# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

COMPLAINT NO. R2-2009-0043

# ADMINISTRATIVE CIVIL LIABILITY IN THE MATTER OF UNAUTHORIZED DISCHARGES OF WASTEWATER SAUSALITO-MARIN CITY SANITARY DISTRICT MARIN COUNTY

This Complaint is issued to Sausalito-Marin City Sanitary District (hereinafter "Discharger") to assess administrative civil liability pursuant to California Water Code ("CWC") Section 13385 and Section 13323. The Complaint addresses two unauthorized discharge events of partially treated wastewater from the Discharger's wastewater treatment plant (Plant) and one sanitary sewer overflow (SSO) caused by the Discharger's failure to properly maintain and operate its sanitary sewer collection system (collection system). The Discharger violated Order R2-2003-0109 (NPDES Permit No. CA0038067). The unauthorized discharge violations cited herein occurred February 15, 2009, through February 21, 2009, and February 27, 2009. The SSO violation cited herein occurred August 10, 2008.

The Assistant Executive Officer of the California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter the "Regional Water Board") hereby gives notice that:

- 1. The Discharger is alleged to have violated provisions of law for which the Regional Water Board may impose civil liability pursuant to CWC Section 13385 and Section 13323. This Complaint proposes to assess \$332,000 in penalties for the violation cited based on the considerations described in this Complaint. The deadline for comments on this Complaint is July 13, 2009, 5 p.m.
- 2. The Discharger owns and operates a wastewater treatment plant (Plant), located at #1 Fort Baker Road, Sausalito, Marin County. The Plant provides secondary treatment for domestic wastewater from Marin City, the City of Sausalito, Tamalpais Community Services District, and Golden Gate National Recreation Area. The Discharger is subject to Regional Water Board Order No. R2-2003-0109 (National Pollutant Discharge Elimination System (NPDES) Permit No. CA0038067), which allows for the discharge of secondary treated wastewater through a submerged diffuser to Central San Francisco Bay.
- 3. The Plant has an average dry weather capacity of 1.3 million gallons per day (MGD) and can treat up to 6.0 MGD during wet weather with flows in excess of this being diverted from the biological treatment units directly to the secondary clarifiers.

- 4. The Discharger's collection system includes about 10 miles of sanitary sewer lines and seven pump stations. About 70 miles of sanitary sewer lines are owned and operated by the City of Sausalito, Tamalpais Community Services District, and Golden Gate National Recreation Area. The Discharger's collection system serves an approximate population of 18,000 consisting primarily of residential customers and some light industrial/commercial customers.
- 5. This Complaint is issued to address two unauthorized discharge events totaling approximately 767,200 gallons of partially treated wastewater and one SSO totaling 9,000 gallons. The unauthorized discharge events originated from a bypass pipeline at the Discharger's Facility and occurred on February 15, 2009 through February 21, 2009 and on February 27, 2009. The SSO occurred from the City of Sausalito's collection system near the Discharger's Main Street Pump Station on August 10, 2008.
- 6. Unless waived, the Regional Water Board will hold a hearing on this Complaint at its September 9, 2009, meeting, at the Elihu M. Harris State Building, First Floor Auditorium, 1515 Clay Street, Oakland. The Discharger or its representative will have an opportunity to be heard and contest the allegations in this Complaint and the imposition of the civil liability. An agenda for the meeting will be mailed to the Discharger not less than 10 days before the hearing date. At the hearing, the Regional Water Board will consider whether to affirm, reject, or modify the proposed civil liability, to refer the matter to the Attorney General for recovery of judicial liability, or take other enforcement actions.
- 7. The Discharger can waive its right to a hearing to contest the allegations contained in this Complaint by (a) paying the civil liability in full or (b) undertaking an approved supplemental environmental project in an amount not to exceed \$155,000 and paying the remainder of the civil liability, all in accordance with the procedures and limitations set forth in the attached waiver.

# **ALLEGATIONS**

- 1. On February 17, 2009, the Discharger reported to the Regional Water Board an unauthorized discharge of partially treated wastewater to waters of the United States from a leaking bypass pipeline at its Plant. The bypass pipeline is located in the shoreline of Central San Francisco Bay under a causeway at the Discharger's Facility.
  - a. The discharge was discovered by a contractor standing on the northeast corner of the Plant's Operations Control Building. The contractor reported the discharge to the Discharger around 13:00 hours on February 17, 2009.
  - b. The Discharger's contractors began attempting to stop the discharge at about 14:00 hours on February 17, 2009. Access to the discharge location was limited since the bypass pipeline is located in the shoreline of Central San Francisco Bay in the intertidal zone, and thus mostly underwater except during low tide.

