4. Step 4 – Adjustment Factors

Staff considered certain Conduct Factors to calculate adjustments to the amount of the Initial Amount of the Administrative Civil Liability as follows:

a. Culpability (1.4)

The Enforcement Policy suggests an adjustment multiplier between 0.5 and 1.5 depending on whether the discharge was a result of an accident or the discharger's intentional/negligent behavior. The Discharger failed to provide adequate protection of its equipment from 100-year frequency floods as required under its Permit. The Discharger also failed to ensure implementation of proper standard operating procedures when the Discharger failed to ensure that the emergency bypass pump valve remained in the "open" position during standby mode. The Discharger failed to comply with the Sanitary Sewer Collection System Order to provide adequate sampling to determine the nature and impact of the release. The Discharger had prior knowledge of the potential risks associated with the electrical wires[7] and the failure to protect plant equipment from 100-year frequency flood[8] as required by its discharge permit. The Discharger failed to provide redundant pumping capabilities by having all four influent pumps connected to a single shunt trip. A single point of failure, the shunt trip, caused all four influent pumps to fail. The Discharger failed to provide a reliable emergency pump that could operate without repeatedly shutting down. The emergency pump had operational problems noted before the overflow event. Prior to the overflow event, treatment plant staff recommended sending the pump back to the manufacturer[9]. Therefore, this factor should be adjusted to a higher multiplier of 1.4 for negligent behavior.

b. Cleanup and Cooperation (1)

The Discharger responded quickly by diverting flows to the plant and secured additional pumps from other agencies and informed the public regarding the sewage spill. The Discharger also timely responded to the NOV and 13267 letter. Therefore, a multiplier of 1.0 is appropriate.

c. History of Violations (.9)

The Discharger had no history of sewage overflow violations in recent years. Therefore, a factor of .9 is appropriate.

---

[7] Exhibit 2, Exhibit 71.
[8] Hearing transcript page 516.
[9] Hearing transcript page 286.

The initial base liability per gallon and initial base liability per day are multiplied by the above factors to determine **Revised Liability amount of $1,019,692.80.**

Revised Per Gallon Assessment

(Initial Liability) x (Culpability) x (Cleanup and Cooperation) x (History of Violations)

= *$$$$ Revised Liability Per Gallon Assessment*

(809,280) x (1.4) x (1) x (.9) = $1,019,692.80

Revised Per Day Assessment (Discharge Violations)

Discharge Violations:

(Initial Liability) x (Culpability) x (Cleanup and Cooperation) x (History of Violations)

= *$$$$ Revised Liability Day Assessment*

(12,000) x (1.4) x (1) x (.9) = $15,120

5. Step 5 - Determination of Total Base Liability Amount

The Total Base Liability amount is determined by adding the revised liability amounts per gallon and per day. The **Total Base Liability is $1,034,812.80**.

(Revised Liability Per Gallon Assessment) + (Revised Liability Per Day Assessment for Discharge Violations) + (Revised Liability Per Day Assessment for Non-Discharge Violations)

$1,019,692.80 + $15,120 = $1,034,812.80

6. Step 6 – Ability to Pay and Ability to Continue in Business

If there is sufficient financial information to assess the violator's ability to pay the Total Base Liability Amount or to assess the effect of the Total Base Liability Amount on the violator's ability to continue in business, the Total Base Liability Amount may be adjusted to address the ability to pay or to continue in business.

Sufficient evidence was presented that the Discharger could pay the proposed penalty[10]. The Discharger failed to demonstrate it does not have an ability to pay the recommended penalty. Accordingly, the Total Base Liability Amount was not adjusted.

7. Step 7 – Other Factors as Justice May Require

If the amount determined using the above factors is inappropriate, the amount may be adjusted under the provision for "other factors as justice may require," but only if express findings are made to justify this. In addition, the costs of investigation and enforcement are "other factors as justice may require," and should be added to the liability amount.

Staff costs incurred by the Central Coast Regional and State Water Resources Control Board are $75,000 and are added to the Total Base Liability Amount, bringing the liability adjusted Total Base Liability Amount to **$1,109,812**.

(Total Base Liability) + (Staff Costs) = *adjusted Total Base Liability*

$1,034,812.80 + $75,000 = $1,109,812.80

8. Step 8 – Economic Benefit

The Economic Benefit Amount is any savings or monetary gain derived from the act or omission that constitutes the violation. The Enforcement Policy states that the adjusted Total Base Liability Amount shall be at least 10 percent higher than the Economic Benefit Amount so that liabilities are not construed as the cost of doing business and that the assessed liability provides a meaningful deterrent to future violations.

The primary economic benefit for the Discharger was the delay of upgrading its electrical wiring system and protecting in-ground utility boxes from potential floodwaters as planned in 2004 for a total budget cost of $200,000. The economic benefit gained from this project delay is calculated at $177,209 based on US EPA's BEN model to calculate economic benefits for noncompliance with regulations.

9. Step 9 – Maximum and Minimum Liability Amounts

The **Minimum Liability Amount** is **$194,930.** As mentioned in Step 8, the Enforcement Policy states that when making monetary assessments, the adjusted Total Base Liability Amount shall be at least 10 percent higher than the Economic Benefit Amount. Further, Water Code section 13385, subdivision (e) requires the

[10] Exhibit 114.

Central Coast Water Board to recover any economic benefit or savings received by the violator.

The **Maximum Liability Amount** is **$6,754,000**. The maximum administrative civil liability that may be assessed pursuant to Water Code section 13385, subdivision (c) is the sum of ten thousand dollars ($10,000) for each day in which the violation occurs and $10 for each gallon discharged but not cleaned up that exceeds 1,000 gallons. The maximum administrative civil liability that may be assessed pursuant to Water Code section 13268, subdivision (b)(1) is $1,000 per day of violation.

10. Step 10 – Final Liability Amount

In accordance with the above methodology, the Central Coast Water Board finds that the **Final Liability Amount is $1,109,812.80.** This Final Liability Amount is within the statutory minimum and maximum amounts.

13. This Order on Complaint is effective and final upon issuance by the Regional Board. Payment must be received by the Regional Board no later than thirty days from the date on which this Order is issued.

14. In the event that District fails to comply with the requirements of this Order, the Executive Officer or his/her delegee is authorized to refer this matter to the Office of the Attorney General for enforcement.

15. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000, et seq.) in accordance with the California Code of Regulations Title 14, Chapter 3, section 15321.

IT IS HEREBY ORDERED, pursuant to California Water Code section 13385 and 13268, that the South San Luis Obispo County Sanitation District is assessed administrative civil liability in the amount of $1,109,812.80.

The Discharger shall submit a check payable to State Water Resources Control Board in the amount of **$1,109,812.80** to *SWRCB Accounting, Attn: Enforcement, P.O. Box 100, Sacramento, California 95812-0100* by **November 5, 2012**. A copy of the check shall also be submitted to *Regional Water Quality Control Board, Attn: Harvey Packard, 895 Aerovista Place, Suite 101, San Luis Obispo, California 93401* by **November 5, 2012**. The check shall be made out to the *Clean Up and Abatement Account* and shall include the administrative liability Order No. R3-2012-0041.

Any person aggrieved by this action of the Central Coast Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of the order, except that if the thirtieth day following the date of the order falls on a Saturday, Sunday, or state holiday, the petition must be received by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the internet at http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

I, Kenneth A. Harris Jr., Interim Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the Central Coast Water Board on October 3, 2012.

