

California Regional Water Quality Control Board

San Diego Region

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Linda S. Adams Secretary for Environmental Protection

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July 22, 2009

Certified Mail – Return Receipt Requested Article Number: 7009 0080 0000 7308 0189

Mr. Timothy Bertch, Director Metropolitan Wastewater Department City of San Diego 9192 Topaz Way San Diego, CA 92123

In reply refer to: CIWQS No. 332626: JCofrancesco

Subject: Transmittal of Administrative Civil Liability Complaint to City of San Diego, ACL Complaint No. R9-2009-0042

Dear Mr. Bertch:

An Administrative Civil Liability Complaint has been issued to you by the San Diego Regional Water Quality Control Board The Complaint alleges that you have violated State Water Resources Control Board (State Water Board) Order No. 2006-0003-DWQ (Order), *Statewide General Waste Discharge Requirements,* and Section 13385(a)(5) of the California Water Code (CWC) for which a penalty may be imposed. The Complaint recommends a penalty amount of \$620,278. The Complaint is enclosed, along with a Hearing Notice and a standard Waiver options form. These documents apply to this particular Complaint. <u>Please read each document carefully. The</u> <u>issuance of a Complaint may result in the issuance of an order requiring that you</u> <u>pay a penalty.</u>

In the subject line of any response, please include the requested "**In reply refer to:**" information located in the heading of this letter. For questions pertaining to the subject matter, please contact Joann Cofrancesco at (858) 637-5589 or State Water Board Office of Enforcement (OE) Attorney, Ms. Danielle Teeters at (916) 323-6847.

Respectfully,

MICHAEL P. McCANN

Assistant Executive Officer

MPM:jh:jlc:ls

California Environmental Protection Agency

Mr Bertch City of San Diego ACLC No. R9-2009-0042

Enclosures: 1. ACL Complaint No. R9-2009-0042

- 2. Waiver Form
- 3. Notice of Waiver of Public Hearing
- 4. Prosecution Staff Report, July 21, 2009
- 5. Proposed Hearing Procedures

cc: (w/encl., by email)

Mr. Ken Greenberg, Compliance Office U.S. EPA greenberg.ken@epa.gov Mr. Larry Watt San Dieguito Water District water@ci.encinitas.ca.us

Mr. Sean Sterchi Southern California Drinking Water Field Operations Branch California Department of Public Health <u>ssterchi@dhs.ca.gov</u>

Ms. Sharon Taylor Division Chief United States. Fish & Wildlife Service Sharon Taylor@fws.gov

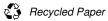
Mr. Christopher Toth, Deputy Director Metropolitan Wastewater Department City of San Diego <u>CToth@sandiego.gov</u> Mr. Michael Bardin Santa Fe Irrigation District mbardin@sfidwater.org

Ms. Catherine Hagan Office of Chief Counsel State Water Resources Control Board <u>CHagan@waterboards.ca.gov</u>

Mr. Reed Sato, Director Mr. Danielle Teeters, Staff Counsel III Office of Enforcement State Water Resources Control Board <u>RSato@waterboards.ca.gov</u> <u>DTeeters@waterboards.ca.gov</u>

<u>CIWQS Information:</u> Regulatory Measure ID: 213943 (Enrollee), 368796 (ACL Complaint) Violation IDs: 665958 (2006-0003-DWQ) Place ID: 631631 Party ID: 8700

California Environmental Protection Agency



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

IN THE MATTER OF:)
CITY OF SAN DIEGO SANITARY SEWER SYSTEM SAN DIEGO COUNTY) COMPLAINT NO. R9-2009-0042) FOR) ADMINISTRATIVE CIVIL LIABILITY
Place ID: 631631 Regulatory Measure ID: 213943)) July 22, 2009

THE CITY OF SAN DIEGO IS HEREBY GIVEN NOTICE THAT:

- The City of San Diego (Discharger) is alleged to have violated provisions of law for which the California Regional Water Quality Control Board, San Diego Region (Regional Water Board) may impose civil liability pursuant to Section 13350 or Section 13385 of the California Water Code (CWC).
- 2. This Administrative Civil Liability (ACL) Complaint is issued under authority of CWC Section 13323.
- 3. The Discharger owns and operates approximately 3,000 miles of sewer lines with an estimated wastewater total flow of 180 million gallons per day. The Discharger is required to operate and maintain its sewage collection systems to prevent sanitary sewer overflows and spills in compliance with requirements of State Board Order No. 2006-0003-DWQ, *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*. Prohibition C.1 of statewide General Order states that any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited. Additionally, Prohibition C.2 states that 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.
- Section 301 of the Clean Water Act (33 U.S.C. § 1311) and CWC Section 13376 prohibit the discharge of pollutants to surface waters except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. State Board Order No. 2006-0003-DWQ is not an NPDES permit.

ALLEGATIONS

- 5. The Discharger violated Prohibitions C.1 and C.2 of Order No. 2006-0003-DWQ, Section 301 of the Clean Water Act, and CWC section 13376 by discharging a total of 381,185 gallons of untreated sewage to Lake Hodges, a water of the State of California, a water of the United States and a domestic supply reservoir, during the period of August 20-24, 2007, from Manhole No. K09N-108 located south of Escala Drive in Rancho Bernardo, without authorization under an NPDES permit, The details of this violation are set forth in full in the accompanying Staff Report, which is incorporated herein by this reference as if set forth in full.
- 6. Pursuant to CWC Section 13350(a), any person or entity who, in violation of any Waste Discharge Requirements issued by the State Water Board, discharges waste, or causes or permits waste to be deposited where it is discharged, into waters of the state, is subject to administrative civil liability pursuant to CWC Section 13350(e), either (1) on a daily basis not to exceed five thousand dollars (\$5,000) for each day the violation occurs; or (2) on a per gallon basis in an amount not to exceed ten dollars (\$10) per gallon of waste discharged.
- 7. 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.
- 8. The alleged violation, set forth in full in the accompanying Staff Report, constitutes a violation under CWC Section 13350, or, in the alternative, CWC Section 13385.
 - a. The maximum liability that the Regional Water Board may assess pursuant to CWC section 13350(e) is **\$3,811,850**, calculated using the per gallon option.
 - 1. (381,185 [gallons discharged] X \$10 [per gallon] = \$3,811,850)

- b. The maximum liability that the Regional Water Board may assess pursuant to CWC Section 13385(e) is **\$3,841,850**.
 - (380,185 [gallons discharged but not cleaned up in excess of 1,000 gallons] X \$10 [per gallon]) + (5 [days of violation) X (\$10,000 [per day of violation]) = \$3,851,850)

PROPOSED CIVIL LIABILITY

 It is recommended that pursuant to CWC Section 13350(e) or, in the alternative, Section 13385(e), the Regional Water Board should impose a civil liability of six hundred twenty thousand two hundred seventy eight dollars (\$620,278) on the City of San Diego for the discharge of 381,185 gallons of untreated sewage from August 20-24, 2007.

Dated this 22nd Day of July 2009

MICHAEL P. McCANN Assistant Executive Officer

Signed pursuant to the authority delegated by the Executive Officer to the Assistant Executive Officer

WAIVER FORM FOR ADMINISTRATIVE CIVIL LIABILITY COMPLAINT

By signing this waiver, I affirm and acknowledge the following:

I am duly authorized to represent the City of San Diego (hereinafter "Discharger") in connection with Administrative Civil Liability Complaint No. R9-2009-0042 (hereinafter the "Complaint"). I am informed that California Water Code section 13323, subdivision (b), states that, "a hearing before the regional board shall be conducted within 90 days after the party has been served [with the complaint]. The person who has been issued a complaint may waive the right to a hearing."

