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

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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 requirements are the basis for assessing administrative civil liability pursuant to CWC section 13385.

1. Regional Water Board Order No. R3-2009-0046 (NPDES Permit No. CA0048003);

2. Section 301 of the Clean Water Act and CWC section 13376; and

3. Sanitary Sewer Collection System Order.

1. Regional Water Board Order No. R3-2009-0046

The Discharger violated Discharge Prohibition G 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."

The Discharger violated Provision VI.C.6 which states, "Stormwater flows from the wastewater treatment process areas are directed to the WWTP 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.

The Discharger violated the Standard Provisions (Attachment D-1.B.2), which state, "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 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 electric influent pump motors.

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.

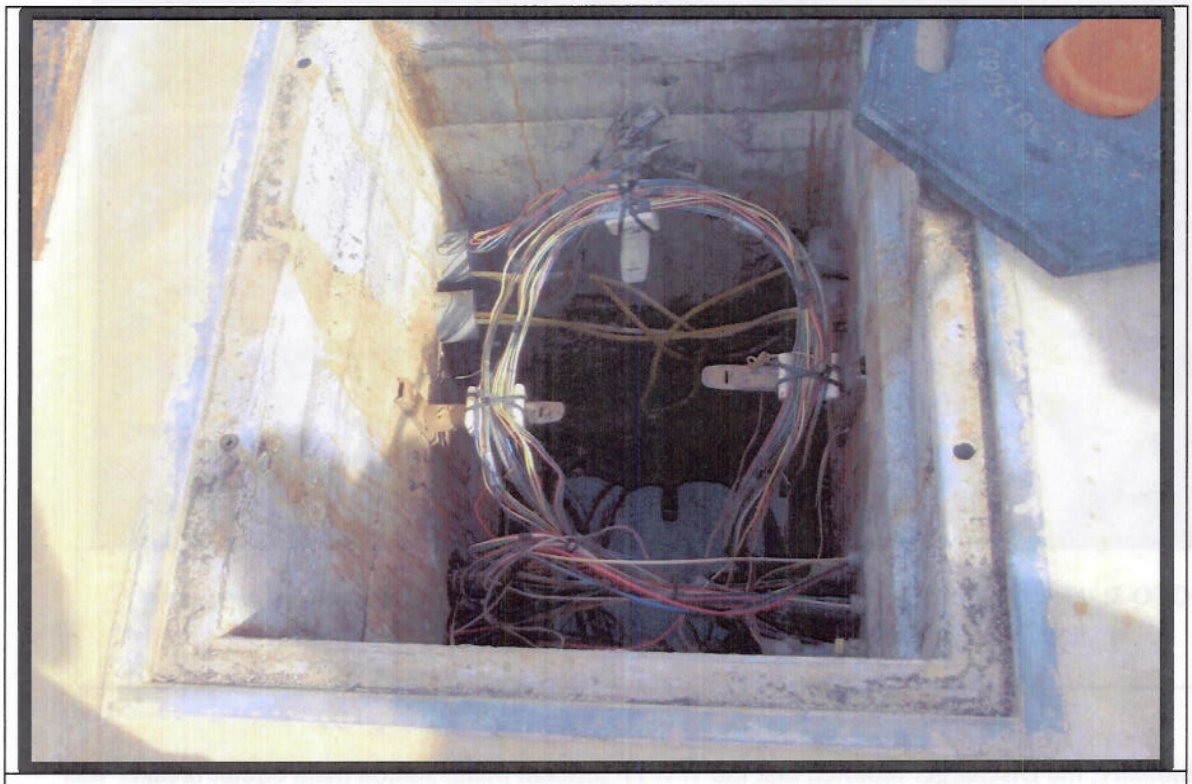

PHOTO 1: *View of underground utility box which was inundated with floodwater. After entering the utility box, the floodwater then proceeded into the WWTP influent pump station through electrical conduits, causing the electrical failure and resulting sewer overflow.*