Kenneth A. Harris Jr.
Interim Executive Officer

Attachment – Penalty Calculation Methodology Worksheet

Penalty Calculation Methodology Worksheet - Version Date: 6/24/2010
Password for Workbook Protection: **enforcement**

Instructions
1. Select Potential Harm for Discharge Violations
2. Select Characteristics of the Discharge
3. Select Susceptibility to Cleanup or Abatement
4. Select Deviation from Standard
5. Click "Determine Harm & per Gallon/Day..."
6. Enter Values into the Yellow highlighted fields

Select Item	5 = Major
Select Item	4 = Discharged material poses significant risk
Select Item	< 50% of Discharge Susceptible to Cleanup or A
Select Item	Moderate

Discharger Name/ID:

			Violation 1	
Discharge Violations	**Step 1**	Potential Harm Factor (Generated from Button)	10	
	Step 2	Per Gallon Factor (Generated from Button)	0.6	
		Gallons	674,400	
		Statutory / Adjusted Max per Gallon ($)	2.00	
		Total		**$ 809,280**
		Per Day Factor (Generated from Button)	0.5	
		Days	2	
		Statutory Max per Day	10000.00	
		Total		**$ 12,000**
Non-Discharge Violations	**Step 3**	Per Day Factor		
		Days		
		Statutory Max per Day		
		Total		$ -
		Initial Amount of the ACL		**$ 821,280.00**
Add'l Factors	**Step 4**	Culpability	1.4	$ 1,149,792.00
		Cleanup and Cooperation	1	$ 1,149,792.00
		History of Violations	0.9	$ 1,034,812.80
	Step 5	**Total Base Liability Amount**		**$ 1,034,812.80**
	Step 6	Ability to Pay & to Continue in Business	1	$ 1,034,812.80
	Step 7	Other Factors as Justice May Require	1	$ 1,034,812.80
		Staff Costs	$ 75,000	$ 1,109,812.80
	Step 8	Economic Benefit	$ 180,000	**$ 1,109,812.80**
	Step 9	Minimum Liability Amount	180,000	
		Maximum Liability Amount	$ 6,754,000	
	Step 10	**Final Liability Amount**		**$ 1,109,812.80**

Penalty Day Range Generator

Start Date of Violation=	12/19/10	
End Date of Violation=	12/20/10	
Maximum Days Fined (Steps 2 & 3) =	2	Days
Minimum Days Fined (Steps 2 & 3) =	1	Days

EXHIBIT B

CALIFORNIA
Water Boards

EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIQUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Coast Regional Water Quality Control Board

June 19, 2012

Certified Mail
No. 7004 1160 0002 0466 7347

Ms. Melissa Thorme, Special Counsel
South San Luis Obispo County Sanitation District
621 Capitol Mall, 18th Floor
Sacramento, California 95814

Dear Ms. Thorme:

The Central Coast Regional Water Quality Control Board (Regional Water Board) is issuing an Administrative Civil Liability Complaint (Complaint) to your client, South San Luis Obispo County Sanitation District ("District"). The Complaint alleges that the District has violated California Water Code Sections 13268 and 13385(a)(2) by failing to comply with provisions of Section 301 of the Federal Water Pollution Control Act (33 U.S.C. § 1311) (Clean Water Act) and CWC 13376, Central Coast Water Board Order No. R3-2009-0046, NPDES Permit No. CA0048003, the Sanitary Sewer Collection System Order 2006-0003-DWQ, and Amended MRP 2008-0002-EXEC, for which a penalty may be imposed under the Water Code.

The Complaint recommends a penalty amount of $1,383,007.50. The Complaint is enclosed, along with a Waiver Form, an ACLC Fact Sheet, and a draft set of Hearing Procedures that sets forth important requirements and deadlines for participation in the hearing. The Fact Sheet describes the Complaint process and explains what you can expect and your obligations as the process proceeds. **Please read each document carefully. This Complaint may result in the issuance of an order by the Regional Water Board requiring that your client pay a penalty.**

If you have questions about the Complaint or the enclosed documents, please contact Senior Staff Counsel Julie Macedo, State Water Resources Control Board's Office of Enforcement, by telephone at (916) 323-6847, or by email at JMacedo@waterboards.ca.gov.

We look forward to resolving this matter in a fair and orderly process.

Sincerely,

Michael Thomas

Digitally signed by Michael Thomas
DN: cn=Michael Thomas, o=Central Coast Water Board, ou, email=mThomas@waterboards.ca.gov, c=US
Date: 2012.06.19 15:03:52 -07'00'

Michael Thomas
Assistant Executive Officer

cc: See next page.

cc: *(Via email only)*

Mr. Michael Seitz
In-House Counsel
Shipsey & Seitz, Inc.
Mike@shipseyandseitz.com

Mr. John Wallace
Wallace Group
johnw@wallacegroup.us

Ms. Julie Macedo
Senior Staff Counsel
Office of Enforcement
State Water Resources Control Board
JMacedo@waterboards.ca.gov

bcc: Julie Macedo, OE
OE Chron (Electronic & Hardcopy)

JM/rdm
June 19, 2012
I:\OE_AttorneyFolder\Region 3\South SLO Sanitation District\SLO cover letter.doc

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION

COMPLAINT NO. R3-2012-0030

ADMINISTRATIVE CIVIL LIABILITY
IN THE MATTER OF
SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT,
SAN LUIS OBISPO COUNTY

The Assistant Executive Officer of the California Regional Water Quality Control Board, Central Coast Region (Regional Water Board) hereby gives notice that:

1. The SOUTH SAN LUIS OBISPO COUNTY SANITATION DISTRICT (the Discharger) is alleged to have violated California Water Code (CWC) 13385(a)(2) for unauthorized wastewater discharges for which the Regional Water Board may impose civil liability pursuant to CWC sections 13323 and 13385(c). The Discharger also violated CWC 13268 by failing to certify six reports in the CIWQS SSO Online Database[1] within time frames required under Order No. 2006-0003-DWQ "Statewide Waste Discharge Requirements for Sanitary Sewer Systems" (hereafter, Sanitary Sewer Collection System Order). This Complaint seeks $1,383,007.50 in administrative civil liability.

2. The Discharger owns and operates a sanitary sewer collection system (hereafter collection system) and a wastewater treatment plant (WWTP), providing both conveyance and treatment services for an estimated population of 37,648 from member agencies located in the City of Arroyo Grande, City of Grover Beach, and the Oceano Community Services District. These member agencies retain ownership and direct responsibility for individually-owned collection system assets within the boundaries of these member agencies which then discharge raw sewage into the Discharger's gravity trunk sewer system and WWTP for proper treatment, conveyance and disposal.

3. This complaint alleges that the Discharger caused untreated wastewater discharges to surface waters of the United States on December 19 and 20, 2010. This sanitary sewer overflow (hereafter December 2010 sewer overflow), totaling 1,139,825 gallons reaching surface water, was unauthorized and caused by the Discharger's failure to maintain and operate its sanitary sewer collection system as required in the corresponding National Pollutant Discharge Elimination System (NPDES) Permit, and in the Sanitary Sewer Collection System Order.

4. Since the December 2010 sewer overflow, the Discharger has been represented by Wallace Group, a consulting firm, which provides engineering and management services for the District. The Wallace Group and the Water Board's Enforcement Team (members of the

[1] California Integrated Water Quality System (CIWQS), the State Water Board's SSO Online Database report, available at: https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?reportAction=criteria&reportId=sso_main

Regional and State Boards involved with this matter) were unable to reach a mutually agreeable settlement for the Water Board's consideration.