- c. At about 16:00 hours on February 18, 2009, the Discharger's contractors partially repaired the bypass pipeline; and reduced the discharge rate from about 280 gallons per minute to 0.5 gallon per minute.
- d. The discharge completely ceased at about 16:00 hours on February 21, 2009, when the Discharger's contractors were able to complete all necessary repairs to stop the discharge from the bypass pipeline.
- e. Based on the Discharger's flow data analysis, the discharge likely began at about 12:00 hours on February 15, 2009, when an abrupt change in the hourly flow difference was observed between the influent and effluent flow data.
- f. The total discharge volume was approximately 764,500 gallons of partially treated wastewater. The discharge went through the primary sedimentation basin prior to being discharged from the bypass pipeline.
- g. The Discharger later determined that the cause of the discharge was corrosion of an access port in a pipeline joint located on the south end of the bypass pipeline. The corrosion likely resulted from poor workmanship on the field application of cement mortar at the access port which allowed for localized corrosion of the bolts that hold the access port cover in place, compounded by impact damage to the pipe from rubble moved by surf.
- h. The discharge released directly into Central San Francisco Bay and resulted in a four-day closure of the following beaches: Swede's Beach, Horseshoe Cove, and Rodeo Beach. Signs warning against the use of bay water-contact sports areas were also posted for four days at the turnouts/footpaths along East Road in Sausalito.
- i. The discharge occurred mostly during wet weather conditions.
- j. The Discharger was not able to recover nor contain any portion of the discharge.
- 2. On February 27, 2009, the Discharger reported to the Regional Water Board an unauthorized discharge of partially treated wastewater to waters of the United States from the same bypass pipeline at its Facility.
  - a. The Discharger was notified of the discharge at about 08:20 hours on February 27, 2009, by the Discharger's contractor beginning work to encase the entire bypass pipeline with concrete.
  - b. While grading the shoreline, the Discharger's contractor caused damage to an access port in a joint located on the north end of the bypass pipeline causing it to rupture and leak.
  - c. The discharge ceased 10 minutes later, at about 08:30 hours on February 27, 2009, when the contractor installed a pipeline plug which stopped the leak.
  - d. The total discharge volume was approximately 2,700 gallons of primary treated wastewater.
  - e. The discharge released directly into Central San Francisco Bay and resulted in a two-day closure of the following beaches: Swede's Beach, Horseshoe Cove, and Rodeo Beach. Signs warning against the use of bay water-contact sports areas were also posted for four days at the turnouts/footpaths along East Road in Sausalito.
  - f. The discharge occurred during dry weather conditions.
  - g. The Discharger was able to recover about 675 gallons and return it to the Plant for treatment.

- 3. On August 10, 2008, at 13:42 the Regional Water Board received a notice from the Office of Emergency Services of an SSO of raw sewage to waters of the United States from a sewer line located upstream of the Discharger's Main Street Pump Station in Sausalito.
  - a. The City of Sausalito (City) was notified of the SSO at 12:18 hours and arrived on site at 13:30 hours on August 10, 2008.
  - b. The Discharger arrived on site shortly after receiving a call from the Marin County Sheriff's Department at 14:39 hours and a request from the City to inspect the Main Street Pump Station.
  - c. The City reported that the SSO began at about 12:15 hours on August 10, 2008, and occurred from two private sewer line cleanouts located in the City's collection system. The two cleanouts are (i) the laundry room cleanout of the Portofino Apartments and (ii) the cleanout under the Boardwalk entrance of the Gaylords Restaurant.
  - d. The cause of the SSO was blockage in the sewer line caused by the Discharger's failure to adequately open a sluice gate in the "Rock Catcher" vault located downstream and at the terminus of the City's sewer line.
  - e. The "Rock Catcher" vault including the sluice gate is owned, operated and maintained by the Discharger.
  - f. The SSO ceased at about 13:55 hours on August 10, 2008, when the City cleared the blockage.
  - g. When the Discharger arrived on site at 15:00 hours, it discovered that the sluice gate in the "Rock Catcher" vault was not completely opened to allow full flow of wastewater through the gate. The Discharger completely opened the sluice gate to allow unrestricted flow of wastewater through the gate.
  - h. The City reported that the total SSO volume was approximately 9,000 gallons of undiluted, raw wastewater.
  - i. The SSO entered Central San Francisco Bay from the Portofino Apartments cleanout via a storm drain that leads directly to Swede's Beach and from the Gaylords Restaurant cleanout through the ground and directly to Swede's Beach.
  - j. The SSO resulted in the posting of closure signs along Swede's Beach for 3 days.
  - k. The SSO occurred during dry weather conditions.
  - 1. The City was able to recover about 60 gallons of the SSO which consisted primarily of solid matter such as rags and paper products.
- 4. An SSO is a discharge from a collection system of raw wastewater consisting of domestic wastewater as well as industrial and commercial wastewater, depending on the pattern of land uses in the area served by the collection system. An SSO contains high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease, and other pollutants. An SSO causes a public nuisance when untreated wastewater is discharged to areas with public exposure, such as streets or surface waters used for drinking, fishing, or body contact recreation. An SSO that discharges to land and is not fully cleaned up or contained, discharges to surface waters and/or seeps to ground waters. SSOs pollute

surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters.

# REQUIREMENTS APPLICABLE TO THE DISCHARGER

- 1. The Discharger is subject to Regional Water Board Order No. R2-2003-0109 (NPDES Permit No. CA0038067). Order No. R2-2003-0109 prescribes waste discharge requirements for discharges.
- 2. Order No. R2-2003-0109 includes the following prohibitions:

Section III. Discharge Prohibitions

- C. The bypass of untreated or partially treated wastewater to waters of the United States is prohibited, except as provided for in the conditions stated in 40 CFR 122.41(m) (4) and in A.13 of the Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits, August 1993 (Attachment G).
- E. Any sanitary sewer overflow that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.
- 3. Order No. R2-2003-0109 includes the following standard provision:

Attachment D. Federal Standard Provisions

I. D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order [40 CFR §122.41(e)].

#### WATER CODE PROVISIONS RELEVANT TO THESE DISCHARGES

1. Pursuant to CWC Section 13385(a)(2), a discharger is subject to civil liability for violating any waste discharge requirement issued pursuant to Chapter 5.5, which is the Water Code chapter that applies to the Board's issuance of NPDES permits. The Regional Water Board may impose civil liability administratively pursuant to CWC, Chapter 5, Article 2.5 (commencing at Section 13323) in an amount not to exceed the sum of both of the following:

- a. Ten thousand dollars (\$10,000) for each day in which a violation occurred.
- b. Ten dollars (\$10) for each gallon exceeding 1,000 gallons of discharge and not cleaned up.

If this matter is referred to the Attorney General for judicial enforcement, a higher liability of \$25,000 for each day of violation and \$25 for each gallon exceeding 1,000 gallons of discharge and not cleaned up, may be imposed by a superior court.