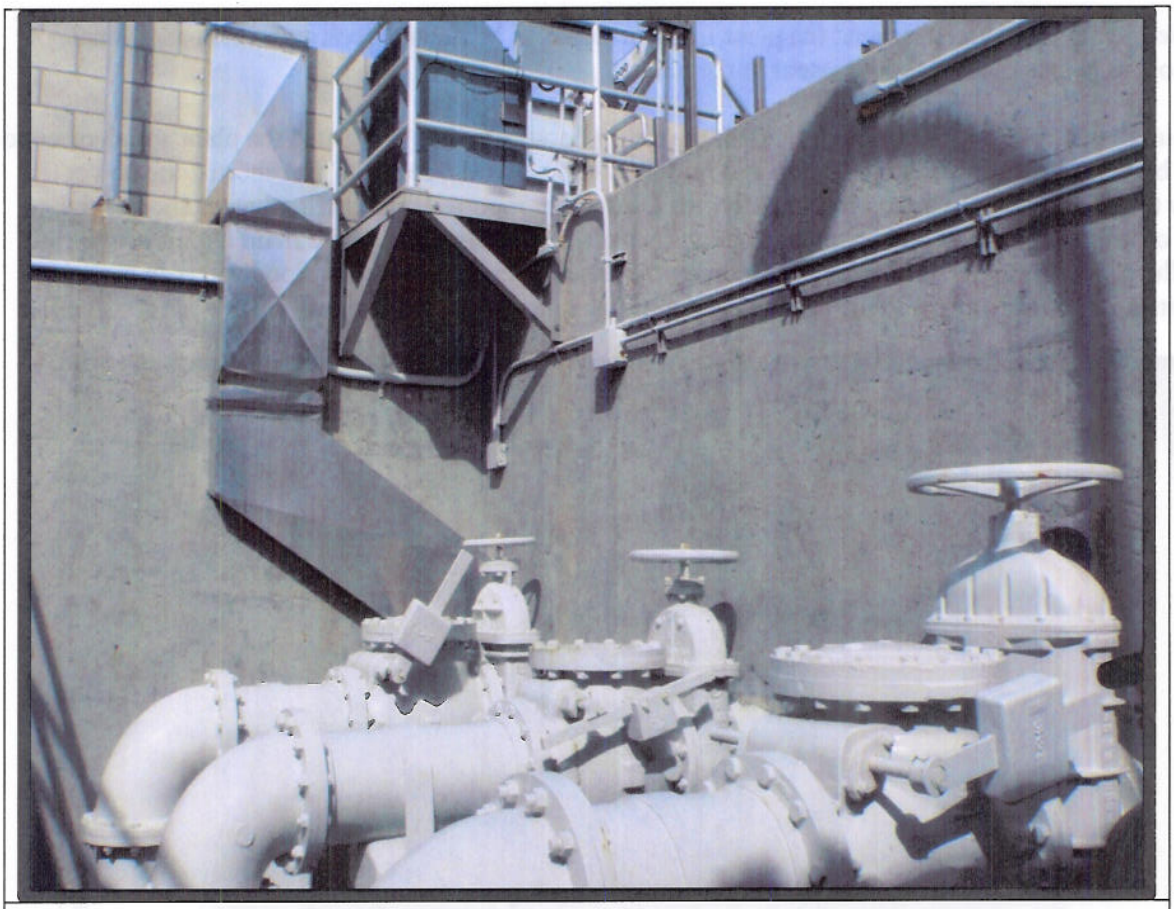

PHOTO 2: *View of Discharger's WWTP influent pump station where electrical-powered pumps are located. The failure of these pumps caused the sewer overflow.*

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).

The Discharger did not conduct water quality sampling and monitoring activities immediately following the untreated sewage overflow incident. According to the Discharger, this was mainly due to the flood advisory warning issued by the San Luis Obispo (SLO) County. Instead, the Discharger utilized the SLO County Environmental Health Department (EHD) water quality monitoring samples taken on December 28, 2010, more than one week after the untreated sewage overflow incident.

According to the Discharger's report (of May 31, 2011), the SLO County posted signs warning the public of the sewage spill and rain advisory at all main beach entrances and on all advisory boards. The Discharger reported that the SLO County EHD collected monitoring samples on December 28, 2010, and after reviewing the analytical results, lifted the beach advisory warning on December 29, 2010.

Beneficial Uses of Affected Waters

The Water Quality Control Plan for the Central Coast Region (Basin Plan[6]) is the Regional Water Board's master water quality control planning document. It designates beneficial uses and water quality objectives for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve water quality objectives.