5. The Discharger's collection system is comprised of approximately nine miles of gravity trunk sewers ranging from 15 to 30 inches in diameter that lead into the Discharger's Wastewater Treatment Plant (WWTP) located adjacent to the Oceano County Airport and the Pacific Ocean. The Discharger's WWTP consists of primary clarification, trickling filters, secondary clarification, chlorine disinfection, and a dechlorination system. The design capacity of the Discharger's WWTP is 5.0 million gallons per day (mgd). The Discharger's WWTP also accepts brine waste generated from public water softeners, which is mixed with the final treated wastewater prior to ocean discharge. In 2008, approximately 325,000 gallons of brine waste were discharged with the final effluent from the WWTP.

6. Treated wastewater exiting the Discharger's WWTP enters the Pacific Ocean at a depth of approximately 55 feet through a 4,400-foot outfall-diffuser system, jointly owned by the Discharger and City of Pismo Beach. The Discharger's final effluent is also mixed with approximately 1.9 mgd of treated wastewater effluent in the outfall diffuser system from the City of Pismo Beach (regulated under NPDES Permit No. CA00448151), prior to discharge into the Pacific Ocean.

7. Section 301 of the Federal Water Pollution Control Act (33 U.S.C. § 1311) (Clean Water Act) and CWC section 13376 prohibit the discharge of pollutants to surface waters of the United States except in compliance with an NPDES permit. The Discharger's wastewater treatment facility is regulated under the Regional Water Board's Order No. R3-2009-0046, NPDES Permit No. CA0048003, adopted on October 23, 2009. The Discharger's collection system is enrolled for coverage under the Sanitary Sewer Collection System Order, which applies to all federal and state agencies, municipalities, counties, district and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California.

8. On December 19, 2010, the Discharger's WWTP influent pump station automatically shut down after floodwater entered an electrical conduit leading into a pump motor control system in the WWTP influent pump station. The penetrating floodwater shorted a critical motor control component (shunt switch) which then resulted in tripping a large main circuit breaker that supplied power to all four influent pumps located in the pump station.

9. The resulting loss of power to all four influent pumps caused untreated sewage to surcharge upstream into the Discharger's collection system and overflow which caused the December 2010 sewer overflow, discharging untreated sewage from the collection system into the environment. Additionally, the Discharger documented and certified six sewer backups where untreated sewage was discharged inside six residential homes through private sewer service lateral connections.

10. The Discharger initially reported overflow reports into the CIWQS SSO Online Database on December 22, 2010, totaling 898,600 gallons of sewage discharged into Arroyo Grande

Creek, Oceano Lagoon, and the Pacific Ocean. The Discharger then submitted a revised estimate of 384,200 gallons for the overflow volume in a report to the Central Coast Regional Water Board on January 3, 2011. On May 31, 2011, the Discharger further revised the overflow volume to 417,298 gallons. As of June 16, 2012, the publicly available CIWQS SSO Online Database report shows 418,842 gallons of sewage reaching surface waters as reported by the Discharger (See Appendix A of the Technical Report for more details).

11. In response to the December 2010 sewer overflow, the Discharger submitted a spill report to the Regional Water Board on January 3, 2011. On March 7-8, 2011, State Water Resources Control Board (State Water Board) staff inspected the Discharger's WWTP and collection system facilities.

12. On April 18, 2011, the Regional Water Board issued a Notice of Violation (NOV) and a 13267 Letter (CWC section 13267) requiring the Discharger to submit a technical report concerning the December 19, 2010 discharge of untreated sewage from its collection system. In response, the Discharger submitted a technical report dated May 31, 2011, detailing the nature, circumstances, extent and gravity of the unauthorized discharge of untreated sewage.

13. On September 23, 2011, the Discharger submitted supplemental information including but not limited to plant historical flow information, justification of calculation methodology and other plant hydraulic data.

14. The Discharger is required to properly maintain, operate and manage its sanitary sewer collection system in compliance with the Regional Water Board Order No. R3-2009-0046, NPDES Permit No. CA0048003 and the Sanitary Sewer Collection System Order, and is required by the Sanitary Sewer Collection System Order to provide adequate capacity to convey base flows and peaks flows, including flows related to wet weather.

15. The discharge of untreated sewage to waters of the United States is a violation of the requirements in R3-2009-0046, section 301 of the Clean Water Act, CWC section 13376, and the Sanitary Sewer Collection System Order. Violations of these requirements are the basis for assessing administrative civil liability pursuant to CWC section 13385.

16. The Discharger violated Discharge Prohibition G of Order No. R3-2009-0046 which states, "The overflow or bypass of wastewater from the Discharger's collection, treatment, or disposal facilities and the subsequent discharge of untreated or partially treated wastewater, except as provided for in Attachment D, Standard Provision 1.G (Bypass), is prohibited. This prohibition does not apply to brine discharges authorized herein."

17. The Discharger violated Provision VI.C.6 of Order No. R3-2009-0046 which states, "Stormwater flows from the wastewater treatment process areas are directed to the headworks and discharged with treated wastewater. These stormwater flows constitute all industrial stormwater at this facility and, consequently, this permit regulates all industrial stormwater discharges at this facility along with wastewater discharges." Portions of the untreated sewage were discharged from manholes located at the WWTP and mixed with stormwater which eventually reached the Pacific Ocean.

18. The Discharger violated the Standard Provisions (Attachment D-1.B.2) to Order No. R3-2009-0046, which states, "All facilities used for transport or treatment of wastes shall be adequately protected from inundation and washout as the result of a 100-year frequency flood." The underground utility boxes near the WWTP influent pump station that housed the electrical wiring/cables and conduits were not adequately protected from potential flooding. The migration of floodwater through the unsealed conduits shorted the shunt switch and influent pump motors.

19. The Discharger violated section 301 of the Clean Water Act, which prohibits the discharge of pollutants to waters of the United States except in compliance with an NPDES permit. The discharge of untreated sewage to the Pacific Ocean was not in compliance with the Discharger's NPDES permit.

20. The Discharger violated Prohibition C.1 of the Sanitary Sewer Collection System Order which states, "Any SSO that results in the discharge of untreated or partially treated wastewater to waters of the United States is prohibited."

21. The Discharger violated Prohibition C.2 of the Sanitary Sewer Collection System Order which states, "Any SSO that results in a discharge of untreated or partially treated wastewater that creates a nuisance as defined in CWC section 13050(m) is prohibited."

22. The Discharger violated Provision D.8 of the Sanitary Sewer Collection System Order which states in part, "The Enrollee shall properly manage, operate, and maintain all parts of the sanitary sewer system owned and operated by the enrollee…".

23. The Discharger violated Provision D.10 of the Sanitary Sewer Collection System Order which states, "The Enrollee shall provide adequate capacity to convey base flows and peak flows, including flows related to wet weather events."

24. The Discharger violated section A.6 of the Sanitary Sewer Collection System Order Amended Monitoring and Reporting Program, which states, "All SSOs that meet the above criteria for Category 2 SSOs must be reported to the Online SSO Database within 30 days after the end of the calendar month in which the SSO occurs."

25. Administrative civil liability (ACL) may be imposed pursuant to the procedures described in CWC sections 13323 and 13385. The complaint alleges that the act (or the failure to act) constitutes a violation of law, and describes the provisions of law authorizing civil liability to be imposed, and the proposed civil liability.

