

State of California
California Regional Water Quality Control Board
Santa Ana Region

IN THE MATTER OF:

Orange County Sanitation District)	Complaint No. R8-2008-0054
10844 Ellis Avenue)	for
P.O. Box 8127)	Administrative Civil Liability
Fountain Valley, California 92708-8127)	(First Issued: May 16, 2008)
)	(Amended: June 18, 2008)
<u>Attn: Dr. Robert Ghirelli</u>)	

YOU ARE HEREBY GIVEN NOTICE THAT:

1. Orange County Sanitation District (OCSD) is alleged to have violated provisions of law for which the California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board), may impose administrative civil liability pursuant to California Water Code Section 13385.
2. A hearing concerning this complaint will be held before the Regional Board within 90 days of the date of issuance of this complaint, unless OCSD waives its right to a hearing. Waiver procedures are specified on Page 7 of this complaint. If the hearing on this matter is not waived, the hearing will be held during the Board's regular meeting on July 18, 2008 at the City Council Chambers, 25541 Barton Road, Loma Linda, California. The meeting begins at 9:00 a.m. OCSD or its representative will have the opportunity to appear and be heard and to contest the allegations in this complaint and the imposition of civil liability by the Regional Board. An agenda announcement for the meeting and the staff report pertaining to this item will be mailed to you not less than 10 days prior to the hearing date.
3. If the July 18, 2008 hearing is held on this matter, the Regional Board will consider whether to affirm, reject, or modify the proposed administrative civil liability or whether to refer the matter to the Attorney General for recovery of judicial civil liability.
4. This complaint pertains to an unauthorized discharge of approximately 28 million gallons of a mixture of primary and secondary treated wastewater from OCSD's treatment facilities during 2006. At the time of the incident, discharges from OCSD's wastewater treatment plants to the Pacific Ocean were regulated under waste discharge requirements, Order No. 98-5 (NPDES No. CA 0110604), jointly issued by the United States Environmental Protection Agency (USEPA) and the Regional Board on March 6, 1998.

5. OCSD is alleged to have violated Discharge Specification A. 2. of Order No. 98-5. On April 29, 2006, OCSD discharged approximately 28 million gallons of a mixture of primary and secondary treated and disinfected effluent through its emergency outfall, Discharge Serial No. 002, into the Pacific Ocean. Discharge Specification A.2 states:

"The discharge of wastewater to other than Discharge Serial No. 001 is prohibited, except in the event of an emergency. An emergency is a circumstance that precludes discharging all wastewater to Discharge Serial No. 001 despite proper operations and maintenance of the discharger's facilities. Such emergencies are limited to situations such as earthquake, flood, and acts of war or terrorism. In the event of an emergency, the discharger may discharge other than as required by the terms of this permit provided:

- a) The Executive Officer and the Director are notified of the pending discharge as soon as possible,
- b) The Executive Officer and the Director agree that an emergency exists,
- c) The discharger takes all steps required by the Executive Officer and the Director to minimize any harm resulting from the discharge,
- d) Discharges through Discharge Serial No. 002 (deactivated ocean outfall) will be maximized before wastewater is discharged through Discharge Serial No. 003 (overflow point to the Santa Ana River), and
- e) The discharger returns the discharge to compliance with the terms of this permit without delay."

6. This complaint is based on the following facts:

- A.) OCSD owns and operates a publicly owned treatment works (POTW) that includes a wastewater collection system and treatment and disposal facilities. The treatment facilities handle wastewaters from twenty-one cities and unincorporated areas of northern and central Orange County. The facilities also receive brine wastes, sewage, and other wastes from the western areas of San Bernardino and Riverside Counties through the Santa Ana Regional Interceptor.
- B.) OCSD operates Reclamation Plant No. 1 (RP-1), with a primary treatment design capacity of 108 million gallons per day (MGD) and 96 MGD of

secondary treatment capacity, and Treatment Plant No. 2 (TP-2) with primary treatment design capacity of 168 MGD and 90 MGD of secondary treatment capacity. The OCSD's final effluent is a blend of approximately 50% primary treated wastewater and 50% secondary treated wastewater.