#### **VIOLATIONS**

- 1. The two unauthorized discharge events that occurred on February 15, 2009, through February 21, 2009, and on February 27, 2009, resulted in the bypass of partially treated wastewater to waters of the United States. The discharges originated from the Discharger's Facility, and thus violated Prohibition III.C. of Regional Water Board Order No. R2-2003-0109.
- 2. The SSO that occurred on August 10, 2008, in the City of Sausalito's collection system resulted in the discharge of raw wastewater to waters of the United States due to the Discharger's failure to properly operate and maintain one of its collection system structures. The Discharger thus violated Prohibition III. E. and Federal Standard Provision I.D in Attachment D of Regional Water Board Order No. R2-2003-0109.

#### **MAXIMUM LIABILITY**

The maximum administrative civil liability the Regional Water Board may impose for the violation is \$7,804,650 based on the following calculations:

Eight days of violation for two unauthorized discharge events and one SSO = 8 days x \$10,000/day/violation = \$80,000

Discharge exceeding 1000 gallons and not cleanup = (764,500 gallons - 1,000 gallons + 2,700 gallons - 1,000 gallons - 675 gallons + 9,000 gallons - 1,000 gallons - 60 gallons) x <math>\$10/gallon = \$7,724,650

Total: \$7,724,650 + \$80,000 = \$7,804,650

# **CONSIDERATION OF FACTORS UNDER CWC 13385**

- 1. In determining the proposed amount of civil liability to be assessed against the Discharger, the Regional Water Board's prosecution staff has taken into consideration the factors described in CWC Section 13385. The factors described 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,
  - With respect to the discharger, the ability to pay and the effect on ability to continue in business,

- Any voluntary cleanup efforts undertaken,
- Any prior history of violations,
- The degree of culpability,
- The economic benefit or savings, if any, resulting from the violation, and
- Other such matters as justice may require.

At a minimum, liability shall be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violation.

#### 2. The nature, circumstances, extent, and gravity of the violation or violations

## <u>Nature</u>

February 15, 2009-February 21, 2009 Discharge Event

764,500 gallons of primary treated wastewater discharged directly into Central San Francisco Bay from a bypass pipeline at the Discharger's Facility. The unauthorized discharge occurred for a period of about 6 days.

February 27, 2009 Discharge Event

2,700 gallons of primary treated wastewater discharged directly into Central San Francisco Bay from the same bypass pipeline at the Discharger's Facility. The unauthorized discharge occurred for 10 minutes.

August 10, 2009 SSO

An SSO of approximately 9,000 gallons of raw wastewater discharged to Swede's Beach and then to Central San Francisco Bay. The SSO occurred for almost 2 hours.

#### Circumstances

February 15, 2009-February 21, 2009 Discharge Event

The discharge occurred when an access port in a joint located on the south end of the bypass pipeline ruptured. The cause of the rupture was pipeline joint corrosion compounded by the constant impact of rubble on the joint. The corrosion likely occurred due to the inadequate application of cement mortar at the welded joint during the bypass pipeline installation in 1986. Because the cement mortar was not properly applied, it wore away and exposed the joint to the marine environment causing the joint to corrode. The corrosion compounded by the continuous impact of rubble as a result of wave and tidal action caused an access port (or hand-hole) in the

<sup>&</sup>lt;sup>1</sup> Hand-holes of 6-inches in diameter were used for field application of cement mortar on the inside of the welded pipeline joints. Hand-holes are located on each joint and on each side of the pipeline springline. Cement mortar was applied to the inside of the steel bypass pipeline in order to protect it against corrosion. Pipeline segments were coated and lined with cement mortar in the factory while the joints were coated and

joint to rupture. Primary treated wastewater leaked from the ruptured pipeline handhole into Central San Francisco Bay.

The bypass pipeline is used to divert influent wastewater flows around the Plant's primary sedimentation basin during maintenance. At the time the discharge occurred, the bypass pipeline was not in use. The source of the discharge was primary treated wastewater that backflows into the bypass pipeline from piping leading to the Plant's secondary treatment process. There is no valve at the downstream end of the bypass pipeline to prevent this primary treated effluent from back feeding into the bypass pipeline. As a result, the bypass pipeline is under constant hydraulic pressure even when not in use (hydraulic pressure is about 7 psi; the pipeline pressure rating is 125 psi). During construction of the Plant, a valve was never installed at the downstream end of the bypass pipeline because of concerns it might corrode and ultimately shut off completely due to the valve's constant direct exposure to the marine environment.

# February 27, 2009 Discharge Event

The discharge occurred when a hand-hole in a joint located on the north end of the bypass pipeline ruptured. The rupture was caused by shoreline grading activities which damaged the hand-hole in the pipeline joint. The morning of February 27, 2009, the Discharger's contractor began grading the shoreline with a mini-excavator in preparation to encase the entire pipeline with concrete. The Discharger's contractor had been instructed to begin grading only after completion of valve installation in the bypass pipeline. The valve in the bypass pipeline would prevent the backflow of primary treated wastewater into the bypass pipeline. Unfortunately, the Discharger's instructions were not clearly communicated to the contractor. The contractor began grading activities prior to the installation of the valve causing rubble to rupture a hand-hole in the pipeline joint. Since the valve had yet to be installed to prevent backflow, primary treated wastewater leaked from the ruptured pipeline hand-hole into Central San Francisco Bay.

#### August 10, 2009 SSO

The cause of the SSO was due to a blockage in the sewer line caused by the Discharger's failure to adequately close a sluice gate in a "Rock Catcher" vault located downstream and at the terminus of the City's sewer line. The vault is used to collect rocks, gravel and debris from the Discharger's conveyance system and the City's collection system. During maintenance of the vault on August 1, 2008, the Discharger failed to fully open the vault sluice gate. The sluice gate was ¾ closed thus restricting wastewater flow through the gate. The restricted flow through the system compounded by puddle pads<sup>2</sup> the City's collection system resulted in the

lined in the field via the hand-holes. After the pipeline was coated and lined, the hand-holes were capped and the entire joint was coated with cement mortar.