26. Pursuant to CWC section 13385(a), any person who violates CWC section 13376 or any requirements of section 301 of the Clean Water Act is subject to administrative civil liability pursuant to CWC section 13385(c), in an amount not to exceed the sum of both the following: (1) ten thousand dollars ($10,000) for each day in which the violation occurs; and (2) where there is a discharge, any portion of which is not susceptible to cleanup or is not cleaned up, and the volume discharged but not cleaned up exceeds 1,000 gallons, an

additional liability not to exceed ten dollars ($10) multiplied by the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons.

27. CWC sections 13327 and 13385(e) require the State Water Board and Regional Water Boards to consider several factors when determining the amount of civil liability to impose. These factors include: "...the nature, circumstances, extent, and gravity of the violation or violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and, with respect to the violator, the ability to pay, the effect on its ability to continue its business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters as justice may require." Staff costs are sought under this complaint as described in the Technical Report, consistent with the CWC and all applicable case law. Staff costs are continuing and will continue through the Water Board hearing.

28. Additionally the State Water Board in November 2009 adopted a Water Quality Enforcement Policy (Enforcement Policy) which outlines a calculation methodology for ACL assessments. The Enforcement Policy was approved by the Office of Administrative Law on May 20, 2010. Section VI of the Enforcement Policy provides a calculation methodology to enable the State and Regional Water Board staff to fairly and consistently implement liability provisions of the CWC. The calculation methodology presented in the Enforcement Policy provides a consistent approach and analysis of factors to determine liability and complies with the applicable sections of the CWC. The Enforcement Team also considered the Section D.6 factors of the Sanitary Sewer Collection System Order.

29. The violations alleged herein and described in the Technical Report include both "discharge violations" to waters of the United States and "non-discharge violations" for purposes of considering section 13385 of the CWC and the Enforcement Policy's civil liability calculation methodology. The Technical Report provides a lengthy discussion of how the Enforcement Team arrived at its recommended administrative civil liability.

30. The staff report entitled *Technical Report for Noncompliance with Central Coast RWQCB Order No. R3-2009-0046 and State Water Resources Control Board Order No. 2006-0003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems", Unauthorized SSO occurring on December19-20, 2010*, dated June 2012, is attached and incorporated herein, as well as all accompanying appendices.

31. As a required minimum, the economic benefit of $177,209 plus 10% received by the Discharger must be recovered to comply with statutory requirements and deter future non-compliance, for a total of $194,930. However, based on the considerations of the factors listed in CWC sections 13327 and 13385(e) and the liability methodology contained in the Enforcement Policy, the Prosecution Team recommends a proposed administrative civil liability of $1,383,007.50 for violations of CWC section 13385(a)(2) and 13268.

32. This issuance of this Complaint is an enforcement action and is, therefore, exempt from the California Environmental Quality Act, pursuant to Title 14, California Code of Regulations, Section 15321.

Michael Thomas

Digitally signed by Michael Thomas
DN: cn=Michael Thomas, o=Central Coast Water Board, ou, email=mThomas@waterboards.ca.gov, c=US
Date: 2012.06.19 14:38:21 -07'00'

Michael Thomas
Assistant Executive Officer

Date

Attachments:

1. *Technical Report for Noncompliance with Central Coast RWQCB Order No. R3-2009-0046 and SWRCB Order No. 2006-0003-DWQ (Sanitary Sewer Collection System Order, Unauthorized SSO (sanitary sewer overflow) Occurring on December19-20, 2010*, dated June 2012, and accompanying appendices

STATE WATER RESOURCES CONTROL BOARD
and
CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD

TECHNICAL REPORT

Proposed Administrative Civil Liability Complaint (ACL complaint)
Contained in Complaint No. R3-2012-0030

South San Luis Obispo County Sanitation District
San Luis Obispo County

For Noncompliance with:

Central Coast Regional Water Quality Control Board Order No. R3-2009-0046 and
State Water Resources Control Board Order No. 2006-0003-DWQ,
"Statewide General Waste Discharge Requirements for Sanitary Sewer Systems"

Unauthorized Sanitary Sewer Overflow (SSO) occurring on December 19-20, 2010

Prepared By:

Leo Sarmiento, P.E.

Jim Fischer, P.E.

Reviewed By:

Dr. Matthew Buffleben, P.E.

(June 2012)

Table of Contents

A. INTRODUCTION

This Technical Report provides the factual and analytical evidence to support Administrative Civil Liability Complaint (ACL complaint) No. R3-2012-0030 in the amount of $1,383,007.50 against the South San Luis Obispo County Sanitation District (the Discharger) for violations of Central Coast Regional Water Quality Control Board (Regional Water Board) Order No. R3-2009-0046 [National Pollutant Discharge Elimination System Permit (NPDES) No. CA0048003] and the State Water Resources Control Board (State Water Board) Order No. 2006-0003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems" (Sanitary Sewer Collection System Order[1]).

This ACL complaint has been issued in response to a 1,139,825 gallon sanitary sewer overflow occurring on December 19 and 20, 2010 (hereafter, December 2010) from the Discharger's gravity trunk sanitary sewer collection system (collection system) discharged into the waters of the United States, including Oceano Lagoon, Meadow Creek, and the Pacific Ocean. The December 2010 sewer overflow was attributed to failure of the Discharger's wastewater treatment plant (WWTP) influent pump station at the Discharger's WWTP in Oceano, California.

To support the required investigative process, Regional Water Board staff requested assistance from the State Water Board, Office of Enforcement. The Technical Report and ACL complaint is fair, reasonable, and fulfills the State Water Board's Water Quality Enforcement Policy[2] to serve the best interest of the public and provide a deterrent for any future violators. All information contained herein has been reviewed by both the Regional Water Board and State Water Board staff (hereafter Water Board staff).

B. SUMMARY OF LIABILITY FACTORS

The following table provides a summary of calculated liability factors applied as part of the steps used by staff to comply with the State Water Board's Enforcement Policy.

Table 1 – Summary of Calculated Liability Factors

STEP	DESCRIPTION	RANGE	FINAL SCORE
1	Potential for Harm for Discharge Violation	0 to 10	9.0
2a	Assessments for Discharge Violations (per gallon)	up to $10/gallon	$2/gallon
2b	Assessments for Discharge Violations (per day)	up to $10,000/day	$10,000/day
3	Per Day Assessments: Non-discharge Violations	up to $1,000/day	$350/day
4	Adjustment Factors	0.5 to 1.5	1.1
5	Determination of Total Base Liability	Per Day or Per Gallon	Both used
6	Ability to Pay and Ability to Continue in Business	Yes	Yes
7	Other Factors As Justice May Require	Staff Costs	$50,000 (and continuing)
8	Economic Benefit	Avoided Costs or Savings	$73,019
9	Maximum and Minimum Liability Amounts	Min. $80,321	Max $11,388,250
10	**Final Liability**	**See Step #10**	**$1,383,007.50**

[1] Available at http://www.waterboards.ca.gov/water_issues/programs/sso/

[2] Available at: http://www.swrcb.ca.gov/water_issues/programs/enforcement/docs/enf_policy_final111709.pdf

Facility Background

The Discharger owns and operates both a collection system and a WWTP, providing both conveyance and treatment services for an estimated population of 37,648 from member agencies located in the City of Arroyo Grande, City of Grover Beach, and the Oceano Community Services District. These member agencies retain ownership and direct responsibility for individually-owned collection system assets within their areas of responsibility, who then discharge untreated sewage generated into the Discharger's collection system that conveys untreated sewage to the Discharger's WWTP for proper disposal. (See vicinity map, attached hereto as Appendix B).