- C.) The treated effluent from RP-1 is then blended with TP-2 effluent for eventual disposal into the Pacific Ocean. Under normal circumstances OCSD discharges its entire effluent through Discharge Serial (DS) No. 001. This is a 120-inch diameter underwater pipeline that extends approximately 4.5 miles offshore from the mouth of the Santa Ana River, located in Huntington Beach. As indicated above, Discharge Specification A.2 provides that OCSD may discharge to the Pacific Ocean on an emergency basis through DS No. 002, a deactivated ocean outfall, which is a 78-inch diameter underwater pipeline that extends 1 mile offshore from the mouth of the Santa Ana River, at a depth of 65 feet. In case of an extreme emergency, OCSD may also discharge effluent into the Santa Ana River through DS No. 003 located immediately upstream from the mouth of the Santa Ana River. Emergencies are limited to situations such as earthquake, flood, and acts of war or terrorism. Prior to any emergency discharge, OCSD is required to notify USEPA and the Executive Officer and obtain their concurrence that an emergency exists.
- D.) OCSD scheduled to replace a corroded air relief valve/blind flange assembly (valve assembly) on the 120-inch diameter pipeline that carried the blended effluent from RP-1 and TP-2 to DS No. 001. The blended effluent consists of approximately 50% primary and 50% secondary treated wastewater that are disinfected. The valve assembly is located within a vault. OCSD scheduled to shut down the pipeline during low flow and low tide on April 29, 2006, and then replace the valve assembly. Regional Board staff and County Health officials were notified of the planned shutdown. OCSD proposed to temporarily store the effluent at its storage facility during this shutdown. The contingency plan for the valve assembly replacement included the use of the 78-inch outfall, DS No. 002, only as a last resort. However, OCSD did not seek authorization from the USEPA and the Executive Officer for emergency use of DS No. 002.
- E.) On April 29, 2006 at 3:00 a.m., OCSD started the work to replace the valve assembly by shutting down the effluent pumps and using onsite storage for the effluent. At 6:00 a.m., the work was completed and the effluent pumps were activated. Shortly thereafter, at 6:40 a.m., the gasket between the new valve assembly and the flange burst, resulting in approximately 100 gallons of leakage of the effluent into the vault. Approximately 50 gallons of the leaked effluent were recovered. Once again, the effluent pumps were shut down and the effluent was directed to

the onsite storage facility.

- F.) An evaluation of the situation by OCSD staff determined that the leak from the valve was too great to follow the planned contingency of continuing use of DS No. 001 while vector trucks and bypass pumping returned leaked flow from the vault to TP-2. A decision was made by OCSD staff to replace the damaged gasket during the morning on April 29, 2006 and to pump the effluent during this time into the 78-inch outfall. This resulted in the discharge of 28 million gallons of wastewater to the Pacific Ocean, approximately one mile offshore from the mouth of the Santa Ana River and at a depth of 65 feet, over a period of approximately 6 hours. The quality of the discharge was the same as that which would have been discharged through DS No. 001. Regional Board staff and County Health Officials were notified 30 minutes after the discharge was initiated. This discharge was not due to an "emergency" as described in Discharge Specification A.2, and neither the Executive Officer nor the USEPA agreed that it was an emergency discharge. The discharge was in violation of Discharge Specification A.2 of Order No. 98-05.
- G.) As a precautionary measure, the Orange County Health Care Agency closed approximately a five mile stretch of beach in Huntington Beach and Newport Beach. California State Parks officials reported later that at least 300 (300 to 500) swimmers were ordered out of water from Huntington State Beach alone at approximately 10:00 a.m. on April 29, 2006. Huntington Bike Trail also had to be closed due to the spill. The beaches were closed for 48 hours on a warm weekend when many people were likely to visit the beach. The unauthorized discharges from OCSD impacted the beneficial uses of waters of the State and the US.
- H.) A Regional Board staff investigation determined that the unauthorized discharge on April 29, 2006 was likely caused by:
1. A lack of preventive maintenance: All indications are that the valve assembly was installed around 1966. There was a significant amount of corrosion, including pitted contact surfaces, indicating a lack of preventive maintenance.
 2. Not following industry accepted installation procedures: During the first installation, it appears that the pitted contact surfaces were not properly prepared. There was some indication that the flanges were not properly aligned and tightened. During the second installation, the irregular contact surfaces were resurfaced, a proper sealant was applied, proper gaskets were installed, and the flanges were tightened as per accepted industry practice.

3. Not taking appropriate precautions to minimize water hammer: It appears that proper precautionary measures were not taken during the start up of the pumps after the first installation. This might have contributed to the failure of the newly installed valve assembly.

4. Lack of contingency plans: OCSD did not have vector trucks or other equipment available at the project site that were capable of handling large spills or leaks during the valve assembly replacement. OCSD staff could not locate an electrical technician in a timely manner who was knowledgeable about bypassing the limit switch to fully close the isolation valve.

It appears that human errors and a lack of proper contingency planning created a situation that necessitated the unauthorized use of DS No. 002 for the discharge.

7. OCSD violated the federal Clean Water Act, the California Water Code and the Waste Discharge Requirements by discharging effluent through DS No. 002 without prior approval of the Executive Officer and the USEPA. Section 13385(a)(2) of CWC provides that any person who violates Waste Discharge Requirements issued pursuant to the federal Clean Water Act shall be civilly liable. Section 13385(c)(1) provides that civil liability may be administratively imposed by a regional board in an amount not to exceed ten thousand dollars (\$10,000) for each day the violation occurs. Section 13385(c)(2) provides for an additional liability not to exceed \$10/gallon, excluding the first 1,000 gallons.