<sup>&</sup>lt;sup>2</sup> Absorbent material used to cleanup spills in homes and businesses. This material is typically used at child and respite care centers, pet care centers, and medical offices.

discharge of raw wastewater from two private cleanouts on August 10, 2008. The SSO, originating several feet from the shoreline, discharged directly to Central San Francisco Bay via both the ground and a storm drain that leads to Swede's Beach.

#### <u>Extent</u>

February 15, 2009-February 21, 2009 Discharge Event

Bacteria concentrations in receiving waters are used to indicate the presence of waste. The discharge event resulted in the exceedance of bacterial water quality standards<sup>3</sup> in surface waters near the discharge point and 0.25 mile north (near Swede's Beach) and 100 feet south of the discharge point along the shoreline. However, bacterial samples collected 500 feet offshore (at the source, 0.25 miles north and 0.75 miles south) were within water quality objectives. Bacterial samples collected 1 mile north and 0.75 miles south from the source along the shoreline also were within water quality objectives.

Bacterial monitoring results conducted by the Discharger demonstrated total coliform bacteria as high as 24,192 colonies per 100 ml near the source. Fecal coliform bacteria as high as 16,000 colonies per 100 ml were detected near the source and 100 feet south of the source near the shore. Enterococci levels as high as 4,106 colonies per 100 ml were detected near the source<sup>4</sup>. E. Coli levels were detected as high as about 10,000 colonies per 100 ml at the source and 100 ft south of the source and 303 colonies per 100 ml in Swede's Beach<sup>5</sup>.

The spatial extent of the bacterial exceedances was localized to the area near the Plant. The temporal extent of bacterial exceedances near the source was from February 17 to February 21, 2009. At other sampling locations, the temporal extent of bacterial exceedances was limited to February 17 and 18, 2009.

<sup>&</sup>lt;sup>3</sup> California Code of Regulations, Title 17, Article 4, Section 7958 establishes minimum protective bacteriological standards for waters adjacent to public beaches and public water-contact sports areas designated by a regional water quality control board or other authorized and responsible public agency. Based on a single sample, the density of bacteria in water from each sampling station at a public beach or public water contact sports area shall not exceed: (a) 1,000 total coliform bacteria per 100 milliters (ml), if the ratio of fecal/total coliform bacteria exceeds 0.1; or (b) 10,000 total coliform bacteria per 100 ml; or (c) 400 fecal coliform bacteria per 100 ml; or (d) 104 enterococcus bacteria per 100 ml. Beaches are immediately closed (prior to sample results) whenever there is an expected sewage release that reaches recreational waters. Closed beaches are only reopened when two consecutive daily sample results show all indicators below the bacteriological standards.

<sup>&</sup>lt;sup>4</sup> January 2007 San Francisco Bay Basin Water Quality Control Plan (Basin Plan) establishes a maximum water quality standard for Enterococci of 104 colonies per 100 ml for water contact recreation at a designated beach. For water contact recreation at an infrequently used area, the standard for enterococci is 500 colonies per 100 ml.

<sup>&</sup>lt;sup>5</sup> Basin Plan establishes a maximum water quality standard for E. Coli of 235 colonies per 100 ml for water contact recreation at a designated beach. For an infrequently used area, the standard is 576 colonies per 100 ml.

The Discharger collected bay water samples for oil and grease, un-ionized ammonia, and dissolved oxygen near shore and off shore (about 500 feet from the shoreline). All samples were within water quality standards.

February 27, 2009 Discharge Event

Water quality samples collected by the Discharger showed bacterial levels were within water quality standards near shore and off shore. Due to the small volume of partially treated wastewater released, the temporal and spatial extent of the discharge was localized to the area near the Plant on the day of the discharge event.

August 10, 2008 SSO

Water quality samples collected near shore by the Discharger showed bacterial levels were within water quality standards. The extent of the impact of the SSO was likely minimal and limited to the day of the discharge event. However, because the samples were collected by the Discharger two hours after the City ceased the SSO, the sampling results may not be fully representative of the water quality impact. When these delayed samples were collected, the incoming tide likely diluted and dispersed the discharge. It is likely that bacterial samples taken earlier would have been much higher than what was measured 2 hours later.

#### Gravity

February 15, 2009-February 21, 2009 Discharge Event

The gravity of this discharge event was medium. The discharge event resulted in the discharge of a large volume of partially treated wastewater to waters of the United States. Since it was primary treated wastewater, it would not pose the same level of toxicity or impact as an equal volume of raw wastewater. Also, because of relative high tidal currents dispersing the discharge, the immediate impacts are less than they would be if the discharge occurred in an area with no tidal flushing. Nonetheless, the discharge event resulted in a four-day closure and warning signs at several beaches/beach areas. While some of the closures and warnings were precautionary in nature, they nonetheless impacted water contact recreation (REC-1) and non-contact water recreation (REC-2) in Central San Francisco Bay. The beaches closed included Swede's Beach, Horseshoe Cove, and Rodeo Beach. Signs warning against the use of bay water-contact sports areas were also posted for four days at the turnouts/footpaths along East Road in Sausalito. Approximately 1.4 miles of shoreline were posted with closure/warning signs during this 4-day period. The discharge threatened public health, and impaired the recreational use and aesthetic enjoyment of these beaches/areas. Additionally, the discharge may have potentially impacted spawning and estuarine habitats. Based on information provided by the Discharger, there is a narrow band of potential intertidal and shallow subtidal herring spawning habitat in the immediate vicinity of the Facility. The spawning period for the Pacific herring *Clupea pallasi* is generally from November through March.

Central San Francisco Bay also supports or could support many other beneficial uses<sup>6</sup>. However, there is no evidence of impact to these beneficial uses as a result of this discharge event.

February 27, 2009 Discharge Event

The gravity of this discharge event was low. Although the type of discharge is the same as the February 15-21 event, its volume and duration is significantly lower. The Discharger stopped the discharge 10 minutes after it began and recovered close to 25% of the total volume discharged. Nonetheless, the discharge event resulted in a 2-day closure of exactly the same beaches/areas described above. As mentioned above, Central San Francisco Bay also supports or could support many other beneficial uses. However, the impact of the SSO on these other beneficial uses was likely minimal.