Establishing the beneficial uses to be protected in the Central Coastal Basin is a cornerstone of this comprehensive plan. Once uses are recognized, compatible water quality standards can be established as well as the level of treatment necessary to maintain the standards and ensure the continuance of the beneficial uses.

Beneficial uses are presented for inland surface waters by 13 sub-basins in Table 2-1 (see Basin Plan). Beneficial uses for inland surface waters are arranged by hydrologic unit. Beneficial uses are regarded as existing whether the water body is perennial or ephemeral, or the flow is intermittent or continuous. Beneficial uses of coastal waters are shown in Table 2.2 of the Basin Plan.

The Basin Plan has designated the existing beneficial uses of surface waters in Oceano Lagoon, Meadow Creek, downstream and upstream of Arroyo Grande and Pacific Ocean (Pt. San Luis to Pt. Sal) to include water uses for municipal (MUN), agricultural supply (AGR), industrial process supply (IND), groundwater recharge (GWR), contact water recreation (REC-1), non-contact water recreation (REC-2), wildlife habitat (WILD), warm freshwater habitat (WARM), cold freshwater habitat (COLD), migration of aquatic organisms (MIGR), spawning, reproduction and/or early development (SPWN), preservation of biological habitats of special significance (BIOL), rare, threatened or endangered species (RARE), estuarine habitat (EST), freshwater replenishment (FRSH), commercial and sport fishing (COMM) and shellfish harvesting (SHELL).

The discharge of untreated sewage had direct and negative impacts on the beneficial uses of Oceano Lagoon, Meadow Creek, upstream and downstream of Arroyo Grande Creek, Arroyo Grande Creek Estuary and the Pacific Ocean (Pt. San Luis to Pt. Sal) and the affected residential communities with the following impacts:

1. San Luis Obispo County Public Health (SLO CPH) advisory (beach was closed for public use more than five days);

[6] http://www.waterboards.ca.gov/centralcoast/publications_forms/publications/basin_plan/index.shtml

2. The Discharger did not do any sampling and/or monitoring of impacted surface water bodies, but relied on SLO CPH's monitoring efforts. However, the Discharger did conduct personal interviews of residents affected by floodwaters and sewage and reported no health impacts to people and unknown impacts to aquatic life;

3. Multiple beneficial uses were adversely affected for a prolonged period of time; however, chronic effects resulting from this violation were unlikely; and,

4. Some people/residents trying to protect their homes from rising floodwaters were potentially exposed by contact with sewage contaminated floodwaters, including sewage discharged from six (6) sewer backups, totaling 1,200 gallons reported by the Discharger. During the investigation, the Discharger indicated it did not report any health issues or complaints from affected residents resulting from the discharge of untreated sewage in and around residential properties.

Since the untreated sewage discharge resulted in the restriction of beneficial uses for more than five days, this violation falls under "major" harm or potential for harm to beneficial uses as defined in the Enforcement Policy:

> Major - high threat to beneficial uses (i.e., significant impacts to aquatic life or human health, long term restrictions on beneficial uses (e.g., more than five days), high potential for chronic effects to human or ecological health).

Therefore, a score of 5 was assigned to Factor #1.

Factor #2 - Physical, Chemical, Biological/Thermal Characteristics of Discharge

Untreated sewage is composed of, but not limited to, high concentrations of pathogenic bacteria, biochemical oxygen demand due to organic and inorganic materials, nutrients, ammonia, heavy metals, emulsions and other toxins. These pollutants adversely affect the quality of water needed to support and sustain the beneficial uses of the impacted surface waters. Specifically, the untreated sewage discharge may impact the quality of fresh water and seawater aquatic life beneficial uses and limit contact and non-contact recreation.

The characteristics of the discharged material posed an above-moderate risk or threat to potential receptors. The Enforcement Policy defines above-moderate as:

> Discharged material poses an above-moderate risk or direct threat to potential receptors (i.e., the chemical and/or physical characteristics of the discharged material exceed known risk factors and/or there is substantial concern regarding receptor protection).

The degree of toxicity in untreated sewage poses a direct threat to human and ecological receptors. Accordingly, a score of 3 was assigned to Factor #2.

Factor #3 - Susceptibility to Cleanup or Abatement

Pursuant to the Enforcement Policy, a score of 0 is assigned to this factor if 50 percent or more of the discharge is susceptible to cleanup or abatement. A score of 1 is assigned for this factor if less than 50 percent of the discharge is susceptible to cleanup or abatement.

