li> <li>Element Review Frequence review/update of all A collection forms again</li> </ul>	uency annual Agency field data
o KPI 5.13(c)	<ul> <li>Are required spill <u>notification</u> timeframes for Category 1 spills being met?</li> <li>Element Review Frequent review/update of all (against requirements within 2 hours</li> </ul>	ncy/Tasks: uency annual Category 1 spills
o KPI 5.13(d)	<ul> <li>Are required spill <u>notification</u> timeframes for Category 2 spills being met?</li> <li>Element Review Frequency review/update of all (against requirements)</li> </ul>	uency annual Category 2 spills
o KPI 5.13(e)	<ul> <li>Are required spill <u>reporting</u> timeframes for Category 3 spills being met?</li> <li>Element Review Frequence review/update of all 0 requirements</li> </ul>	ncy/Tasks: uency annual
o KPI 5.13(f)	<ul> <li>Are required spill <u>reporting</u> timeframes for Category 4 spills being met?</li> <li>Element Review Frequency review/update of all 0 requirements</li> </ul>	uency annual
o KPI 5.13(g)	<ul> <li>Are the Agency field staff competent with operations, maintenance, repair, and spill response procedures?</li> <li>Element Review Frequency Assessments (every 3 field staff)</li> </ul>	
SSMP Resilience  O KPI 5.13(h)	<ul> <li>Quarterly training on Agency field data collection form and required procedures</li> <li>Quarterly training to with staff data collect procedures as necess</li> </ul>	ensure consistency tion and improving



### **Certificate Of Completion**

Envelope Id: 62F76580-4574-481B-B901-8C7F0A4CDC02

Subject: SCCSD District 21-24 SSMP

Source Envelope:

Document Pages: 201 Signatures: 1 Initials: 0 Certificate Pages: 5

AutoNav: Enabled

Envelopeld Stamping: Enabled

Time Zone: (UTC-08:00) Pacific Time (US & Canada)

Status: Completed

**Envelope Originator:** Blanca Martinez

701 Ocean Street Santa Cruz, CA 95060

Blanca.Martinez@santacruzcountyca.gov

IP Address: 99.162.76.230

## **Record Tracking**

Status: Original

1/28/2025 9:07:29 AM

Security Appliance Status: Connected

Storage Appliance Status: Connected

Holder: Blanca Martinez

Blanca.Martinez@santacruzcountyca.gov

Pool: FedRamp

Signature

Pool: County of Santa Cruz

Location: DocuSign

Location: DocuSign

### Signer Events

Matt Machado

Matt.Machado@santacruzcountyca.gov

Director of Community Development & Infrastructure

County of Santa Cruz

Security Level: Email, Account Authentication

(None)

Signature Adoption: Pre-selected Style Using IP Address: 174.194.130.160

Signed using mobile

Matt Machado

50EBAC64454C48C.

**Timestamp** 

Sent: 1/28/2025 9:21:45 AM Viewed: 1/28/2025 9:26:03 AM Signed: 1/28/2025 9:26:12 AM

#### **Electronic Record and Signature Disclosure:**

Accepted: 3/1/2022 8:22:46 AM

ID: 82550d6a-8dcd-4ff4-b394-1d902bcd64c7

Signature
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### **Timestamp**

**Editor Delivery Events** 

In Person Signer Events

Status **Status**  **Timestamp** 

**Intermediary Delivery Events** 

**Agent Delivery Events** 

**Status** 

**Timestamp Timestamp** 

# **Certified Delivery Events**

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**Status** 

COPIED

# **Timestamp**

## **Carbon Copy Events**

Beatriz Barranco

Beatriz.Barranco@santacruzcountyca.gov

Sr. Civil Engineer County of Santa Cruz

Security Level: Email, Account Authentication

(None)

#### **Electronic Record and Signature Disclosure:**

Accepted: 1/25/2024 12:26:22 PM

**Timestamp** 

Sent: 1/28/2025 9:26:15 AM Viewed: 1/28/2025 10:01:31 AM

ID: edb23b86-e633-4a7e-980d-86a085ffcaa	а
Witness Events	

 	-	 _

**Notary Events** 

## Signature

**Signature** 

## **Timestamp**

**Timestamp** 

## **Envelope Summary Events**

## **Status**

## **Timestamps**

**Envelope Sent** 

Hashed/Encrypted

1/28/2025 9:21:45 AM

Envelope Summary Events	Status	Timestamps			
Certified Delivered	Security Checked	1/28/2025 9:26:03 AM			
Signing Complete	Security Checked	1/28/2025 9:26:12 AM			
Completed	Security Checked	1/28/2025 9:26:15 AM			
Payment Events	Status	Timestamps			
Electronic Record and Signature Disclosure					

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