(OPTION 1: Check here if the Discharger waives the hearing requirement and will pay the liability.)

- a. I hereby waive any right the Discharger may have to a hearing before the Regional Water Board.
- b. I certify that the Discharger will remit payment for the civil liability imposed in the amount of \$620,278 by check that references "ACL Complaint No. R9-2009-0042." made payable to the ["State Water Pollution Cleanup and Abatement Account"]. Payment must be received by the Regional Water Board by August 19, 2009 or this matter will be placed on the Regional Water Board's agenda for a hearing as initially proposed in the Complaint.
- c. I understand the payment of the above amount constitutes a proposed settlement of the Complaint, and that any settlement will not become final until after the 30-day public notice and comment period. Should the Regional Water Board receive significant new information or comments from any source (excluding the Water Board's Prosecution Team) during this comment period, the Regional Water Board's Assistant Executive Officer may withdraw the complaint, return payment, and issue a new complaint. I understand that this proposed settlement is subject to approval by the Executive Officer of the Regional Water Board, and that the Regional Water Board may consider this proposed settlement in a public meeting or hearing. I also understand that approval of the settlement will result in the Discharger having waived the right to contest the allegations in the Complaint and the imposition of civil liability.
- d. I understand that payment of the above amount is not a substitute for compliance with applicable laws and that continuing violations of the type alleged in the Complaint may subject the Discharger to further enforcement, including additional civil liability.

(OPTION 2: Check here if the Discharger waives the 90-day hearing requirement in order to engage in settlement discussions.) I hereby waive any right the Discharger may have to a hearing before the Regional Water Board within 90 days after service of the complaint, but I reserve the ability to request a hearing in the future. I certify that the Discharger will promptly engage the Regional Water Board Prosecution Team in settlement discussions to attempt to resolve the outstanding violation(s). By checking this box, the Discharger requests that the Regional Water Board delay the hearing so that the Discharger and the Prosecution Team can discuss settlement. It remains within the discretion of the Regional Water Board to agree to delay the hearing. Any proposed settlement is subject to the conditions described above under "Option 1."

(OPTION 3: Check here if the Discharger waives the 90-day hearing requirement in order to extend the hearing date and/or hearing deadlines. Attach a separate sheet with the amount of additional time requested and the rationale.) I hereby waive any right the Discharger may have to a hearing before the Regional Water Board within 90 days after service of the complaint. By checking this box, the Discharger requests that the Regional Water Board delay the hearing and/or hearing deadlines so that the Discharger may have additional time to prepare for the hearing. It remains within the discretion of the Regional Water Board to approve the extension.

(Print Name and Title)

(Signature)

(Date)

NOTICE OF WAIVER OF PUBLIC HEARING

California Regional Water Quality Control Board, San Diego Region Issuance of Administrative Civil Liability (ACL) Order Against City of San Diego, California

On July 22, 2009, the California Regional Water Quality Control Board, San Diego Region (Regional Water Board) issued Complaint No. R9-2009-0042 to the City of San Diego (Discharger) in the amount of \$620,278 for alleged violations of State Water Resources Control Board (State Water Board) Order No. 2006-0003-DWQ, *Statewide General Waste Discharge Requirements* and Section 13385(a)(5) of the California Water Code. The Discharger has elected to waive its right to a public hearing in this matter. Waiver of the hearing constitutes admission of the validity of the allegation of violations in the Complaint and acceptance of the assessment of civil liability in the amount of \$620,278 as set forth in the Complaint. The Regional Water Board may consider accepting the Discharger's waiver at its October 14, 2009 meeting.

Written comments regarding the allegations contained in Complaint No. R9-2009-0042, and/or acceptance of the waiver, will be accepted through Monday, September 28, 2009.

The Regional Water Board's October 14, 2009 meeting will be at the Regional Water Board office located at 9174 Sky Park Court, San Diego, California. The meeting will begin at 9:00 a.m. Oral comments for this item may be made during the meeting upon receipt of a request to speak slip. For more information regarding this matter please contact Joann Cofrancesco at 858-637-5589, or at JCofrancesco@waterboards.ca.gov or visit the Regional Water Board's web site at <u>www.waterboards.ca.gov/sandiego.</u>

MICHAEL P. McCANN Assistant Executive Officer

Staff Report CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION State Water Resources Control Board Office of Enforcement

Proposed Administrative Civil Liability Contained in Complaint No. R9-2009-0042 City of San Diego Sewage Collection System

Noncompliance with State Water Resources Control Board Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems

July 22, 2009

Prepared by:

Leo Sarmiento, WRCE Office of Enforcement SWRCB Joann Cofrancesco, WRCE Enforcement Unit San Diego RWRCB

Reviewed by:

Mark Bradley, Senior WRCE Danielle Teeters, Staff Counsel III Office of Enforcement SWRCB Jeremy Haas, Senior ES Enforcement Unit San Diego RWRCB

1. Introduction

This report provides a summary of factual and analytical evidence that form the basis for findings to support an administrative assessment of civil liability in the amount of \$620,278 against the City of San Diego (Discharger) for violations of State Water Resources Control Board (State Water Board) Order No. 2006-0003-DWQ, *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*, as alleged in Complaint No. R9-2009-0042.

Staff of the San Diego Regional Water Quality Control Board (Regional Water Board) requested enforcement assistance from the State Water Board Office of Enforcement to review, investigate, and determine permit compliance regarding the August 20-24, 2007 discharge of untreated sewage into Lake Hodges in Rancho Bernardo, City of San Diego.

2. Background

The Discharger owns and operates more than 3,000 miles of sanitary sewer system with a total flow of approximately 180 million gallons of wastewater per day, for treatment mainly at the Point Loma Wastewater Treatment Plant. The Discharger's Metropolitan Wastewater Department (Wastewater Collection Division) operates and maintains the sewer system and responds to sanitary sewer overflow (SSO) and sewer odor complaints.

On May 2, 2006, the State Water Board adopted Order No. 2006-0003-DWQ, which prescribed Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (General Order). The General Order establishes minimum requirements to prevent Sanitary Sewer Overflows (SSOs) from publicly owned and operated sanitary sewer system. The General Order also allows each Regional Water Quality Control Board to issue more stringent Waste Discharge Requirements (WDRs) for sanitary sewer systems within their respective jurisdiction.

The Regional Water Board adopted Order No. 96-04 on May 9, 1996, prohibiting sewage discharges from sanitary sewer systems at any point upstream of a sewage treatment plant. Consistent with the statewide General Order, the Regional Water Board adopted Order No. R9-2007-0005 on February 14, 2007, which augmented the statewide General Order and superseded Order No. 96-04, reaffirming the Regional Water Board's prohibition of all sanitary sewer overflows upstream of the sewage treatment plant and prescribing more stringent notification requirements.

Prohibition C.1 of statewide General Order states that any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited. Additionally, Prohibition C.2 states that any SSO that results in a discharge of untreated or partially treated wastewater that creates a nuisance as defined in California Water Code Section 13050(m) is prohibited.

Section 301 of the Clean Water Act (33 U.S.C. § 1311) and CWC Section 13376 prohibit the discharge of pollutants to surface waters except in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. State Board Order No. 2006-0003-DWQ is not an NPDES permit.

Lake Hodges is located approximately 31 miles north of San Diego, on the San Dieguito River, which enters the ocean at Del Mar. Located in a coastal canyon, Lake Hodges offers a variety of recreational uses, including but not limited to fishing, boating, bike and horseback riding, and picnicking. When full, the reservoir has 1,234 surface acres, a maximum water depth of 115 feet, and 27 shoreline miles.