August 10, 2008 SSO

The gravity of this SSO was medium. The spill resulted in the discharge of raw wastewater to Central San Francisco Bay. The SSO occurred for at least 2 hours and resulted in a 3-day closure of Swede's Beach. The beach closure impacted water contact recreation (REC-1) and non-contact water recreation (REC-2) in Central San Francisco Bay. Also, approximately 0.3 miles of shoreline were posted with closure signs during this 3-day period. The discharge threatened public health, impaired the recreational use, and aesthetic enjoyment of this beach. The impact to REC-1 and REC-2 was significant because the SSO occurred during the summer when beach use tends to be higher than average. As mentioned above, Central San Francisco Bay also supports or could support many other beneficial uses. However, the impact of the SSO on these other beneficial uses was likely minimal.

# 3. Whether the discharge is susceptible to cleanup or abatement

February 15, 2009-February 21, 2009 Discharge Event

On February 23, 2009, the Regional Water Board issued a Cleanup and Abatement Order R2-2009-0010 (CAO) to require the Discharger to cleanup and abate the effects of the partially treated wastewater discharged into Central San Francisco Bay. The Discharger stated the discharge was not recoverable once it entered the bay. Nonetheless, the Discharger made every effort to attempt to contain or return to the Plant any portion of the discharge prior to it entering the bay. The Discharger was unable to recover any portion of the discharge due to limited access to the pipeline rupture location. Efforts to abate the discharge were limited to low tide periods. As mentioned above, the bypass pipeline is mostly underwater and only accessible during low tide conditions. This resulted in a much higher total discharge volume

<sup>&</sup>lt;sup>6</sup> Central San Francisco Bay also supports or could support industrial service and process supply (IND and PROC), ocean, commercial and sport fishing (COMM), shellfish harvesting (SHELL), fish migration (MIGR), preservation of rare and endangered species (RARE), wildlife habitat (WILD), and navigation (NAV).

than would have occurred had access not been limited by the tides. Also, any efforts to stop the leak by inserting a pipeline plug were unsuccessful due to the irregular shape of the pipeline rupture and the force of wastewater flow exiting the opening. The Discharger ultimately succeeded in stopping the discharge.

# February 27, 2009 Discharge Event

The Discharger stated the partially treated wastewater discharged to Central San Francisco Bay was not recoverable once it entered the bay. The Discharger was able to capture and return to the Plant about 25% (650 gallons) of the total volume discharged prior to it reaching surface waters. The Discharger was able to recover a portion of the discharge because the location of the pipeline rupture was above the tide level. Also, the direction of the leak was toward the Plant's digester wall allowing a portion of the discharge to pool in the area between the pipeline and the digester wall. The Discharger was able to pump and return to the Plant the pooled wastewater. Additionally, due to the more rounded shape of the rupture, the Discharger was able to stop the leak quickly by inserting a pipeline plug.

#### August 10, 2008 SSO

The Discharger stated the raw wastewater discharged to Central San Francisco Bay was not recoverable once it entered the bay. The Discharger was able to capture and return to the Plant less than 1% (60 gallons) of the total volume discharged prior to it reaching surface waters.

#### 4. The degree of toxicity of the discharge

The untreated or partially treated wastewater would be expected to have a deleterious effect on the environment, including causing potential nuisance in the near shore areas. Raw or partially treated wastewater typically has elevated concentrations of biochemical oxygen demand, total suspended solids, oil and grease, ammonia, high levels of viruses and bacteria, trash (only in the case of raw sewage) and toxic pollutants (such as heavy metals, pesticides, personal care products, and pharmaceuticals). These pollutants exert varying levels of impact on water quality, and, as such, will adversely affect beneficial uses of receiving waters to different extents. For all the discharge events described herein, the Discharger did not sample and analyze the discharge for any of these pollutants during the event.

#### February 15, 2009-February 21, 2009 Discharge Event

The toxicity of the discharge was medium. This is because the discharge was of primary treated wastewater where trash and approximately 30 to 40 percent of solids have been removed along with some pollutants bound to the solids. However, most of the solids remain in the discharge along with all dissolved toxic pollutants such as ammonia, metals, and pharmaceuticals and personal care products. Additionally, viruses and bacteria can remain at high levels because the discharge was not disinfected.

February 27, 2009 Discharge Event

The toxicity of the discharge was medium for the same reasons as described for the February 15 to 21 incident.

August 10, 2008 SSO

The toxicity of the discharge was high. The SSO was of raw untreated wastewater. It was also during the middle of summer so the discharge was not diluted by infiltration or inflow of storm water and groundwater into the sewer system.

### 5. The ability to pay and the effect on ability to continue in business

The Discharger is financially stable and has the financial resources to provide for debt service obligations and financial needs, including this proposed administrative civil liability.

The Discharger provided financial information including annual budgets (summarized in *Table 1* below) and sewer rate fees. The Discharger's net assets at the end of fiscal year (FY) 2007/2008 were \$23.4 million. The Discharger's primary sources of revenue are sewer service charges, property taxes, and operations, maintenance and capital charges from the Tamalpais Community Services District, which the Discharger serves under contract. The District also receives some revenue from connection fees and interest income on investments.