According to the Discharger, cleanup or recovery of discharged sewage was not possible because of rising floodwaters and multiple discharge points located in close proximity to Oceano Lagoon, Meadow Creek, Arroyo Grande Creek Estuary and the Pacific Ocean. Since the untreated sewage discharge was mixed with floodwaters and less than 50 percent may have been susceptible to cleanup or abatement, a score of 1 was assigned to the penalty calculation methodology.

Step #2: Assessment for Discharge Violations

The Enforcement Policy requires establishing a base liability for calculating the mandatory penalty required under CWC section 13385(h) and (i). In this case, this step considers both per gallon and per day assessments because of the large nature of the spill or release.

The initial liability amount is calculated on a per gallon basis using the scores for harm potential as discussed above and the extent of Deviation from Requirement of the violation. The Deviation from Requirement reflects the extent to which the violation deviates from applicable discharge requirements. The following definition describes how Water Board staff determine the score for Deviation from Requirement:

> Minor - the intended effectiveness of the requirement remains generally intact (e.g., while the requirement was not met, there is a general intent by the Discharger to follow the requirement).
>
> Moderate - the intended effectiveness of the requirement has been partially compromised (e.g., the requirement was not met, and the effectiveness of the requirement is partially achieved).
>
> Major - the requirement has been rendered ineffective (e.g., the Discharger disregards the requirement, and/or the requirement is rendered ineffective in its essential functions).

While the Discharger demonstrated a general intent to comply with discharge requirements, Water Board staff also discovered that since 2004 the Discharger already recognized the issues of flooding and fire related issues of underground utility boxes containing electrical cables (see Appendix E -Main Budget Item #16). The NPDES discharge permit specifically requires the Discharger to protect the wastewater control systems from 100-year frequency flood (Attachment D-1.B.2 of NPDES permit). However, the Discharger did not implement the proposed improvement project that would have prevented the December 2010 sewer overflow. As defined by the Enforcement Policy, this failure to prevent the December 2010 sewer overflow resulted in partially compromising the intended effectiveness of the requirement. Therefore the category that best fit the Deviation Requirement would be considered "Moderate."

Based on the potential harm score of 9 (nine) and a "Moderate" Deviation from Requirement (see Table 1 of the Enforcement Policy, page 14), the score for Step #2 was 0.5. The Enforcement Policy requires the Water Boards to apply the "per gallon factor" to the maximum per gallon amounts allowed under statute. Since this violation involves a high volume discharge of sewage, a maximum of $2.00/gallon was assessed. Therefore, the initial liability amount on a per gallon basis is $1,138,825.

Step #3: Per Day Assessment For Non-Discharge Violations

The Enforcement Policy requires per day assessments for non-discharge violations, considering potential for harm and the extent of deviation from applicable requirements. These violations include, but are not limited to, the failure to conduct routine monitoring and reporting, the failure to provide required information, and the failure to prepare required plans. While these violations may not directly or

immediately impact beneficial uses, they prevent the water boards from having accurate data to be able to respond quickly and meaningfully to address water quality impacts and therefore undermine the objectives of the CWC and the State Water Board's Sanitary Sewer Overflow Reduction Program (SSORP)[7]. The Water Boards must use the matrix set forth in Table 3 of the Enforcement Policy on page 16 to determine the initial liability factor for each violation. The per day assessment and appropriate per day factor is multiplied by the maximum penalty amount per day allowed under CWC section 13268.

The Sanitary Sewer Collection System Order has a Monitoring and Reporting Program (MRP). The MRP includes specific SSO notification, reporting and record-keeping requirements to replace other mandatory routine written reports for SSOs and facilitate compliance monitoring and enforcement for violations. The State Water Board Executive Officer on February 20, 2008 revised the original 2006 adopted MRP (Amended MRP, WQ 2008-0002-EXEC) to rectify early notification deficiencies to ensure that first responders are notified in a timely manner for SSOs discharged to waters of the state.