Lake Hodges also serves as water supply storage mainly from the San Dieguito River and provides potable water to communities served by San Dieguito Water District and Santa Fe Irrigation District. Both Districts jointly own and operate the R.E. Badger Filtration Plant, a potable water treatment plant. The plant processes imported water by pipeline from Lake Skinner located near Hemet in Riverside County and local water from Lake Hodges located just south of Escondido and the San Dieguito Reservoir located in Rancho Santa Fe.

As established in the Water Quality Control Plan (Basin Plan) for the Regional Water Board, with amendments effective prior to April 25, 2007, the designated beneficial uses of Lake Hodges include water uses for municipal and domestic, agricultural, industrial process and service, limited contact and non-contact water recreation, support of wildlife habitat, and rare threatened or endangered species. Additionally, Lake Hodges is listed under the 2006 Clean Water Act Section 303(D) List of Water Quality Limited Segment as impaired water body for Color, Manganese, Nitrogen, pH, Phosphorus and Turbidity.

On August 24, 2007, the Discharger reported to the Regional Water Board that, from August 20, 2007 to August 24, 2007, a total estimated flow of 381,185 gallons of untreated sewage was discharged from Manhole No. K09N-108 located south of Escala Drive in Rancho Bernardo into Lake Hodges via the Green Valley Creek. The SSO was reported to the Office of Emergency Services (OES) on August 24, 2007 at 11:08 a.m. with OES Control No. 07-5109 and to other regulatory agencies as part of the Discharger's standard discharge response plan (i.e., SSO reporting database with the State Water Board).

On October 24, 2007, the Regional Water Board issued a Notice of Violation and Investigative Order No. R9-2007-0199 (Order) to the Discharger for the August 20-24, 2007 discharge of untreated sewage into Lake Hodges. In response to the Order, the Discharger submitted on November 26, 2007, a technical report entitled, *"Response to Request for Information Requested by Notice of Violation No. R9-2007-0199."* A copy of the technical report is attached hereto (Attachment A) and is available for public review at the Regional Water Board's office. In May 2008, the Regional Water Board sought case assistance from the Office of Enforcement to review, investigate, and determine permit compliance regarding this SSO. Enforcement staff from the State Water Board and Regional Water Board inspected the discharge location in Rancho Bernardo on September 10, 2008. Since a lot of time had passed since the SSO stopped, there were no visible signs of the sewage spill. The enforcement team, however, noted that Manhole K09N-108 was difficult to see from the sidewalk along Escala Drive.

Because of the poor visibility of the manhole, the August 2007 SSO and the poor condition of the sewer line, the Discharger reported that it constructed a new sanitary sewer pipeline along Escala Drive, diverted sewage flows to the newly constructed pipeline, and abandoned the old sewer line connecting to Manhole K09N-108.

3. Allegation

The Discharger violated Prohibitions C.1 and C.2 of Order No. 2006-0003-DWQ, Section 301 of the Clean Water Act (CWA), and CWC sections 13350,13376, and 13385 by discharging a total of 381,185 gallons of untreated sewage to Lake Hodges, a water of the State of California and a water of the United States, during the period of August 20-24, 2007, from Manhole No. K09N-108 located south of Escala Drive in Rancho Bernardo, without authorization under an NPDES permit.

4. Determination of Administrative Civil Liability (ACL) Complaint

An ACL may be imposed pursuant to the procedures described in CWC Section 13323. An ACL complaint alleges the act or failure to act that constitutes a violation of law, the provision of law authorizing civil liability to be imposed, and the proposed civil liability.

Pursuant to CWC Section 13350(a), any person or entity who, in violation of any Waste Discharge Requirements issued by the State Water Board, discharges waste, or causes or permits waste to be deposited where it is discharged, into waters of the state, is subject to administrative civil liability pursuant to CWC Section 13350(e), either (1) on a daily basis not to exceed five thousand dollars (\$5,000) for each day the violation occurs; or (2) on a per gallon basis in an amount not to exceed ten dollars (\$10) per gallon of waste discharged.

The maximum liability that the Regional Water Board may assess pursuant to CWC section 13350(e) is 3,811,850, calculated using the per gallon option {(381,185 [gallons discharged] X \$10 [per gallon] = 3,811,850}.

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.

The maximum liability that the Regional Water Board may assess pursuant to CWC Section 13385(e) is **\$3,851,850** {(380,185 [gallons discharged but not cleaned up in excess of 1,000 gallons] X \$10 [per gallon]) + (5 [days of violation) X (\$10,000 [per day of violation]) = \$3,851,850}.

CWC Section 13327 and 13385(e) requires the Regional Water Board to consider several factors when determining the amount of civil liability to impose. These factors include: "...the nature, circumstance, extent, and gravity of the violation or violations, whether the discharge is susceptible to cleanup and abatement, the degree of toxicity of the discharge, and, with respect to the violator, the ability to pay, the effect on ability to continue in 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."

4.1. Nature, Circumstances, Extent, & Gravity of the Untreated Sewage Discharge

The duration and volume of the untreated sewage discharge adversely affected beneficial uses of Lake Hodges.

Nature and Circumstances

In its technical report dated November 26, 2007, the Discharger reports that the SSO started on August 20, 2007 from Manhole K09N-108, along an 8-inch diameter pipeline east of I-15 and south of Escala Drive in Rancho Bernardo. The start time was based on the sewer odor complaint that was reported by a member of the public around 10:00 a.m. on August 20, 2007 to staff of City of San Diego's District No. 5 Council Office (see Attachment B for telephone interview). According to the sewer odor complainant, the complainant noticed the sewer odor on August 20, 2007, but did not observe any sewage flows anywhere near his property on Escala Drive (approximately 600 feet away from Manhole K09N-108).

The staff of City of San Diego's District No. 5 Council Office forwarded the sewer odor complaint information to Customer Service Department (Citizen Assistance) on the same day (see Attachment C for telephone interview). On August 21, 2007, Customer Service Department staff generated Route Slip No. 05-07-08-113 (Enclosure 3 of Attachment D) and sent it to Metropolitan Wastewater Department (MWD) for appropriate action.

The Discharger's technical report states that MWD's Public Information Officer (PIO) received the Route Slip on August 21, 2007. However, the information was not forwarded to MWD's Wastewater Collection Division for appropriate action until August 24, 2007. The Discharger reports that the main reason for the delay was because the MWD's PIO wanted to contact the sewer odor complainant for additional information but could not find the complainant's telephone number in the Route Slip. No reason was given by the Discharger as to why it was necessary to contact the complainant. In fact, it is not part of the Discharger's policy to contact sewer odor complainants via telephone before investigating the complaint. In this case, the Discharger did not explain why there was the need to contact the complainant via telephone when in fact the complainant's address and details of the sewer odor location were in the Route Slip.

Because of the above-mentioned delays and lack of an alarmed monitoring device at the manhole, the SSO was not discovered and contained by City personnel until 3:45 p.m. on August 24, 2007 (four days after the sewer odor complaint was first received by the Discharger). According to the Discharger, the SSO from Manhole K09N-108 was caused by rags, a mop head, and grease that blocked the sewage flow along the 8-inch vitrified clay mains.

Extent, & Gravity

The calculation for the total estimated volume of sewage discharged was based on the average number of residents served by the sewer mains upstream of the discharge point and the approximate discharge period (64 gallons per minute and approximately 102 hours for a total of 392,185 gallons). The untreated sewage discharged to an open area of 9,206 square feet before flowing into the Green Valley Creek, tributary to Lake Hodges. Approximately 11,000 gallons was recovered from pooled areas by response crews. Therefore, the Discharger estimated a total of 381,185 gallons of untreated sewage reached surface waters (Green Valley Creek and Lake Hodges).