Table 1: Discharger's Financial Summary

J	FY	FY	FY	FY 2008/2009
	2005/2006	2006/2007	2007/2008	Budgeted
	Actual	Actual	Actual	
<b>Operating Revenue</b>	\$3,011,178	\$3,460,850	\$3,503,346	\$4,091,714
<b>Operating Expenses</b>	\$2,495,537	\$2,863,184	\$3,472,577	\$2,898,730
<b>Net Non-Operating</b>	\$541,880	\$699,395	\$726,644	\$454,000
Revenues				
Change in Net	\$1,057,521	\$1,297,061	\$757,413	\$1,646,984
Assets				Estimated
Net Assets,	\$20,263,668	\$21,321,189	\$22,618,250	\$23,375,663
<b>Beginning of Year</b>				
Net Assets, End of	\$21,321,189	\$22,618,250	\$23,375,663	\$25,022,647
Year				Estimated

Note: Non-Operating Revenues/Expenses are not shown but net change is calculated. All reserves are designated to meet projected needs, long-range projects and debt service requirements. The Discharger's net assets exceeded (or are expected to exceed) liabilities in each of the four FYs shown and is indicative of the appreciation of Discharger infrastructure over time due to the Discharger's on-going capital investments in its infrastructure.

The Discharger's jurisdictional area includes the City of Sausalito and unincorporated areas including Marin City. In July 2008, the monthly sewer rates went up to \$32.33 per equivalent dwelling unit (EDU) in the City of Sausalito and to \$36.56 per EDU in Marin City for FY 2008/2009. This was about a 30% increase from FY 2007/2008<sup>7</sup>. The Discharger also charges constituents in unincorporated areas including Marin City an additional monthly fee of \$4.22 per EDU for collection system maintenance and repair. The City of Sausalito currently charges its residents a monthly fee of \$17.92 per EDU for collection system maintenance and repair. The City is in the process of evaluating its rate structure.

These rates are now close to the average monthly sewer rates for Marin County (about \$37 per EDU for FY 2007/2008). It is expected that additional increases in sewer service charges (about 30% increase each FY) will be adopted by the Discharger in FY 2009/2010 and FY 2010/2011. The planned increases will ensure that adequate financial resources are available to meet the Discharger's operating requirements and to implement its capital improvement program (CIP). The Discharger's 10-year CIP proposes \$41.2 million in projects to improve the Discharger's treatment and collection system infrastructure. As a result of the sewer rate increase, the Discharger now has approximately \$790,000 more for FY 2008/2009 than they collected in FY 2007/2008. This additional revenue would allow them to borrow approximately \$8.3 million (assuming an interest rate of 5% for 15 years). Therefore, with this additional revenue alone, the Discharger has the ability to pay up to \$8.3 million. The Discharger could also raise its monthly sewer rate fees by an additional \$0.32 per equivalent dwelling unit (EDU) to raise sufficient funds to pay for a loan that would cover the proposed penalty (assuming an interest rate of 5% for 15 years).

# 6. Any voluntary cleanup efforts undertaken

February 15, 2009-February 21, 2009 Discharge Event

The Discharger was not able to contain nor recover any portion of the discharge volume. The Discharger attempted to stop the spill with a pipeline plug during low tide conditions. The Discharger was unable to plug the leak because of the irregular configuration of the rupture and the force of the wastewater flow exiting the opening. A saddle repair clamp was installed instead to reduce the discharge rate from about 280 gallons per minute to less than 0.5 gallons per minute. The damaged portion of the bypass pipeline reach was later encased in concrete in order to stop the discharge. The Discharger cooperated with regulatory agencies and acted proactively to attempt to quickly stop the leak.

<sup>&</sup>lt;sup>7</sup> The Discharger also charges constituents in unincorporated areas including Marin City an additional monthly fee of \$4.22 per EDU for collection system maintenance and repair. The City of Sausalito currently charges its residents a monthly fee of \$17.92 per EDU for collection system maintenance and repair. The City is in the process of evaluating its rate structure.

February 27, 2009 Discharge Event

The Discharger was able to recover approximately 650 gallons of the total discharge volume. The Discharger was able to successfully install a pipeline plug due to the more rounded configuration of the rupture and cease the discharge. A saddle repair clamp was also installed. The entire bypass pipeline was completely encased in concrete on February 27, 2009. The Discharger cooperated with regulatory agencies and acted proactively to attempt to quickly stop the leak.

August 10, 2008 SSO

The Discharger arrived on site after the City. The City was able to recover about 60 gallons (less than 1%) of the total SSO volume. The Discharger cooperated with regulatory agencies and acted proactively in collecting water quality samples at Swede's beach and providing follow-up information regarding the nature, extent, and circumstances of the SSO.

# 7. Any prior history of violations

Discharge Events (Plant Spills)

Prior to these events, the Discharger has not had any unauthorized discharge events of partially treated or untreated wastewater at the Plant.

**SSOs** 

The Discharger had SSOs prior to the August 2008 SSO from its 10 miles of collection system. Regional Water Board records show that the Discharger had approximately 5 SSOs totaling about 82,000 gallons since December 2004. Regional Water Board's records on SSOs prior to 2004 are not complete or accurate; however, it is likely the Discharger had SSOs prior to this time.

#### 8. The degree of culpability

February 15, 2009-February 21, 2009 Discharge Event

The Discharger's degree of culpability is low. The Discharger is culpable for the violations because it is responsible for the proper operation and maintenance of its treatment facilities. The discharge events could have been prevented with (1) the proper field application of cement mortar to the hand holes in the bypass pipeline joints, (2) adequate routine inspection of the bypass pipeline to detect for leaks and address corrosion and impact damage from rubble of the pipeline, and (3) the installation of a valve at the discharge end of the bypass pipeline to prevent backflow of primary treated wastewater into the pipeline.

It is reasonable to expect that the Discharger should have implemented an inspection and maintenance program for facilities such as the bypass pipeline which are located near the shoreline and continuously exposed to a corrosive marine environment and possible impact damage from rubble moved around by the surf. Nonetheless, the Discharger operated under the assumption that the pipeline service life was 50 years or greater and that it did not require any maintenance because it is infrequently used. Supporting this assumption are results from corrosion testing of the pipeline segment conducted after the February 2009 discharge event. The test revealed that the segment had not appreciably corroded since its installation in 1986. However, as revealed by these discharge events, the cement mortar is susceptible to damage by rubble leading to isolated corrosion thus decreasing the pipeline service life.