The Discharger's collection system is comprised of approximately nine (9) miles of gravity trunk sewers ranging from 15 to 30 inches in diameter. The WWTP owned by the Discharger consists of primary clarification, trickling filters, secondary clarification, chlorine disinfection, and a dechlorination system with a capacity to treat up to 5.0 million gallons per day (mgd). The Discharger's WWTP also accepts brine waste generated from public water softeners, which is mixed with the final treated wastewater prior to ocean discharge. In 2008, approximately 325,000 gallons of brine waste were discharged with the final effluent from the Discharger's WWTP.

Treated wastewater exiting the Discharger's WWTP enters the Pacific Ocean at a depth of approximately 55 feet through a 4,400-foot in an outfall-diffuser system, jointly owned by the Discharger and City of Pismo Beach. The Discharger's final effluent is also mixed with approximately 1.9 mgd of treated wastewater effluent in the outfall diffuser system from the City of Pismo Beach (regulated under NPDES Permit No. CA00448151), prior to discharge into the Pacific Ocean.

Regulatory Authority

The Discharger's wastewater treatment facility is regulated under the Regional Water Board Order No. R3-2009-0046, NPDES Permit No. CA0048003 adopted on October 23, 2009. The Discharger's collection system is regulated under the Sanitary Sewer Collection System Order, adopted by the State Water Board on May 2, 2006.

Discharge of Untreated Sewage

According to the Discharger, on December 19, 2010, the Discharger's WWTP influent pump station automatically shut down after floodwater entered an electrical conduit leading to pump motor control circuitry within the influent WWTP pump station. The floodwater shorted a power "shunt switch" that tripped a large main circuit breaker switch supplying power to all four influent pumps inside the pump station. The resulting loss of power caused untreated sewage flowing into the WWTP to surcharge upstream in the Discharger's collection system and caused the December 2010 sewer overflow to begin. Additionally, as a result of the Discharger's failure described above, six (6) individual sewer backups occurred into private residential homes (totaling a cumulative of 1,200 gallons of untreated sewage discharged) and were reported and certified by the Discharger in the CIWQS SSO Online Database[3]. The Discharger originally estimated 898,600 gallons discharged into waters of the United States, including Oceano Lagoon, Meadow Creek and the Pacific Ocean. The Discharger revised this estimate on January

[3] California Integrated Water Quality System (CIWQS), the State Water Board's database of certified sanitary sewer overflows reported by Enrollees, publicly available at:
https://ciwqs.waterboards.ca.gov/ciwqs/readOnly/PublicReportSSOServlet?reportAction=criteria&reportId=sso_main

3, 2011 to 384,200 gallons and on May 31, 2011 presented its final estimate to 417,298 gallons. (See Appendix A for additional information).

According to the Discharger, Table 2 below provides a timeline and lists the primary actions undertaken in response to the December 2010 sewer overflow.

Table 2 – Timeline and Primary Actions Undertaken by Discharger

12/29/2010 (10:30 est.)	*Shutdown of all four electric influent pump motors located in WWTP pump station; sewage immediately begins to surcharge upstream in collection system.*
12/29/2010 (10:30 est.)	*Discharger staff started its diesel-powered emergency standby pump; however, the Discharger failed to implement standard operating procedures for the emergency standby pump when in "standby" mode, and the discharge valve was left closed by an operator. The discharge valve should have been left in the open position during "standby" mode to further expedite the emergency bypassing operations to re-route sewage around the failed influent pump station.*
12/29/2010 (10:50 est.)	*Discharger staff were successful in partially opening the emergency standby pump discharge valve to the >1/3 open position, however, increasing rising floodwaters within the WWTP influent pump station prevented the emergency standby pump discharge valve from being fully opened.*
12/29/2010 (11:00 est.)	*Start time of December 2010 sewer overflow as a result of influent pump station failure. According to information provided by the Discharger, there was assumed to be a 30 minute "lag time" to allow the collection system to fully surcharge before the December 2010 sewer overflow actually began.*
12/29/2010 (14:30 est.)	*Discharger staff successfully opened the emergency standby pump discharge valve; however, the emergency standby pump was intermittently operational during part of the afternoon due to electrical control panel problems.*
12/29/2010 (18:06)	*A supplemental portable pump borrowed from the City of Pismo Beach was started after rectifying a dead battery on the unit, which allowed additional sewage to be bypassed around the failed influent pump station.*
12/29/2010 (20:20)	*Discharger staff were able to restart pump #3 inside the influent pump station.*
12/29/2010 (22:00)	*Discharger determined that the December 2010 sewer overflow ended. The overflow lasted approximately 11 hours.*
12/29/2010 (a.m.)	*Discharger reported an additional 2,200 gallon sewer overflow to waters of the United States, directly attributed to the WWTP influent pump station electrical failure occurring on December 19, 2010.*

In response to the December 2010 sewer overflow, the Discharger submitted a technical report to the Regional Water Board on January 3, 2011. On March 7-8, 2011, State Water Board staff conducted an announced site visit to the facility to begin the investigation of the December 2010 sewer overflow, including evaluation of the Discharger's compliance with the Sewer System Order. On April 18, 2011, the Regional Water Board staff issued a Notice of Violation (NOV) and an investigation order (under California Water Code (CWC) section 13267) requiring the Discharger to submit a Technical Report about the December 2010 sewer overflow. In response, the Discharger submitted a Technical Report dated May 31, 2011, detailing its position regarding the nature, circumstances, extent and gravity of the unauthorized discharge of untreated sewage. On September 23, 2011, the Discharger submitted supplemental information (plant historical flow information, justification of calculation methodology and other plant hydraulic data) as a follow-up to the Water Board's NOV/13267 letter.

C. VIOLATIONS SUBJECT TO THE COMPLAINT

The Discharger is required to maintain, operate and manage its collection system in compliance with requirements contained in the Sanitary Sewer Collection System Order. The Discharger is also required to maintain, operate and manage all parts of its WWTP in compliance with the Regional Water Board Order No. R3-2009-0046, NPDES Permit No. CA0048003.

The discharge of untreated sewage to waters of the United States is a violation of the following requirements. Violations of these re[redacted]

2. Clean Water Act (33 U.S.C. § 1311) and CWC section 13376

The Discharger violated section 301 of the Clean Water Act (33 U.S.C. § 1311) and CWC section 13376 which prohibit the discharge of pollutants to waters of the United States except in compliance with an NPDES permit. The discharge of untreated sewage to the Pacific Ocean is a violation of the Discharger's NPDES permit.

3. Sanitary Sewer Collection System Order:

The Discharger violated Prohibition C.1 of the Sanitary Sewer Collection System Order which states, "Any SSO that results in the discharge of untreated or partially treated wastewater to waters of the United States is prohibited."

The Discharger violated Prohibition C.2 of the Sanitary Sewer Collection System Order which states, "Any SSO that results in a discharge of untreated or partially treated wastewater that creates a nuisance as defined in CWC section 13050(m) is prohibited."

The Discharger violated Provision D.8 of the Sanitary Sewer Collection System Order which states in part, "The Enrollee shall properly manage, operate, and maintain all parts of the sanitary sewer system owned and operated by the enrollee…".