A rain event occurred on August 26, 2007 with a recorded precipitation of 0.05 inches in Rancho Bernardo and 1.45 inches in Escondido areas. Results of the bacteriological analysis of samples taken from the Green Valley Creek area and Lake Hodges showed increased fecal coliform densities after the rain event on August 26, 2007. Although the Discharger reports that the increased densities of fecal coliform may have been attributed to stormwater runoff contamination and not from the sewage discharge, such conclusion cannot be verified because the Discharger did not collect stormwater runoff samples during the rain event to correlate with monitoring results. In addition, the rain event may have washed remaining raw sewage downstream from the discharge area causing the fecal coliform densities to increase in monitoring samples.

On September 11, 2007, more than two weeks after the SSO, the Discharger conducted bio-assessment monitoring in Green Valley Creek, both upstream and downstream from where the discharge entered the stream. According to the Discharger's assessment of its sampling data, the Green Valley Creek showed signs of stress and impairment. Also, there was no remarkable difference between the upstream and downstream samples. Although 18 days had passed between the SSO and the bio-assessment monitoring, the report also concludes that the majority, if not all, of the insects and non-insects examined were in the older stages of larval development and the insects were older than 21 days (prior to the end of the SSO). It was unknown whether any sensitive species were immediately impacted by the sewage discharge and subsequent cleanup activities.

Because of the discharge of sewage into Lake Hodges and its tributary, the Santa Fe Water District was unable to transfer Lake Hodges raw water to the San Dieguito reservoir or process Lake Hodges raw water through the Badger Filtration Plant, from August 24, 2007 to September 1, 2007. Health warning signs were posted per the direction of the San Diego County Department of Environmental Health, from August 25, 2007 (the date the Discharger discovered that the sewage entered Lake Hodges) to August 31, 2007.

4.2. Susceptibility to Cleanup or Abatement

Due to the Discharger's delay in responding to the sewer odor complaint and discovering the SSO, the quantity of the sewage discharge was large and a majority of the sewage had already entered Green Valley Creek and Lake Hodges, rendering it not susceptible to cleanup or abatement. A small fraction of the SSO, 11,000 gallons, that pooled prior to the creek was recovered using vactor trucks.

4.3. Degree of Toxicity

The high degree of toxicity in untreated sewage posed a high threat to beneficial uses.

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 surface waters in Lake Hodges, particularly impacting the quality of domestic fresh water supplies, aquatic life beneficial uses and limiting contact and non-contact recreation. Any discharge of untreated sewage to this sensitive, freshwater habitat adds significantly to the impairment of water quality in Lake Hodges.

4.4. Degree of Culpability

4.4.1. Response to Sewer Odor Complaint

The Discharger failed to respond to the complaint in a timely manner to reduce the amount of the SSO.

As noted above in Section 4.1, it took four days to respond the sewer odor Complaint. The Route Slip form (Enclosure 3 of Attachment D) contained details of the sewer odor complaint, name and address of the complainant, name of Office where the complaint was received, and other tracking dates. The Route Slip information was clear and specific as to the location of the sewer odor, which stated "...at the intersection of Fernanda Way and Escala and then down the hill before you reach the bridge, the smell is horrible, especially in the afternoon." This complaint information and the complainant's address in the Route Slip could have been used to send crews for immediate site investigation and appropriate action.

These preventable delays could have significantly reduced the amount of raw sewage discharged into Lake Hodges and thus minimized the discharge's adverse impacts. Clearly, the Discharger failed to act on the sewer odor complaint in a timely manner.

Following the SSO incident, the Discharger provided written guidance via email to its Citizen Assistance Office concerning proper procedures for routing complaints regarding SSOs or potential SSOs received from the public. However, the email guidance did not clearly address identified response delays from the August 20-24, 2007 SSO. The following issues remain to be addressed by the Discharger: (1) Specific information on the Route Slip must be completed by originating office (i.e., telephone number of complainant, etc.); (2) Tracking dates for response must be completed similar to a "sample chain of custody setup" and; (3) consider revising routing procedure of complaints (i.e., Route Slip will be sent directly to response unit Supervisor and not filtered/reviewed by PIO). State Water Board staff presented these issues and discussed them with the Discharger's staff during a meeting on December 9, 2008. At the meeting, Mr. Chistopher Toth (Deputy Director of the Wastewater Collection Division) verbally acknowledged the issues of administrative delays and said that the PIO received "counseling" for delayed response action.

4.5. Voluntary Cleanup Efforts

The Discharger has reported making the following corrective actions in response to the discharge:

- 1. A bypass pump was installed to redirect flow around the blockage in the sewer line;
- 2. 11,000 gallons of sewage were recovered from pooled up areas;
- 3. The site and flow path were cleaned by hand-raking and removal of paper products and other debris remaining from sewage discharge;

The Discharger failed to determine the final destination of the SSO in a timely manner. The SSO stopped on August 24, 2007 at 3:45pm. According to the Discharger's report, at that time, the Discharger determined that the raw sewage stopped at a construction site and did not reach the Lake Hodges. After further investigation the next day, they determined that the sewage discharge continued past the construction site and did, in fact, reach Lake Hodges. As a result of the Discharger's failure to appropriately investigate, "Contaminated Water" warning signs were not posted until the day after the SSO stopped.

Because the Discharger made voluntary cleanup efforts, this penalty factor weighs in favor of a reduction from the statutory maximum penalty amount.

4.6. Prior History of Violations

The Discharger has a significant history of raw sewage discharges, including discharges where the Discharger failed to respond in a timely manner.

The following tables show the number and volume of SSOs per calendar year as reported in the Discharger's Quarterly Reports submitted from 2000 to 2006 under Regional Water Board Order No. 96-04 and on-line reports submitted from 2007 to April 2009 under the General Order (see Attachment E). Although the Discharger was not required to report Private Lateral Sewage Discharges (PLSD) prior to 2007, some PLSD may have been reported within the data submitted by the Discharger.

Calendar Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009 (Jan- April)
No. of Discharges	362	238	213	144	125	59	71	94	74	25
Volume ('000 gal)	35,204.2	2,076.3	1,837.5	987.2	5,146.9	163	208	603.8	144.1	79.4

Table 1. Total Sanitary Sewer Overflows

Table 2. Total Sanitary Sewer Overflows to Storm Drain or Surface Waters

Calendar Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
No. of Discharges	313	176	146	88	79	36	46	42	40	12
Volume ('000 gal)	34,966.8	1,819	1,297	795.5	4,780.9	94.5	91.6	491.1	71.5	5

As indicated in Table 1 and Table 2 above, the number and volume of SSOs found and reported has shown a downward trend over the years. The corresponding volume discharged also decreased from 35,204,200 gallons in calendar year 2000 to 144,100 gallons for calendar year 2008.

Within the past 10 years, the Regional Water Board adopted two ACL assessments against the Discharger following two major SSO events.

- Alvarado Creek SSO (Order No. 2000-103, adopted October 11, 2000) in the amount of \$3,469,900 for untreated sewage discharge of 34,000,000 gallons. The assessment of the Alvarado Creek ACL was based on \$0.10 per gallon for 33,999,000 gallons not cleaned up (34,000,000 gallons minus the first 1,000 gallons) and \$10,000 per day for each seven days of continued untreated sewage discharge; and
- Tecolote Creek SSO (Order No. 20001-174, adopted October 10, 2001) in the amount of \$1,589,000 for untreated sewage discharge of 1,500,000 gallons. The assessment of the Tecolote Creek ACL case was based on \$1.00 per gallon for 1,499,000 gallons untreated sewage discharge but not cleaned up (1,500,000 gallons minus the first 1,000 gallons discharged) and \$10,000 per day for nine days of continued untreated sewage discharge.