However, it is recognized that corrosion in the hand holes could only be detected through visual inspection of each of the hand holes, but that access to the hand holes is limited. Many of the hand holes are buried in the shoreline. In order to gain access to inspect the hand holes, manual or machine excavation near each pipeline joint would be required. This type of activity could not have been reasonably required as part of a routine visual inspection program. In addition, as learned during the discharge event on February 27, 2009, the use of a machine excavator could have posed a threat of further damage to the hand holes. Nonetheless, since the pipeline was continuously exposed to a corrosive marine environment and damage from impact of rubble moved around by the surf, a routine visual inspection program may have revealed these potential weaknesses and prompted preventative maintenance or measures that may have avoided these violations.

The installation of a valve at the discharge end would have significantly reduced the total amount of volume discharged. Based on the 1985 Plant upgrades designed by the Discharger's consultant, a downstream valve was not installed on the bypass pipeline because of concerns that in the tidal zone it could corrode and become inoperable. Based on evidence provided by the Discharger, in the early 1980s, coatings and tapes that could fully protect the valve from seawater intrusion, abrasive wave action, and corrosion were not available. Materials that were available at the time would not have held up in a marine environment and thus would not have provided a durable protective barrier. Thus, it was reasonable that the Discharger did not install a valve at the discharge end of the bypass pipeline when the pipeline was installed in 1986. However, technology has improved since that time. Had the Discharger been more proactive, it could have identified the lack of a valve as a vulnerability in its system and installed such a valve once acceptable technology was available, thus minimizing these violations. In fact, in response to this incident, the Discharger has installed a valve which will allow for better control during if there are any similar events in the future.

#### February 27, 2009 Discharge Event

The Discharger's degree of culpability is low. The Discharger is culpable for the violations because it is responsible for the proper operation and maintenance of its

treatment facilities. The discharge event could have been prevented by ensuring adequate onsite communication with the Discharger's contractor prior to the start of bypass pipeline repair efforts. Based on information provided by the Discharger, the contractor was given clear instructions regarding when it was appropriate to start excavation around the pipeline. Specifically, during a pre-construction meeting on February 26, 2009, the Discharger discussed and agreed with the general contractor superintendent that no excavation work would begin prior to the installation of a valve at the discharge end of the bypass pipeline. However, this information was not clearly communicated the next day to the mini-excavator operator (who is employed by the general contractor and was not present at the pre-construction meeting). The Discharger made reasonable effort to give proper instructions, but the information was unfortunately not clearly communicated on-site by the general contractor to its personnel.

# August 10, 2008 SSO

The Discharger's degree of culpability is high. The Discharger is culpable for the violations because it is responsible for the proper operation and maintenance of its collection system. The SSO in the City's collection system would not have occurred if the sluice gate in the "Rock Catcher" vault had been fully re-opened after maintenance was performed on August 1, 2008. Because then wastewater would have flowed unrestricted through the gate and thus prevented the blockage that caused the SSO. At least two of the four Discharger personnel, who performed the maintenance activities at the "Rock Catcher" vault on August 1, 2008, were experienced personnel who had entered the vault on several occasions. Failure to fully open and visually check that the sluice gate was completely opened was a clear oversight on behalf of Discharger personnel.

# 9. The economic benefit of savings

February 15, 2009-February 21, 2009 Discharge Event

The Discharger implemented several repairs and improvements to the bypass pipeline and its maintenance to prevent similar failures in the future. The improvements that could have reasonably been implemented include a weekly visual inspection program to detect leaks and installation of a valve at the discharge end of the bypass pipeline. The estimated cost of a visual inspection is negligible since the Discharger employed staff capable of this task. The cost of valve purchase and installation was about \$75,000. The total cost savings is about \$59,300. This is based on avoided costs for valve purchase and installation for 10 years when the new materials first became available, and assuming an interest rate of 6 percent.

#### February 27, 2009 Discharge Event

The Discharger identified and already implemented improvements to its future communications with contractors in order to prevent similar failures in the future.

The Discharger will also amend its current procedures to require a jobsite tailgate meeting with its contractor superintendent and employees the morning of and just prior to the start of construction activities in sensitive areas. The cost savings of such improvements are minimal.

August 10, 2008 SSO

The Discharger amended its Standard Operating Procedure for maintenance of the "Rock Catcher" vault to require personnel to visually inspect the sluice gate to ensure it is fully opened prior to exiting the area and to count the valve turns needed to bring the gate from closed to fully opened position. The cost savings of such improvements are minimal.

#### 10. Other such matters as justice may require

February 2009 Discharge Events

The matters discussed herein were considered in lowering the administrative civil liability penalty amount.

The Discharger worked closely with local health officials to post closure/warning signs at affected and potentially affected beaches and access areas. This action weighs in the Discharger's favor because it helps to avoid actual health impacts from the discharges.

Also, the Discharger has proactively taken steps to prevent reoccurrence of similar events in the future. Since the discharge events in February 2009, the Discharger has reviewed its Spill Response Plan and identified some additional equipment to add to its contingency inventory. The equipment includes additional plugs of assorted sizes and saddle repair clamps for each pressure pipeline in the District's conveyance and treatment system.

On February 27, 2009, the Discharger encased the entire bypass pipeline with reinforced concrete in order to extend its service life by another 20 years. A daily visual inspection program of the bypass pipeline has also been implemented to check for any leaks in the pipeline. The Discharger also installed a valve at the discharge end of the pipeline to prevent primary treated effluent from backflowing into the pipeline. To prevent failure of the valve, the Discharger has implemented measures to protect it against corrosion which include concrete valve encasement up to the valve bonnet, the application of weathering tape over the exposed surface and embedded several inches into the concrete, and the application of asphaltic tape over the valve. The Discharger also filled the operator valve nut opening with vegetable shortening and installed a watertight PVC cap on the bonnet flange. The total cost of encasement of the bypass pipeline and installation of the valve was approximately \$175,000.