The Discharger violated Provision D.10 of the Sanitary Sewer Collection System Order which states, "The Enrollee shall provide adequate capacity to convey base flows and peak flows, including flows related to wet weather events."

The Discharger violated section A.6 of the Sanitary Sewer Collection System Order Amended Monitoring and Reporting Program, which states, "All SSOs that meet the above criteria for Category 2 SSOs must be reported to the Online SSO Database within 30 days after the end after the end of the calendar month in which the SSO occurs."

D. DETERMINATION OF ADMINISTRATIVE CIVIL LIABILITY

An ACL complaint may be imposed pursuant to the procedures described in CWC section 13323. The ACL complaint alleges that the Discharger's act (or the failure to act) constitutes a violation of law, and describes the provisions of law authorizing civil liability to be imposed, and the proposed civil liability.

Pursuant to CWC section 13385(a), any person who violates CWC section 13376 or any requirements of section 301 of the Clean Water Act is subject to administrative civil liability pursuant to CWC section 13385(c), in an amount not to exceed the sum of both the following: (1) ten thousand dollars ($10,000) for each day in which the violation occurs; and (2) where there is a discharge, any portion of which is not susceptible to cleanup or is not cleaned up, and the volume discharged but not cleaned up exceeds 1,000 gallons, an additional liability not to exceed ten dollars ($10) multiplied by the number of gallons by which the volume discharged but not cleaned up exceeds 1,000 gallons.

CWC section 13385(e) require the State Water Board and Regional Water Boards to consider several factors when determining the amount of civil liability to impose. These factors include in part: "…the nature, circumstances, extent, and gravity of the violation or violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and, with respect to the violator, the ability to pay, the effect on ability to continue its business, any voluntary cleanup efforts

undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters as justice may require."

Additionally the State Water Board in November 2009 adopted a Water Quality Enforcement Policy outlines a calculation methodology for ACL assessments. Section VI of the Enforcement Policy provides a calculation methodology to enable Water Board staff to fairly and consistently implement liability provisions of the CWC. The calculation methodology presented below also provides a consistent approach and analysis of factors to determine liability and complies with the applicable sections of the CWC.

Step #1: Potential For Harm of Untreated Sewage Discharge

Pursuant to the Enforcement Policy, Water Board staff shall calculate actual or threatened impacts to beneficial uses using a three-factor scoring system to determine a final score for harm potential. The three factors include: (1) the potential for harm to beneficial uses; (2) the degree of toxicity of the discharge; and (3) the discharge's susceptibility to cleanup or abatement for any violation or group of violations. The sum of these factors comprise the final score for potential for harm.

Based on the recommended range of scores for harm to the environment, risk to potential receptors and susceptibility to cleanup, a score of 9.0 (nine) was assigned to Step #1 of the civil liability calculation as summarized below:

Table 3 – Summary Liability Factors (Step #1)

Factor #1	Potential Harm to Beneficial Uses	Score of 5.0
Factor #2	Characteristics of Discharge	Score of 3.0
Factor #3	Susceptibility to Cleanup or Abatement	Score of 1.0
	Total Score	9.0

The following provides details on how Water Board staff arrived at the final score in Step #1.

Factor #1 - Harm and Nature, Circumstances, and Gravity of Violations

The evaluation of the potential harm to beneficial uses factor considers the harm that may result from exposure to the pollutants or contaminants in the illegal discharge, in light of the statutory factors of the nature, circumstances, extent and gravity of the violation or violations. A score between 0 and 5 is assigned based on a determination of whether the harm or potential for harm is negligible (0), minor (1), below moderate (2), moderate (3), above moderate (4), or major (5).

The Discharger reported that storm events prior to December 19, 2010, had saturated the upper watershed of Arroyo Grande and Meadow Creek areas and resulted in severe flooding in and around the wastewater treatment plant. Over six (6) inches of rain fell on December 18-20, 2010, causing up to three feet deep of floodwater on roadways near the wastewater treatment plant. Some residential homes adjacent to the wastewater treatment plant were inundated by floodwaters and residents were forced to evacuate for health and safety reasons.

On Sunday morning of December 19, 2010, the weekend standby plant operator responded to a generator alarm and arrived at the wastewater treatment plant site around 7:30 a.m. The responding plant operator

observed rising floodwaters around the plant from the adjacent Meadow Creek and called additional operators to help address flooding issues at the plant.

At around 10:30 a.m. on December 19, 2010, the rising floodwater had inundated the plant's underground utility boxes at the influent pump station and migrated into electrical conduits that shorted the power supply to the influent pump motors. Initially, the Discharger reported that the floodwater shorted the motor of influent pump #4 and tripped its circuit breaker, which also tripped the main circuit breaker of the influent pump motors. Later investigation by the Discharger found that the floodwaters in electrical conduits may have also tripped the "shunt" switch of the influent pumps at the WWTP.

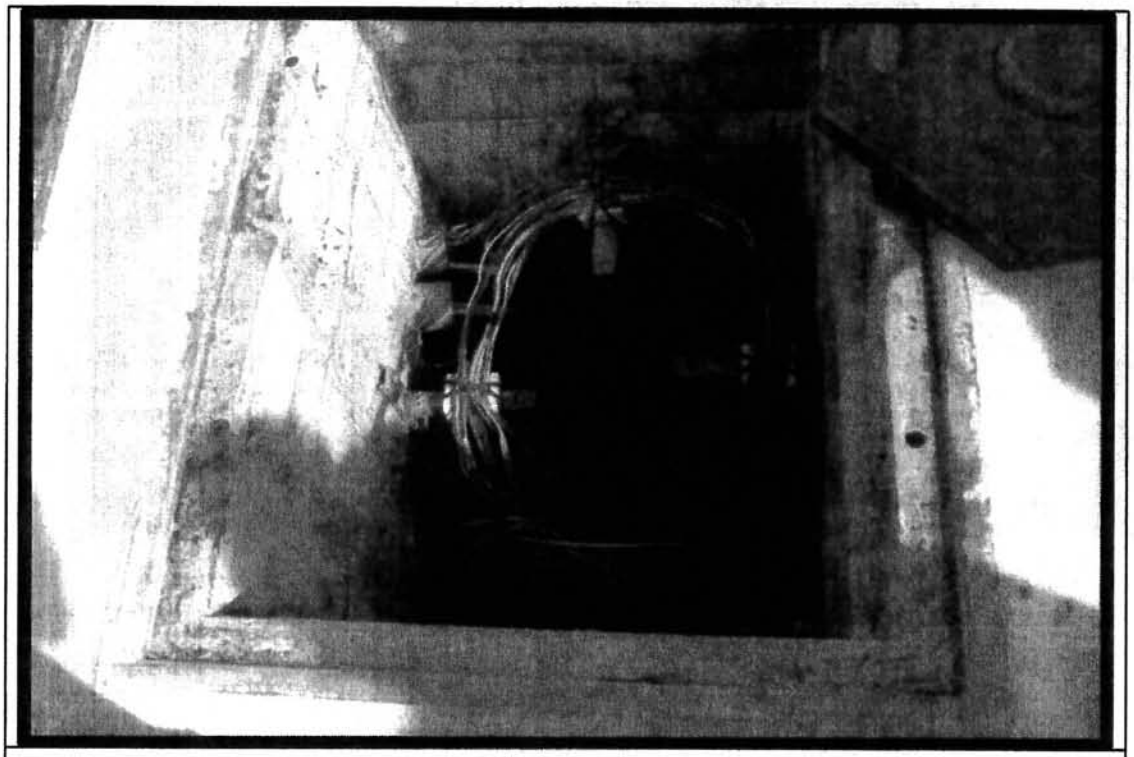

PHOTO 1: *View of underground utility box which was inundated with floodwater. After entering the utility box, the floodwater then proceeded into the WWTP influent pump station through electrical conduits, causing the electrical failure and resulting sewer overflow.*