Both SSO cases had similar nature of violation with this Lake Hodges SSO case because the Discharger failed to monitor and respond to the discharge incident in a timely manner. It took seven and nine days from the initial report date for the Discharger to discover and contain the untreated raw sewage discharges for the Alvarado and Tecolote Creek SSO cases, respectively. In addition, in February 2005, a Settlement Agreement and Release was executed between the Regional Water Board and the Discharger for sewage discharged from the Discharger's sewage collection system into water of the State, waters of the United States, and tributaries thereof, that occurred up to and including October 1, 2004, in the amount of one million two hundred thousand dollars (\$1,200,000).

4.7. Economic Benefit or Saving and Ability to Pay

The Economics Unit of the Office of Research, Planning, and Performance of the State Water Resources Control Board has calculated the economic benefit of the City of San Diego violations of State Water Resources Control Board Order 2006-0003, *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*. The estimate of economic benefits of non-compliance was made using U.S. Environmental Protection Agency's (USEPA) BEN Model that is recommended by the State Water Board's Enforcement Policy.¹ In addition, the Economics Unit conducted an analysis of the City of San Diego's ability to pay.

Summary and Conclusions

The economic benefit to the City of San Diego in this case, as determined by the Prosecution Team, was realized when the City was not required to treat the 381,185 gallons of raw sewage discharged on August 20-24, 2007, into Lake Hodges. The cost to treat the quantity of discharged sewage is estimated at \$4,514. The total economic benefit to the City for not treating the sewage discharged is estimated to be \$5,031 if the penalty is paid before January 1, 2010.

San Diego has the ability to pay the administrative civil liability set forth in the Administrative Civil Liability Complaint issued in July, 2009. This conclusion is supported with the following facts:

- (1) In 2006, San Diego's population was approximately 1.26 million with medium household income higher than the State average;
- (2) The percent of the population below the poverty line and unemployment are both less than State averages;
- (3) The City of San Diego's general fund budget is projected to be \$1.19 billion in the fiscal year 2009, of which \$397 million is the sewer enterprise fund.
- (4) The proposed ACLC which amounts to \$620,277.50 is approximately four percent of the \$17.1 million Public Liability Fund making payment affordable without jeopardize the necessary functions of the City.

¹ State Water Resources Control Board, "Water Quality Enforcement Policy", February 19, 2002, Page 40.

Economic Benefit of Non-Compliance--The USEPA BEN Model

As recommended by the State Water Board's Enforcement Policy, the estimate of economic benefits of non-compliance was made using USEPA's BEN Model.

The Prosecution Staff has determined that the discharge could have been prevented if the Discharger had responded in a timely fashion to the public sewer odor complaint which was made on August 20, 2007. The economic benefit the City realized was in the benefit of not treating the 381,185 gallons of raw sewage that was discharged to Green Valley Creek which flowed into Lake Hodges.

The cost of treating sewage in the affected area was calculated using the sewer rate schedule. The sewer flat rate charge for a single family home is \$12.31 for two months plus \$2.89 per hundred cubic feet (HCF) of sewage. The sewer based charge for the single residential homes upstream of where the discharge first occurred at Manhole # 108 (MH-108) (total of 494 single family homes - see attachment A of staff report) would be 494 x \$12.31/2 = \$3,041. Thus, the total estimated cost for collection/treatment of the 381,185 gallons (509.6 HCF) would be: \$3,041 plus 509.6 x \$2.89 = \$4,514. The City of San Diego experienced an economic benefit of \$4,514.00 in not being required to treat the 381,185 gallons of sewage that was discharged into Lake Hodges.

Ability to Pay and Ability to Continue in Business

Step 6 of the proposed Enforcement Policy is to determine the ability to pay the Total Base Liability Amount of the ACL and to stay in business. The objective is to adjust the ACL to an amount that the discharger can reasonably pay and still bring operations into compliance. Since a government entity cannot file bankruptcy, their existence is not in jeopardy.

Comparing a city's demographic characteristics to the state or national characteristics is an indication of the ability to pay an environmental assessment. The demographic analysis provides a better understanding of the community's ability to financially support public functions. An affordability analysis of the city's finances can also be conducted. It involves calculations of the amount of currently available funds and then, if necessary, the amount of funds available through financing.

In 2006, the year prior to the discharge, the City of San Diego had an estimated population of 1,264,263 (US Census, 2006). At that time, San Diego's median household income (MHI) was \$60,185 and the State MHI was \$58,361. Their unemployment rate was 3.4 percent and poverty rate was 9.1 percent. The State's unemployment rate was 4.4 and the poverty rate was 13 percent. The poverty rate is the percent of the population that falls below a federally predetermined level. The City of San Diego's general fund budget is projected to be \$1.19 billion in the fiscal year 2009. In addition, an enterprise fund is used to collect \$397 million in sewer fees to operate, maintain and repair the sewer collection system and wastewater treatment plants.

The City has established a Public Liability Reserve Fund to insulate General Fund services from a detrimental payout if the City were found liable in a large claim or claims. The City of San Diego Fiscal Year 2010 Annual Budget presents the City's public liability reserve fund policy goals and fiscal recovery plan. It is the City's goal to maintain dedicated fiscal reserves equal to but not less than 50 percent of the value of the outstanding claims and to reach this level of reserve by Fiscal Year 2014. The Fiscal Year 2010 goal for the Public Liability Reserve is 15.0 percent of outstanding claims value. Current public liabilities are estimated to be \$114.5 million in filed claims. The Fiscal Year 2010 Proposed Budget includes an allocation of \$25.1 million which will increase the reserve level to \$17.1 million. The ACL which amounts to \$620,277.50 is approximately four percent of the \$17.1 million Public Liability Fund making payment affordable without jeopardizing the necessary functions of the City.

4.8. Other Matters as Justice May Require

To date, the State Water Board and Regional Water Board have spent an estimated 230 hours to investigate and consider enforcement actions regarding this matter. At an average rate of \$150 per hour, the staff costs at this time are no less than \$34,500.

The Discharger conducted closed-circuit television (CCTV) inspections following the SSO incident and determined that the sewer main along Manhole No. K09N-108 was in poor condition and needed replacement. In October 2007, because of this condition, the Discharger constructed approximately 500 feet of pipeline along Escala Drive and diverted sewage flows from Manhole No. K09N-108. The construction cost of the new sewer pipeline was approximately \$209,000.

In a October 6, 2008 letter to the Regional Board, the Discharger reported that it will continue managing and updating its system-wide Sewer Cleaning Program (SCP). The SCP included ongoing evaluation of pipe conditions using CCTV, repair, replacement priorities, and cleaning techniques in an effort to minimize SSOs. As a requirement of the statewide General Order, this program will be incorporated in the Discharger's Sanitary Sewer Management Plan (SSMP). The draft SSMP was provided to staff of State Water Board and Regional Water Board during a meeting on December 9, 2008.

The Discharger also reported purchasing 0.1 acres of upland habitat mitigation credits from the Marron Valley Cornerstone Lands Conservation Bank in the amount of \$2,250 to compensate for damage resulting from cleanup activities.

5. Administrative Civil Liability

5.1. Maximum Civil Liability

Based on CWC Section 13350, the statutory maximum ACL amount based on the volume of discharge is therefore \$3,811,850.

Based on CWC Section 13385, the statutory maximum ACL amount based on the volume of discharge not cleaned up in excess of 1,000 gallons and five days discharge period (August 20, 2007 through August 24, 2007) is therefore \$3,851,850.

Proposed Civil Liability

The proposed civil liability in this matter is \$620,278. The liability is calculated based on \$1.50 per gallon for 380,185 gallons untreated sewage discharged but not cleaned up (381,185 gallons minus the first 1,000 gallons discharged) and \$10,000 per day for five days of continued untreated sewage discharge.