In addition, the Discharger has procured the services of a consulting firm to plan and design the Discharger's Plant Influent Screenings, Grit Removal and Filtration Facilities Project (Project). One of the goals of the Project will be to permanently plug and abandon the bypass pipeline. The Project is expected to be completed and implemented within three years.

As required by the Cleanup and Abatement Order R2-2009-0010 (CAO), the Discharger has also commissioned an audit of all its treatment and collection system facilities to assess other treatment and collection system facilities (including components in the intertidal zone or under water) that pose a threat of discharge of wastes into waters of the State and a threat to create a condition of pollution and nuisance. The audit will also identify preventive and corrective measures the Discharger can implement in the short-term and long-term to abate these threats, and develop a time schedule to implement short-term and long-term preventive and corrective measures identified. The total cost of meeting CAO requirements to date is about \$127,000.

As part of this audit, the Discharger has also indicated it will consider changes to its operational procedures including but not limited to improvements to its alarm systems that notify the Discharger of overflow events, and improvements to communication procedures, equipment/facility monitoring and recording of observations. The Discharger has also procured the services of a consulting firm to evaluate corrosion of its facilities and to recommend corrosion monitoring options to prevent future reoccurrences. Additionally, over the past five years, the Discharger has taken steps to increase the service life of facilities exposed to the marine environment by specifying use of corrosion resistant materials where appropriate.

August 10, 2008 SSO

The matters discussed herein were considered and did not impact the administrative civil liability penalty amount.

As discussed above, the Discharger identified and implemented several actions to prevent a similar occurrence in the future. The Discharger counseled and issued a letter of reprimand to the entry supervisor to ensure future due care and diligence. Additionally, in a letter to the Regional Water Board, the Discharger stated it would contact the businesses where the puddle pads could have originated and discuss with them proper disposal practices. It was originally assumed the material had originated from laundry facilities. Therefore, the City contacted the laundry facilities which stated they had not discharged such materials so no re-education was done. The Discharger later conducted public outreach efforts to educate the public on what can be properly disposed of in the sewer. These public outreach efforts, however, were not conducted until just recently (May 2009). The public outreach efforts should have been done more promptly and immediately following this SSO event.

#### 11. Staff Time

Regional Water Board Staff time to prepare the Complaint and supporting evidence is estimated to be about 122 hours. Based on an average cost to the State of \$170 per hour, the total staff cost is \$20,740.

# **CEQA EXEMPTION**

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.

June 11, 2009	
Date	Dyan C. Whyte Assistant Executive Officer

Attachment: Waiver of Hearing

#### WAIVER OF HEARING

If you waive your right to a hearing, the matter will be included on the agenda of a Regional Water Board meeting but there will be no hearing on the matter, unless a) the Regional Water Board staff receives significant public comment during the comment period, or b) the Regional Water Board determines it will hold a hearing because it finds that new and significant information has been presented at the meeting that could not have been submitted during the public comment period. If you waive your right to a hearing but the Water Board holds a hearing under either of the above circumstances, you will have a right to testify at the hearing notwithstanding your waiver. Your waiver is due no later than July 13, 2009, 5 p.m.

- Waiver of the right to a hearing and agreement to make payment in full. By checking the box, I agree to waive my right to a hearing before the Regional Water Board with regard to the violations alleged in Complaint No.R2-2009-0043 and to remit the full penalty payment to the State Water Pollution Cleanup and Abatement Account, c/o Regional Water Quality Control Board at 1515 Clay Street, Oakland, CA 94612, within 30 days after the scheduled Hearing date. I understand that I am giving up my right to be heard, and to argue against the allegations made by the Assistant Executive Officer in this Complaint, and against the imposition of, or the amount of, the civil liability proposed unless the Regional Water Board holds a hearing under either of the circumstances described above. If the Regional Water Board holds such a hearing and imposes a civil liability, such amount shall be due 30 days from the date the Regional Water Board adopts the order imposing the liability.
- Waiver of right to a hearing and agree to make payment and undertake an SEP.

By checking the box, I agree to waive my right to a hearing before the Regional Water Board with regard to the violations alleged in Complaint No. R2-2009-0043, and to complete a supplemental environmental project (SEP) in lieu of the suspended liability up to \$155,000 and paying the balance of the fine to the State Water Pollution Cleanup and Abatement Account (CAA) within 30 days after the scheduled Hearing date. The SEP proposal shall be submitted no later than July 31, 2009. I understand that the SEP proposal shall conform to the requirements specified in Section IX of the Water Quality Enforcement Policy, which was adopted by the State Water Resources Control Board on February 3, 2009, and be subject to approval by the Assistant Executive Officer. If the SEP proposal, or its revised version, is not acceptable to the Assistant Executive Officer, I agree to pay the suspended penalty amount within 30 days of the date of the letter from the Assistant Executive Officer rejecting the proposed/revised SEP. I also understand that I am giving up my right to argue against the allegations made by the Assistant Executive Officer in the Complaint, and against the imposition of, or the amount of, the civil liability proposed unless the Regional Water Board holds a hearing under either of the circumstances described above. If the Regional Water Board

Sausalito- Marin City Sanitary District Complaint No. R2-2009-0043

holds such a hearing and imposes a civil liability, such amount shall be due 30 days from the date the Regional Water Board adopts the order imposing the liability. I further agree to satisfactorily complete the approved SEP within a time schedule set by the Assistant Executive Officer. I understand failure to adequately complete the approved SEP will require immediate payment of the suspended liability to the CAA.

extend the hearing date.  By checking this box, I hereby waiv Regional Water Board within 90 day reserve the right to have a hearing in Regional Water Board prosecution so outstanding violation(s). By checking the Regional Water Board delay the	ng this box, the Discharger requests that hearing so that the Discharger and the ments. It remains within the discretion of
Name (print)	Signature
Date	Title/Organization