8. Based on the violations cited above, OCSD is alleged to have violated its Waste Discharge Requirements for one day and discharged 28 million gallons of wastewater through DS 002 without authorization. The maximum liability for these violations is \$280,000,000.

a. \$10,000 for one day of discharge; and

b. \$279,990,000 at \$10 per gallon for each gallon over 1,000 gallons discharged but not cleaned up.

8. CWC §13385(e) specifies factors that the Regional Board shall consider in establishing the amount of civil liability. These factors include: nature, circumstances, extent, and gravity of the violation, and, with respect to the discharger, the ability to pay, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters that 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. These factors are evaluated in the following table:

Factor	Comment
A. Nature, Circumstance, Extent, and Gravity of Violation	<p>OCSD is alleged to have violated Discharge Specification A. 2. of Order No.98-5, by discharging approximately 28 million gallons of treated and disinfected wastewater through the deactivated Discharge Serial No. 002 on April 29, 2006. In response to this unauthorized discharge, County Health Care Agency closed an approximately five mile stretch of Huntington and Newport Beaches from April 29 to May 1, 2006 thereby impacting the beneficial uses. This happened during a failed attempt by OCSD to replace an air valve/blind flange assembly. Board staff contends that lack of proper planning, lack of contingency measures, and technical and human errors were major causes for this unauthorized discharge.</p> <p>In calculating the penalty assessment based on gallons discharged, the Assistant Executive Officer considered the fact that the quality of the discharge was within the discharge limits specified in the Waste Discharge Requirements (for discharges to Discharge Serial No. 001) and the fact that the alleged violation was caused by an unanticipated series of events.</p>
B. Culpability	<p>Staff believes that OCSD could have avoided this discharge through proper planning and by following industry established procedures for valve replacement. The discharge occurred from facilities owned and operated by OCSD, and OCSD is strictly liable for the unauthorized discharge of wastes from these facilities.</p>
C. Economic Benefit or Savings	<p>OCSD saved money by not replacing the air valve/flange assembly in a timely manner and by not maintaining them on a regular basis. OCSD has provided information that estimates a cost savings of \$130,000 for the unperformed maintenance activities.</p>
D. Prior History of Violations	<p>OCSD is a sewage collection and treatment agency for 21 cities and a large portion of the unincorporated areas of Orange County. There have been a number of spills and leaks of raw sewage from the collection systems and spills of the treated effluent to unauthorized locations.</p>
E. Other Factors	<p>Staff spent approximately 125 hours investigating this</p>

incident and the total staff cost for this investigation is approximately \$13,875.

F. Ability to pay The discharger has not provided any information to indicate that it is unable to pay the proposed assessment.

9. After consideration of these factors, the Assistant Executive Officer proposes that a civil liability of \$ 263,875 be imposed on OCSD for the violations cited above. This is calculated as follows:

- a. \$120,000 penalty;
- b. \$13,875 in staff costs; and
- c. \$130,000 in economic savings

10. OCSD has indicated that it wishes to waive its right to a hearing and participate in a supplemental environmental project (SEP). OCSD may contribute up to \$120,000 towards a SEP project provided that OCSD submits a SEP proposal for review and approval by the Executive Officer within 60 days of issuance of this amended Complaint.

11. If OCSD wishes to waive its right to a hearing and participate in a SEP, please sign the attached waiver form, which is Page 8 of this Complaint, and return it, together with a check payable to the State Water Resources Control Board in the amount of \$ 143,875. Send the check and the signed waiver form to:

Santa Ana Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, CA 92501-3348
Attention: Stephen D. Mayville

If you have any questions concerning this complaint, please contact Stephen D. Mayville at (951) 782-4992 or Julio Lara at (951) 782-4901. All legal questions should be directed to Reed Sato at (916) 341-5889.

6/18/08
Date

Kurt V. Berchtold
Kurt V. Berchtold
Assistant Executive Officer

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<u>Attn: Dr. Robert Ghirelli</u>)	

Waiver of Hearing

On behalf of Orange County Sanitation District, I agree to waive its right to a hearing before the Santa Ana Regional Water Quality Control Board with regard to the violations alleged in Complaint No. R8-2008-0054. I am enclosing a check for \$143,875 made payable to the State Water Resources Control Board. On behalf of OCSD, I agree to submit a proposal for a Supplemental Environmental Project (SEP) for the balance of the assessed amount within 60 days from the date of the amended Complaint. The SEP proposal shall be subject to approval of the Executive Officer. I understand that I am giving up the right of Orange County Sanitation District to be heard and to argue against the allegations made by the Assistant Executive Officer in Complaint No. R8-2008-0054, and against the imposition of, and amount of, civil liability.

Date

for Orange County Sanitation District