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

- 1. The untreated sewage was discharged into Lake Hodges, an impaired water of the United States. The discharge contained pollutants for which Lake Hodges is impaired.
- The discharge significantly threatened public health. As a precautionary measure, water districts suspended potable water pumping operations at the R.E. Badger Filtration Plant from Lake Hodges to San Dieguito Reservoir from August 24, 2007 through September 1, 2007 due to public health concerns. The plant had to supplement and purchase approximately 150 acre-feet of water from San Diego County Water Authority.
- 3. The Discharger failed to implement timely response measures that could have prevented or minimized the volume of the untreated sewage discharge. The nature, extent and gravity of the violation support imposition of a substantial penalty.
- 4. The Discharger has a history of significant discharges of untreated sewage upstream of its wastewater treatment plant. In 2000-2001, the Discharger settled two proposed ACLs issued by the Regional Water Board, both related to SSOs. The ACL amounts were \$3,469,900 for discharge of 34,000,000 gallons into Alvarado Creek, and \$1,589,000 for discharge of 1,500,000 gallons into Tecolote Creek. Both SSOs had similar nature of violation with Lake Hodges SSO because the Discharger failed to monitor and respond to the discharge incident in a timely manner. This factor supports imposition of higher penalty (\$/volume discharged) than previous ACLs.

- 5. The Discharger was proactive in the assessment and clean up of the sewage discharge after it was discovered.
- 6. The Discharger alleges that the number and volume of SSOs found and reported has shown a downward trend over the years.
- 7. The proposed civil liability assessment is sufficient to recover costs incurred by staff of the Regional Water Board and State Water Board, and it serves as deterrent for future violations.

Attachments:

- A Technical Report, *Response to Request for Information Requested by Notice of Violation No. R9-2007-0199*, November 26, 2007
- B Interview Summary, Mr. Serakos, August 14, 2008
- C Interview Summary, Ms. Courtney Smith, September 16, 2008
- D Response Letter, *Response to Email Request Information Related to Notice of Violation No. R9-2007-0199*, October 6, 2008
- E Sanitary Sewer Overflow History, City of San Diego, January 2000 April 2009



THE CITY OF SAN DIEGO MAYOR JERRY SANDERS

November 26, 2007

HAND DELIVERED

Mr. Michael P. McCann Assistant Executive Officer (Acting) Regional Water Quality Control Board 9174 Sky Park Court, Suite 100 San Diego, CA 92123-4340



Attention: Melissa Valdovinos

Dear Mr. McCann:

Subject: Response to Request for Information Requested by NOTICE OF VIOLATION NO. R9-2007-0199

On October 24, 2007, the City of San Diego received a Notice of Violation (NOV) pertaining to a sanitary sewer overflow event (SSO Event) that occurred on August 20, 2007, south of 12242 Escala Drive, resulting in a discharge to Green Valley Creek, which flows to Lake Hodges. The purpose of this letter is to update the information on the SSO Event and to provide a response to the questions that were included in the NOV. Technical investigation into this matter continues and a supplemental informational report may be submitted at a later date.

SSO Event Summary

The SSO Event that is the subject of this NOV occurred from Manhole K09N-108 on an 8-inch diameter pipe east of I-15 and south of Escala Drive in Rancho Bernardo. The spill was caused by rags, a mop head, and grease that blocked the flow in the 8-inch Vitrified Clay (VC) main. The sewer main was on a 36-month cleaning schedule, was last cleaned on March 16, 2004, and found to be clear of debris.

The SSO Event is estimated to have started at about 10 am on Monday, August 20, 2007, and continued until 3:45 pm on Friday, August 24, 2007. Out of the estimated 392,185 gallons of sewage spilled, approximately 11,000 gallons were recovered by Wastewater Collection Division (WWC) crews using Vactor Trucks, and 3,912 gallons were absorbed by the soil in the area immediately south of the spill point as per WWC Engineering calculations. Warning signs were posted following the SSO Event where sewage entered Lake Hodges.

The problem sewer main consisting of approximately 544 lineal feet of 8-inch VC pipe that has since been abandoned. The wastewater flow has been re-routed to a new 8-inch Polyvinyl Chloride (PVC) gravity sewer main on Escala Drive.



Wastewater Collection Division Metropolitan Wastewater • 9150 Topaz Way • San Diego, CA 92123 Tel (858) 654-4160 Page 2 Mr. Michael P. McCann November 26, 2007

Response to Questions Included in the NOV

1. An explanation of how this SSO incident occurred.

The overflow was caused by grease buildup and debris (mop head) in the sewer pipe. This caused the sewage to back up in the pipe and spill out of Manhole K09N-108.

2. A detailed explanation of the assumptions and methods used in approximating the volume of the SSO.

See Enclosure 1.

3. A chronology of steps taken by the City of San Diego, after the SSO occurred, to recover the discharged sewage and minimize impacts to the environment and public health.

8/24/2007: At 11:56, Emergency Response Supervisor received a call from a Public Information Officer of the Metropolitan Wastewater Department (MWWD), regarding a route slip from City Council to investigate a sewer odor in the Escala Drive area. Supervisor created a Service Request Number, and dispatched an Emergency Response (ER) Investigative Unit.

8/24/2007: At 14:00, ER Unit located and observed Manhole K09N-108 overflowing in canyon. Unit immediately notified Supervisor of spill and requested assistance. Supervisor assigned cleaning crews to contain and relieve stoppage. Cleaning crews arrived on site at 14:28, setup containment and cleaned pipe to relieve the stoppage. The stoppage was relieved at 15:45. Crews then started to clean up the spill site and tracked the final destination of sewage spill. It was determined at this time the spill was pooling up next to construction materials used for a freeway bridge repair and would not reach the lake.

8/25/2007: Crews returned to the site. At this time, heavy equipment had moved the freeway bridge repair materials (steel beams) providing crews access to recover approximately 11,000 gallons of sewage in the pooled up areas using Vactor Trucks. Further investigation determined that the sewage spill continued past this location and reached the lake. Appropriate agencies were immediately notified, including the City of San Diego Water Department, and San Diego County Health Department (SDCHD). As directed by the SDCHD, a total of ten (10) "Contaminated Water" warning signs were posted where sewage entered Lake Hodges.

8/27/2007: Crews cleaned up site by hand raking and removed paper products and other debris remaining from sewage spill. Crews also cleaned along the flow path from overflowing manhole to the lake.

8/29/2007: Crews removed ten (10) "Contaminated Water" warning signs in the area as directed by SDCHD.

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4. A summary of any effects on water conveyance from Lake Hodges to the San Dieguito Reservoir or water treatment at the R.E. Badger Filtration Plant.

See Enclosure 2.

5. A summary of all threatened and endangered species at or adjacent to Lake Hodges, and at or adjacent to the tributary creek that carried untreated sewage to the lake.

Three animal and five plant species were identified as potentially occurring at or adjacent to Lake Hodges and at or adjacent to Green Valley Creek that carried the sewage to the lake. Impacts from the spill are likely to have little to no direct impact on the species. The list of threatened and endangered species, their potential to occur, and potential impact from the sewer spill is included as Enclosure 3.

6. A site plot plan illustrating the location of the sewage collection system, the SSO path, sampling locations, and other pertinent features, such as habitat, surface waters, and land uses.

See Enclosure 4.

- 7. A description of all soil and water sampling activities associated with the SSO, analytical results, and an evaluation of the analytical results.
 - a. Soil Sampling Activities: See Enclosure 5.

b. Water Sampling Activities: Nine sampling locations were established as a result of Escala Drive/Lake Hodges sewer spill; four from the lake shoreline and the surrounding Green Valley Creek, east of Interstate-15, and five from Lake Hodges Reservoir near where the spill entered. One sample site was located at the spill entry point to the lake, another mid stream and two from the inlet and the outlet of a large corrugated pipe under West Bernardo Drive where the spill entered the creek. The shore line and creek sampling sites were collected from August 25, 2007 through August 31, 2007. The Reservoir sampling sites were collected from August 26, 2007 through September 12, 2007 at the request of California Department of Public Health (CDPH).