While the Discharger demonstrated a general intent to comply with the Sanitary Sewer Collection System Order, during the investigative process, Water Board staff discovered that the Discharger failed to certify and comply with the Amended MRP requirements for six (6) sewer backups into residential structures resulting from the December 2010 Sewer Overflow. As required under the Amended MRP (section A.6), the Discharger failed to certify each of the six (6) individual sewer backup reports in the CIWQS SSO Online database within 30 days after the end of the calendar month in which the SSO event occurred (certification was due on January 30, 2010 and not certified by the Discharger in the SSO Online Database until March 6, 2012, 766 days late per each sewer backup report).

The following factors were applied for non-discharge violations (see Table 3 of the Enforcement Policy, page 15). A potential harm of "minor" was selected since the reported sewer backups did not reportedly reach waters of the United States as certified by the Discharger. A "major" deviation from requirement was selected since the Discharger did not report and certify the sewer backups in the CIWQS SSO Online Database on time, 766 days late for each required report. The resulting score for Step #2 was selected as 0.35, which is the mid-range in Table 3. Therefore, the initial liability amount is $350 per day per violation. However, in consideration of the Discharger's overall demonstrated compliance with the Amended MRP for initial December 2010 sewer overflow reporting, Water Board staff reduced the maximum applicable number of violation days for each of the six (6) sewer backups to 30 days for each violation.

[7] Information for the SSORP is available http://www.waterboards.ca.gov/water_issues/programs/sso/

Table 7 – Summary of Non-Discharge Violations

SSO Event ID #	SSO Start Date/Time	SSO Volume Certified in CIWQS (3/6/2012)	Date Due	Original Certification Date	# of days of violation
778422	2010.12.19 00.00.00	50	1/30/2010	3/6/2012	766
778302	2010.12.19 11.05.00	100	1/30/2010	3/6/2012	766
778300	2010.12.19 11.01.00	100	1/30/2010	3/6/2012	766
778297	2010.12.19 11.08.00	100	1/30/2010	3/6/2012	766
778294	2010.12.19 11.07.00	800	1/30/2010	3/6/2012	766
778290	2010.12.19 11.08.00	50	1/30/2010	3/6/2012	766

Step #4: Adjustment Factors

The Enforcement Policy describes three factors related to the violator's conduct that should be considered for modification of the amount of the initial liability. The three factors are: the violator's culpability, the violator's efforts to clean up or cooperate with regulatory authorities after the violation, and the violator's compliance history. After each of these factors is considered for the violations involved, the applicable factor should be multiplied by the proposed amount for each violation to determine the revised amount for that violation.

Adjustment for Culpability

For culpability, the Enforcement Policy suggests an adjustment resulting in a multiplier between 0.5 to 1.5, with the lower multiplier for accidental incidents, and the higher multiplier for intentional or negligent behavior. In this case, a culpability multiplier of 1.1 has been selected for the following reasons:

1. Failure of the Discharger to provide adequate protection of its WWTP equipment from a 100-year frequency flood as required in the Attachment D-1.B.2 of the Discharger's NPDES permit;

2. Failure of the Discharger to comply with 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;"

3. Failure of the Discharger to implement its required legal authority to prevent illicit discharges into its collection system including inflow and infiltration [subsection D.13(iii)(a) of the Sanitary Sewer Collection System Order and also specified in the Discharger's certified Sewer System Management Plan];

4. Failure of the Discharger to comply with its NPDES permit requirements (Standard Provisions) to ensure implementation of standard operating procedures. In this case, the Discharger failed to ensure that the emergency bypass pump valve remains in the "open" position during standby mode; and

5. Failure of the Discharger to comply with the Provision D.7(v) of the Sanitary Sewer Collection System Order to provide adequate sampling to determine the nature and impact of the release.

In 2004, the Discharger considered a $200,000 Main Budget Item #16 to replace all wirings on various motors and lighting in the plant with waterproof wires rated for the respective type of service. According to the Discharger's staff report, the electrical wires installed in 1964-66 were not designed to be submerged in groundwater and had deteriorated over time, which in several instances caused electrical fire and/or loss of power. In 2010-2011 fiscal year budget, the Discharger indicated that Main Budget Item #16 was 90 percent complete with the specifications and would be ready to bid early in the fiscal year with an expected new budget cost of $500,000.

This particular project could have replaced the subject electrical utility vault with water resistant wiring and sealed electrical conduits that could have prevented and/or reduced the December 2010 sewer overflow.