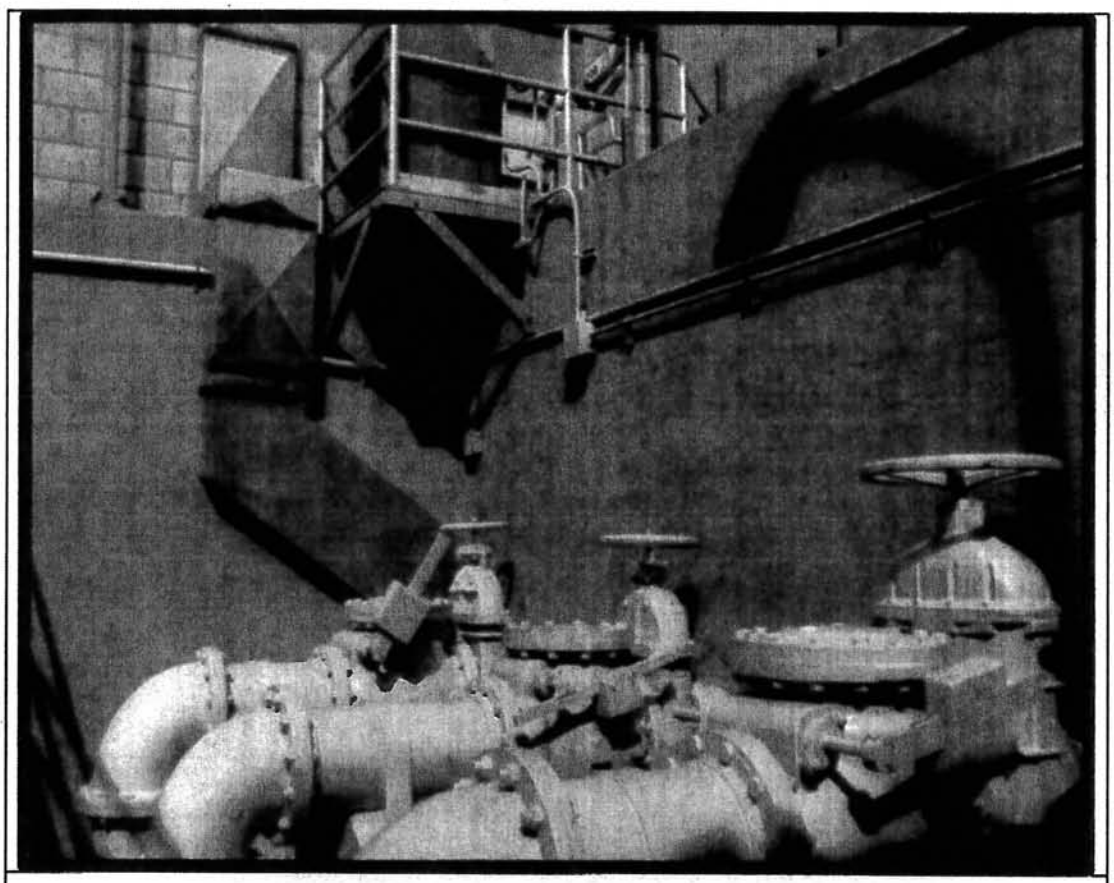

PHOTO 2: *View of Discharger's WWTP influent pump station where electrical-powered pumps are located. The failure of these pumps caused the sewer overflow.*

Additionally, the Discharger reported that the WWTP influent pump station main circuit breaker was incorrectly set by its electrical contractor during previous maintenance servicing. According to the Discharger, an investigation conducted by Thoma Electric concluded that the instantaneous trip of the main circuit breaker inside the WWTP influent pump station was set to trip before an additional circuit breaker leading to the primary logic controller pump #4. In addition, Thoma Electric completed a breaker coordination study in June, 2011 to identify other potential electrical problems to prevent any future recurrence of "incorrect settings" to occur in the WWTP influent pump station.

The simultaneous shutdown of all four influent pumps in the WWTP influent pump station caused by the electrical failure resulted in rapid backup of sewage inside the WWTP influent pump station, causing the influent sewage flow to surcharge upstream in the collection system. Based on the Discharger's reported HGL Methodology[4], the collection system surcharging began at approximately 11:00 a.m. on December 19, 2010.

[4] Hydraulic Grade Line (HGL) methodology used by Discharger in estimating the December 2010 sewer overflow volume, which relies on with field observations and generic "example" procedures and information in "Best Practices for Sanitary Sewer Overflow Prevention and Response Plan," published by CWEA http://www.cwea.org/members/publications/SSORP-CWEA.pdf

While the Discharger attempted to use its emergency standby pump to bypass sewage around the failed influent pump station, the Discharger failed to implement standard operating procedures for the emergency standby pump during "standby" mode. The pump's bypass valve was inadvertently in the "closed" position, which initially restricted the discharge flow bypassing the WWTP influent pump station. Unfortunately, WWTP operators were only able to open the valve to approximately the "1/3 open" position before rising floodwaters entering the WWTP influent pump station required evacuation. Later in the day, the WWTP operators were able to fully open the valve. During the bypassing operations, WWTP plant operators also reported that the emergency standby pump was intermittently operational during part of the afternoon on December 19, 2010 due to electrical control panel problems with the pump. In addition, the Discharger estimated that the diesel pump was only running at 1,500 revolutions per minute (rpm) instead of its maximum rated 1,835 rpm at a theoretical flow rate of 9.4 mgd. Additionally, the portable pump borrowed from the City of Pismo Beach was not immediately operational due to a dead battery.

Due to the major storm event and localized flooding on December 19, 2010, the Discharger reported that it assumed that the untreated sewage overflow had been washed away by stormwater runoff and ended up in the Pacific Ocean via Oceano Lagoon and Meadow Creek.

Determination of Estimated Volume Discharged

The Discharger presented and compared three separate calculation methodologies in determining the estimated volume discharged for the December 2010 sewer overflow:

1. HGL Methodology, assuming only sewage overflow points visually inspected during localized flooding and then visually inspected after the December 2010 sewer overflow were the only possible overflow locations where sewage was discharged;

2. Flow analysis using WWTP historical data based on historic diurnal curves; and,

3. Calculation performed by the WWTP Plant Superintendent at the time of the December 2010 sewer overflow (Mr. Jeff Appleton, Chief Plant Operator).

The following table summarizes the calculated discharge volume for each methodology reported by the Discharger in response to the NOV/13267 letter:

Table 4 – Summary of Discharger's Methods and Estimates of Sewer Overflow Volume

CALCULATION METHODOLOGY	CALCULATED SEWER OVERFLOW VOLUME
#1 reported HGL	417,298 gallons*
#2 Influent Flow Data	661,000 gallons
#3 Chief Plant Operator's Report	2,250,000 to 3,000,000 gallons

*Final sewer overflow volume reported by Discharger (response to NOV and 13267 Letter dated May 31, 2011)

In estimating the final volume of the sewage spill, the Discharger utilized method #1. According to the Discharger, the reported HGL Methodology utilized the observed height of water column from one of the plant's manholes during the December 2010 sewer overflow event, and then was used to calculate the volume of sewage discharged upstream from observed manholes based on site conditions (manhole cover,

number of pick holes in cover, etc.) using the CWEA publication mentioned above, resulting in its final volume estimation for the December 2010 sewer overflow of 417,298 gallons discharged into the environment.