The lake shoreline and the creek samples were analyzed for all the three indicator bacteria: Total Coliform, Fecal Coliform, and Enterococcus using the Membrane Filtration technique (MF). The reservoir samples were also analyzed for the same indicators using Idexx Quanti-Tray Chromogenic technique. The duration of sampling for the shoreline sample was driven by compliance of AB 411 standard. The termination of the lake sampling was guided by the State Department of Public Health and based on pre-spill historical data.

In general, bacteriological results for August 25, 2007 sampling demonstrated the lowest counts amongst all the sampling days. AB 411 recreational water standards for the lake shoreline sample were met after two consecutive clean results on August 30th and 31st. The highest counts for Fecal Coliform density were obtained at the Mid Stream sample site after a significant amount of rain fell in the surrounding areas on August 26, 2007, 1.45 inches in

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Escondido and 0.05 inches in Rancho Bernardo. It is felt that storm runoff contributed to the elevated counts at all the sampling locations. Samples collected from the inlet and the outlet of the corrugated pipe where the spill entered the creek consistently showed lower bacterial densities than samples collected at Mid Stream sampling location. This suggests that the water quality at Mid Stream location was impacted by urban run-off or other factors aside from the spill. There is no pre-spill data to confirm this conclusion. Counts from all samples started to go down on the 28th of August and sampling was terminated on August 31st.

The high Total Coliform results for the reservoir samples were consistent with pre-spill conditions; however, the *E. coli* and Enterococcus densities were somewhat elevated in comparison with the previous data submitted by the Water Operation Lab. Therefore, the requirements for those two indicators was set at <3/100 mL. These standards were met in the last three days of sampling for all locations. *E. coli* and Enterococcus results for all the reservoir samples do not indicate sewage contamination (See Enclosure 6).

8. A description of all observations and sampling activities associated with potential short-term and long-term habitat/wildlife impacts from the SSO and an evaluation of these impacts.

A Biological Assessment /Report (See Enclosure 7) has been prepared assessing the results of the biological survey conducted in response to the spill on habitat and sensitive species in the vicinity of the spill. Approximately 0.1 acre of land was disturbed by emergency response sewer main cleaning activities. Mitigation for the 0.1 acre of impact to disturbed Diegan Coastal Sage Scrub is proposed at MWWD's Otay Mesa Upland Mitigation Bank. Additionally, an Initial Biological Assessment for Green Valley Creek was conducted (See Enclosure 8), describing the findings of post-spill inspections and the results of the bio-assessment samples collected in Green Valley Creek. No significant findings were found as a result of the assessment to the creek.

9. An explanation of the cleaning schedule and activities, prior to and following the SSO, for the sewer main.

The sewer main where the blockage occurred is Facility Sequence Number 49476 (FSN 49476). FSN 49476 originally was on a ten-year cleaning cycle that was established in the Metropolitan Wastewater Department's <u>Wastewater Collection System Plans</u> (September 2002). This sewer main was cleaned on February 15, 2004 and again on March 16, 2004 with a rodding truck as a part of the City's initial system-wide sewer system cleaning effort. In both cases, each city operator cleaning this pipe found the sewer main to be clear and free of grease, sludge, and roots. Based upon a computer algorithm, the sewer main's next scheduled maintenance event target date initially was set to be March 16, 2014.

On July 29, 2004, this sewer main's cleaning cycle frequency was reduced to 36 months in recognition of it being associated with an off-road, non Right-of-Way area (although its location was proximate to a city street). The sewer main's next scheduled maintenance target date was reset to March 16, 2007. In December, 2004 a maintenance plan change was made to clean the sewer main with a flusher truck rather than a rodding truck or tow-rodding machine in recognition of its proximity to a street and better availability of flusher trucks in the City's maintenance vehicle fleet.

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> According to the Metropolitan Wastewater Department's <u>Wastewater Collection System</u> <u>Plans</u>, the Wastewater Collection Division staff cleans each gravity sewer within a window of time surrounding its target cleaning date. The target cleaning date is the month, day, and year a particular pipe is scheduled to be cleaned. The size of this time window typically is set to plus or minus 25 percent of the pipe's current cleaning frequency. To clean FSN 49476 on schedule, this sewer main needed to be cleaned sometime between July 16, 2006 and December 16, 2007.

> A maintenance request was generated in March, 2007 for FSN 49476 to be cleaned. The Main Cleaning section supervisors discussed whether it would be better for this sewer main to be cleaned by canyon cleaning equipment/methods or Right-of-Way cleaning equipment/methods. During this process the maintenance request document was misplaced and needed to be regenerated. A replacement maintenance document was not generated prior to the SSO event in August, 2007, although it would have been generated and assigned to a city crew for maintenance work within this sewer main's cleaning date time window.

> Following this SSO event, the three sewer main sections leading down the canyon from Escala Drive were inspected by CCTV method. The manholes associated with these sewer mains were in poor condition and would require replacement or rehabilitation. A decision was made to reroute and replace these sewer main sections from the canyon area and into Escala Drive in order to expedite emergency construction replacement work and to allow easier maintenance of these sewer mains in the future. The sewer main replacement work was completed in October, 2007. The original three sections of sewer main and manholes leading down the canyon slope have been abandoned. A site map is included as Enclosure 10 showing the abandonment of the existing sewer and the re-alignment of the new sewer.

10. An explanation of steps the City of San Diego has taken, or will take, to educate the public, in general, and specifically in the vicinity of the SSO, on the consequences of disposing fats, oils, and grease into the sewer.

On September 14, 2007, the Metropolitan Wastewater Department's Public Information Office mailed postcards with information about the consequences of disposing fats, oils and grease into the sewer to addresses totaling 31 parcels within 1000-feet of the SSO.

11. An explanation of steps the City of San Diego has taken, or will take, to ensure that all reports from the public are promptly routed to the Metropolitan Wastewater Department SSO hotline when reporting SSOs or potential SSO-related concerns.

The City of San Diego Water and Sewer Emergency Services phone number (619-515-3525) is widely publicized on City vehicles, voicemails and websites. The Volunteer Canyon Watcher Program participants are also encouraged to call in and report any indications of real or potential canyon sewer spills observed during recreational hikes through San Diego's urban canyons. The Metropolitan Wastewater Department's Public Information Office will also provide Citizen's Assistance and City Council Offices with educational material on a regular, annual basis.

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12. An explanation of steps the City of San Diego has taken, or will take, to identify and expedite the process of forwarding misrouted reports made by the public regarding SSOs or potential SSO-related concerns to the Metropolitan Wastewater Department.

On October 31, 2007, the Metropolitan Wastewater Department Public Information Office provided written guidance to the Citizen's Assistance Office (CAO) on the proper procedures for routing reports made by the public regarding SSOs or potential SSO-related concerns. This office will provide updated educational material to the CAO on a regular, annual basis.

Director's Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Respectfully Submitted, Bertch, Ph.D. Timoth Metropolitan Wastewater Department Director CM/CJT/ldn

cc: Robert Ferrier, Assistant Director (w/out enclosures) David Jarrell, Acting Deputy Chief Operating Officer for Public Works

Enclosures:	 Enclosure 1 – Spill Volume Calculations Enclosure 2 – Chronology of Sewage Spill into Lake Hodges – August 2007 Enclosure 3 – List of Threatened and Endangered Species Potential to Occur Enclosure 4 – Site Plot Plan Enclosure 5 – Soil Sampling Analysis
	Enclosure 6 – Water Sampling Results
	Enclosure 7 – Escala Dr Sewer Emergency Ranch Bernardo Canyon Biological
	Assessment
	Enclosure 8 – Green Valley Creek Initial Biological Assessment Sept 2007
	Enclosure 9 – San Diego MWWD Facility Information Sheet
	Enclosure 10 – Realigned 8-in PVC Sewer

Enclosure 1

Spill Volume Calculations

.