Based on the information above, Water Board staff have reason to believe that the Discharger had prior knowledge of potential risks associated with the deteriorating electrical wires and the failure to protect plant equipment from 100-year frequency flood as required by its NPDES discharge permit.

Accordingly, Water Board staff find the Discharger culpable for not implementing its proposed project (Main Budget Item #16) since 2004 and other flood protection projects to protect the plant facilities from 100-year frequency flood as required by its discharge permit. Therefore, this factor should be adjusted to a higher multiplier of 1.1 for negligent behavior.

Adjustment for Cleanup and Cooperation

For cleanup and cooperation, the Enforcement Policy suggests an adjustment should result in a multiplier between 0.75 to 1.5, with the lower multiplier where there is a high degree of cleanup and cooperation. While the Discharger reported different discharge volumes, Water Board staff find its response and cooperation timely and satisfactory.

Upon detecting the spill, the Discharger responded quickly by diverting flows to the plant's clarifiers, drying beds and sludge lagoons. Additionally the Discharger secured additional pumps from other agencies and informed the public regarding the sewage spill.

The Discharger was timely in its response to the April 18, 2011 NOV and 13267 letter issued by the Regional Water Board and provided additional information accordingly.

In this case a Cleanup and Cooperation multiplier of 1.0 has been selected due to the Discharger's efforts to manage a difficult situation while coordinating response work with various resource agencies.

Adjustment for History of Violations

The Enforcement Policy suggests that where there is a history of repeat violations, a minimum multiplier of 1.1 should be used for this factor. In this case, a multiplier of 1.0 was selected because a review of the California Integrated Water Quality System (CIWQS) Sanitary Sewer Overflow database shows that the Discharger had no history of sewage overflow violations in recent years. It should be noted that the methodology considers history of violations and culpability as separate factors, as set forth in this Technical Report. The selection of the lowest multiplier for the absence of prior violations in the history of violations category does not require nor suggest that a low multiplier is appropriate in the culpability category.

Step #5: Determination of Total Base Liability Amount

The Total Base Liability amount of $1,333,007.50 is determined by adding the amounts for each violation and adjusted for multiple day violations. Accordingly, the Total Base Liability amount for the violations is calculated by multiplying the initial amount by the adjustment factors:

(Initial Liability) x (Culpability) x (History of Violations) x (Cleanup) = ($1,211,825) x (1.1) x (1) x (1) = $1,333,007.50

Step #6: Ability to Pay and Ability to Continue in Business

The Enforcement Policy states that if the State and/or Regional Water Board have sufficient financial information to assess the Discharger's ability to pay the Total Base Liability or to assess the effect of the Total Base Liability on the Discharger's ability to continue in business, then the Total Base Liability amount may be adjusted downward. Conversely, if the Discharger's ability to pay is greater than similarly-situated Dischargers, it may justify an increase in the proposed amount to provide a sufficient deterrent effect.

It is anticipated that the Discharger would be able to pay the proposed liability. The Discharger's adopted Budget for fiscal year 2010-2011 is divided into three Accounting Funds: (1) Operating Fund (Fund 19), (2) Expansion Fund (Fund 20) and, (3) Replacement/Improvement Fund (Fund 26).

The following table shows the estimated balance as of July 1, 2010 for all three accounting funds:

Table 7 – Summary of Discharger Estimated Fund Balances (as 7/1/2010)

Accounting Fund	Estimated Balance as of July 1, 2010
Operating Fund (Fund 19)	$(591,984) [negative balance]
Expansion Fund (Fund 20)	$5,230,172
Replacement/Improvement Fund (Fund 26)	$867,832

According to the Discharger's Budget report for fiscal year 2010-2011, the sources of revenues for Fund 19 come from service charges and sales/reimbursements, for Fund 20 revenues come from sewer connection fees, and for Fund 26 revenues come from Fund 19 transfers.

Accordingly, the penalty factor in this step is neutral, and does not weigh either for or against the adjustment of the Total Base Liability. The Discharger may provide additional information in response to the Complaint to demonstrate that a downward adjustment is warranted.

Step #7: Other Factors as Justice May Require

The Enforcement Policy requires that if the Central Coast Regional Water Board believes that the amount determined using the above factors is inappropriate, the liability amount may be adjusted under the provision for "other factors as justice may require," but only if express findings are made to justify a reason for modifying the administrative civil liability.