Initially, the Discharger used the historical influent flow data (method #2) in reporting spill volumes into the CIWQS SSO Online Database. However, the Discharger contends that the reported HGL Methodology is the most reliable method in calculating spill volumes for each discharge point (manhole) because the reported HGL Methodology takes into account field observations by eyewitnesses and photographs taken during and after the December 2010 sewer overflow event, assuming these were the only locations throughout the entire collection system where overflows were experienced. The following table shows varying spill volumes reported by the Discharger after the December 2010 sewer overflow event.

Table 5 – Summary of Discharger's Estimates of Sewer Overflow Volume

DATE OF REPORT	DESCRIPTION	SEWER OVERFLOW VOLUME (gallons)
December 22, 2010 –	Reported drafts submitted online to CIWQS SSO Online Database	898,600
January 3, 2011 –	Report submitted to Regional Water Board	384,200
May 31, 2011 –	Response to NOV/13267 Letter dated 4-18-11	417,298

Following meetings, telephone conferences and review of documents submitted by the Discharger, Water Board staff concluded that in this case, the reported HGL Methodology used by the Discharger in calculating December 2010 sewer overflow volume is inappropriate. While the Discharger presented a discharge calculation methodology that could reasonably support a single discharge event (i.e., one involving a discharge with a single manhole location and if no flow data were available), it is inappropriate for the December 2010 sewer overflow since multiple discharge locations were involved. Secondly, the Discharger's collection system is considered an "open" system (gravity flow) because of multiple holes/vents in manholes, sewer cleanouts, installed backflow prevention devices designed to allow sewage to escape the collection system under certain conditions, and private laterals where overflows could likely occur but are unaccounted for in the Discharger's reported HGL Methodology. The Discharger reported six (6) sewer overflows resulting in sewer backups into residential homes as a result of the collection system surcharging from service laterals connected to the Discharger's collection system, providing additional evidence to support that not all overflow locations were accounted for using the reported HGL Methodology. Lastly, the Discharger recognized that some discharge locations were not visually inspected because of health and safety issues due to localized flooding (immediate evacuation was required in some areas).

Further, the Discharger in using its reported HGL Methodology ignored the recommendations specified in the publication to "establish and utilize your agency's approved standardized templates, tables, and or pictures to estimate SSO volume." Instead, the Discharger applied the generic "example" information included in the publication, further rendering the reported HGL Methodology estimates inaccurate and unreliable, since many different factors (e.g., manhole cover geometry, weight, slope) will affect the discharge rate.

Since this particular SSO event occurred at the plant's influent pump station with recorded influent and effluent flow data, Water Board staff used historical plant flow data in calculating the total spill volume for the following reasons:

1. The influent pump station at the WWTP is equipped with a "Parshall flume" flow meter, which provided historical influent flow monitoring data for and reporting purposes. Additionally, the plant has an effluent flow meter that monitors effluent flows.

2. Plant staff performed regular maintenance and calibration of the flow meters, thus ensuring accuracy of measured flow data.

3. Records of influent and effluent flows provide measured flow data and minimize potential errors inherent in individual observations and/or assumptions.

4. Historical flow data and Inflow/Infiltration characterization study provide overall influent and effluent flow characteristics of the treatment plant.

5. Discharger's sewer system is an "open" system where inflow/infiltration can freely occur in unknown sections throughout the collection rendering the Discharger's reported HGL Methodology unreliable for estimating the December 2010 untreated sewage discharge volume.

Calculation Methodology (see detailed description in Appendix A)

In calculating the appropriate December 2010 sewer overflow discharge volume[5] to waters of the United States, Water Board staff evaluated the following information submitted by the Discharger:

1. Measured influent flow data for December (2008-2010);

2. Measured effluent flow data (2008-2010);

3. Measured Influent flow data before and after the December 2010 sewer overflow incident;

4. Recent inflow/infiltration study report by the Discharger;

5. Reported bypass volume (bypassing influent pump station during December 2010 sewer overflow incident and stored onsite/pipelines); and,

6. Plant throughput residence time (amount of time it took for water to travel through the plant).

Based on the monitored flow data above, Water Board staff created a graphical presentation of hourly diurnal flow variations that subject the plant's unit operations. Diurnal flow variations for both dry and wet weather events showed similar downward pattern from peak flows around 11:00 a.m. through midnight (see graphs in Appendix A). Since the plant lost its monitored influent flow data during the December 2010 sewer overflow event, Water Board staff used the hourly diurnal flow data for both

[5] Estimated discharge volume (December 2010 Sewer Overflow) = influent/effluent flow - total bypass flow of influent pump station.

influent and effluent flows to estimate the December 2010 sewer overflow discharge volume. In calculating the discharge volume, Water Board staff used a conservative start and end times. The table below summarizes the calculation results for the total December 2010 sewer overflow discharge volumes (bolded text):

Table 6 – Summary of Water Board's Estimate of Sewer Overflow Volume

Volume (gallons)	Influent Flow* (gallons)	Effluent Flow** (gallons)
Total volume entering the plant if pump station hadn't failed (sewage and inflow/infiltration).	3,095,573	3,262,701
Volume that bypassed the failed pump station and entered into treatment plant (based on effluent meter)	1,945,076	1,945,076
Total volume that bypassed the failed pump station and entered into treatment plant (effluent Flow + 180,000 to sludge storage)	2,125,076	2,125,076
Total Sewer Overflow Discharge Volume (including 2,200 gals. SSO on Dec. 20, 2010)	**972,697**	**1,139,825**

* based on 11 hours SSO (11:00 a.m. to 10:00 p.m.)
** based on 10 hours SSO (12:00 a.m. to 10:00 p.m.) due to assumed plant residence time (1 hr)

In determining the appropriate methodology in estimating the December 2010 sewer overflow volume, Water Board staff used the effluent flow estimation process because it provides the most reliable and accurate approach with the following reasons:

1. Unlike the influent flow meter, the effluent flow meter was fully functional throughout the December 2010 sewer overflow event;

2. The influent flow meter stopped recording flow rates at approximately 7.4 mgd due to wet well flooding. However, the effluent flow continued to record flow data which showed increasing flow rates as high as 8.44 mgd (at 10:26 AM). This provides evidence that the actual influent flow was higher than recorded by the influent meter; and,

3. The effluent flow data provide further evidence that the collection system and the WWTP sustained heavy inflow and infiltration flows throughout the December 2010 sewer overflow event.

Therefore, the estimated December 2010 sewer overflow volume discharged was 1,139,825 gallons.

Environmental Monitoring after the Sewer Overflow Event

The discharge of 1,139,825 gallons of untreated sewage resulted in undetermined harm to the water quality and beneficial uses of Oceano Lagoon, Meadow Creek, Arroyo Grande Creek Estuary downstream and upstream of Arroyo Grande Creek and the Pacific Ocean (Pt. San Luis to Pt. Sal). (See attached vicinity map of sewer overflow locations reported by the Discharger, attached hereto as Appendix B).