In addition, the costs of investigation should be added to any final liability amount according to the Enforcement Policy. The current cost of Water Board staff investigation is $50,000, and this figure will

increase through hearing. Currently, the liability amount has been adjusted upward by $50,000 to reflect staff costs bringing the total proposed liability to $1,383,007.50.

No other factors are being considered in the determination of the proposed liability amount.

Step #8: Economic Benefit

The Enforcement Policy requires that State and/or Regional Water Boards determine any economic benefit of the violations based on the best available information, and suggests that the amount of the civil liability should exceed this amount whether or not economic benefit is a statutory minimum.

The Discharger gained economic benefit from 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. The CWC encourages an administrative liability of at least this amount to recover competitive advantages obtained by the Discharger by failing to comply with statutory requirements and deter future non-compliance.

Step #9: Maximum and Minimum Liability Amounts

The maximum liability that the Regional Water Board may assess pursuant to CWC section 13350(e) is ten dollars ($10) per gallon discharged. Therefore the maximum liability that the Regional Water Board may assess is $11,388,250.

CWC section 13350(e) does not set a minimum liability when utilizing the per gallon option. The Enforcement Policy requires that:

> *"The adjusted Total Base Liability 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."*

Therefore, the minimum liability amount the Regional Water Board may assess is $194,930 (see economic benefit computation above). The recommended liability falls within the allowable statutory range for minimum and maximum amounts.

Step #10: Final Liability Amount

The total proposed civil liability in this matter is $1,383,007.50, which corresponds to $1.21 per gallon of untreated sewage discharged.

The proposed amount of civil liability attributed to the discharge of 1,138,825 gallons [1,139,825 gallons less 1,000 gallons pursuant to Section 13385.(c)(2) of CWC] of untreated sewage was determined by taking into consideration the factors required in CWC sections 13327 and 13385(e), and the penalty calculation methodology described in the Enforcement Policy. The following table summarizes the penalty calculation:

Table 8 – Summary of Enforcement Policy Penalty Matrix Calculations

Discharger Name/ID:	South San Luis Obispo County Sanitary District		
		Violation 1	
Discharge Violations	Step 1 Potential Harm Factor (Generated from Button)	9	
	Step 2 Per Gallon Factor (Generated from Button)	0.5	
	Gallons	1,138,825	
	Statutory / Adjusted Max per Gallon ($)	2.00	
	Total		$ 1,138,825
	Per Day Factor (Generated from Button)	0.5	
	Days	2	
	Statutory Max per Day	10000.00	
	Total		$ 10,000
Non-Discharge Violations	Step 3 Per Day Factor	0.35	
	Days	180	
	Statutory Max per Day	$ 1,000	
	Total		$ 63,000.00
	Initial Amount of the ACL		**$ 1,211,825.00**
Add'l Factors	Step 4 Culpability	1.1	$ 1,333,007.50
	Cleanup and Cooperation	1	$ 1,333,007.50
	History of Violations	1	$ 1,333,007.50
	Step 5 Total Base Liability Amount		**$ 1,333,007.50**
	Step 6 Ability to Pay & to Continue in Business	1	$ 1,333,007.50
	Step 7 Other Factors as Justice May Require	1	$ 1,333,007.50
	Staff Costs	$ 50,000	$ 1,383,007.50
	Step 8 Economic Benefit	$ 177,209	**$ 1,383,007.50**
	Step 9 Minimum Liability Amount	194,930	
	Maximum Liability Amount	$ 11,388,250	
	Step 10 Final Liability Amount		**$ 1,383,007.50**

The proposed civil liability is appropriate for this untreated sewage discharge based on the following reasons:

- The discharge of large amounts of untreated sewage into waters of the United States adversely impacted the beneficial uses of Oceano Lagoon, Meadow Creek and the Pacific Ocean;
- The degree of toxicity in untreated sewage posed a threat to the beneficial uses of the above surface waters;
- The Discharger failed to implement upgrades and/or protection from floodwaters or 100-year frequency flood;
- The proposed civil liability amount is sufficient to recover costs incurred by staff of the Water Board, and serves as a deterrent for future violations; and,

- The determination of the proposed civil liability is consistent with the requirements of the State Water Board's Enforcement Policy.