Escala Drive Rancho Bernardo Canyon Sewer Spill

Spill Volume Calculations

Prepared by:

Cha Moua, Associate Engineer-Civil

OBJECTIVE

The purpose of this report is to provide a detailed explanation of the assumptions and methods used to estimate the volume of wastewater spilled from an 8-inch diameter vitrified clay (VC) pipe located in the Rancho Bernardo Canyon, directly east of Interstate 15, and south of Escala Drive in the Rancho Bernardo Community Planning Area of San Diego (Figure 1).

FIELD OBSERVATIONS OF SPILL

A spill occurred from Manhole K09N-108 on an 8-inch diameter pipe just south of 12242 Escala Drive in Rancho Bernardo. The spill was reported at about 10 am on August 20, 2007, and was contained by 3:45 pm on August 24, 2007. The spill on Manhole K09N-108 was caused by rags, a mop head, and grease that blocked the flow within the 8-inch VC main.

SPILL VOLUME ESTIMATE

The sewer flow contributing to the spill site consists of two tributary basins totaling about 494 single-family homes (Figure 2). The number of homes was obtained using the 2006 aerial photos. Sewage from Basin #1 (323 homes) drains by gravity into Pump Station 76 then pumps south into a 10-inch gravity main located at Basin #2 which consists of 171 homes.

The average flow rate for Basin #1 was 42 gallons per minute (gpm). This is the latest flow data available (February 2005) at Pump Station 76. Assuming that the sewer flow for a person is 80 gallons per day (City of San Diego Sewer Design Guide, 2004 Edition), then the number of people living in a household can be determined. For Basin #1 and Basin #2, the number of people per household is calculated to be 2.341.

Spill Volume Calculations:

1. Basin #1: Solving for the Number of People per Household

Let N = Number of People per Household H = Number of Homes Q = Average Daily Flow (42 gpm) P = People per Household

Q = 80 gpd x P x H 42 gpm = 80 gpd x P x 323; P = 2.341 2. Basin #2: Solving for the Average Flow

1 1

$$Q = 80 \text{ gpd x P x H}$$

= 80 x 2.341 x 171
= 22.240 gpm

3. Average Flow Rate; Basin #1 and Basin #2

Q = 42 gpm + 22.240 gpm = 64.240 gpm

4. Total Volume Spilled

Spill started: 8/20/07 at 10 am Spill stopped: 8/24/07 at 3:45 pm Spill duration: 101.75 hours

Q = 101.75 hrs x 64.240 gpm = 392,185 gallons





Enclosure 2

Chronology of Sewage Spill into Lake Hodges - August 2007

Chronology of Sewage Spill into Lake Hodges – August 2007

By: Ricardo Amador, Senior Biologist

August 25, 2007 (Saturday)

The Marine Microbiology and Vector Management (MMVM) Lab is notified by Wastewater Collection (WWC) Division that a sewage spill near Lake Hodges has occurred and that the spill has entered the lake. A lab field sampler is assigned to meet with Senior Water Utility Supervisor, Jose Oropeza, to initiate bacteriological sampling of sites established by an on-site survey conducted by Jose and Metropolitan Wastewater Department Director Tim Bertch. Four sample sites were identified; 1) the inlet of a large corrugated pipe under West Bernardo Drive into which the spill entered, 2) the outlet of the same corrugated pipe, 3) at midstream between the corrugated pipe outlet and the probable spill entry point into the lake and 4) the probable spill, shoreline, entry point into the lake itself. See Lake Hodges Spill, Aug 25, 2007 map.

All bacti samples collected by the MMVM Lab are analyzed for fecal indicator bacteria (FIB); total coliform, fecal coliform and enterococci using the Membrane Filtration method. See Table 1.

The sewage spill is reported to have occurred beginning 10:00 am, August 20, 2007 and ending 3:45pm, August 24, 2007. An estimated overflow volume of 392,185 gallons of sewage enters the Green Valley Creek, east of Interstate-15. The spill is caused by rags, a mop head, and grease blockage.

The Santa Fe Water District is unable to transfer Lake Hodges raw water to the San Dieguito reservoir or process Lake Hodges raw water through the Badger Filtration Plant effective August 24, 2007.

The access points to Lake Hodges are posted by WWC as per San Diego County Department of Environmental Health (SDCDEH).

August 26, 2007 (Sunday)

The MMVM Lab collects a second round of watershed bacti samples from the established sites but can only collect 3 samples; there is no water at the corrugated pipe outlet site.

Four lake bacti sample sites are identified and approved by Clay Clifton of the SDCDEH. The Water Department Lab begins sampling and analyzing lake samples for the purposes of drinking water, raw water source monitoring.

All samples and subsequent samples are analyzed for the fecal indicator bacteria total coliform, $E \ coli$ and enterococci using the IDEXX chromogenic substrate method. See Table 1 and Table 2.

Precipitation of 1.45 inches in Escondido and 0.05 inches in Rancho Bernardo is recorded this day.

August 27, 2007 (Monday)

The MMVM Lab collects a third round of watershed bacti samples from the established sites. There is no water at the corrugated pipe outlet site. No lake bacti samples are collected by the Water Department.

August 28, 2007 (Tuesday)

The MMVM Lab collects a fourth round of watershed bacti samples from the established sites. All 4 samples are collected; water is present at the corrugated pipe outlet site.

The Water Department Lab collects and analyzes five lake bacti samples; Bernardo Bay is added to the sampling regimen. See Hodges Reservoir Sample Stations map.

August 29, 2007 (Wednesday)

The MMVM Lab collects a fifth round of watershed bacti samples from the established sites. A map of the Lake Hodges bacti sampling sites is sent to Clay from the Water Department Lab.

No lake bacti samples are collected.

MMVM lab staff contacts SDCDEH to request that guidance and direction be provided the Water Department Lab as it relates to the required sampling regimen. From this contact, MMVM Lab staff is informed that the watershed bacti sampling and analyses performed by the MMVM Lab will continue until the lake FIB monitoring conducted by the Water Department Lab meet the following AB411 compliance standards for single samples:

- Total coliform . . . $\leq 10,000 / 100 \text{mL}$
- Fecal coliform . . . $\leq 400 / 100 \text{mL}$
- Enterococci $\leq 104 / 100 mL$
- Fecal:Total ratio . <0.1 when total coliform exceeds 1,000 / 100mL

All FIB standards must be met in back-to-back samplings conducted on two consecutive days.

August 30, 2007 (Thursday)

MMVM Lab collects a sixth round of watershed bacti samples from the established sites. The Water Department Lab collects and analyzes five lake bacti samples.

August 31, 2007 (Friday)

The MMVM Lab collects a seventh and last round of watershed bacti samples from the established sites.

The Water Department Lab collects and analyzes five lake bacti samples.

County DEH notifies the MMVM Lab that further sampling is not required and that WWC can remove postings from around the lake.

The Water Department Lab is informed that further monitoring is required by the California Department of Public Health (CDPH).

WWC lifts postings at access points to Lake Hodges as per SDCDEH.

September 1, 2007 (Saturday)

Watershed bacti samples are no longer required.

The Water Department Lab collects and analyzes five lake bacti samples.

CDPH insists on further lake monitoring until bacti data are similar to pre-spill conditions. Target densities are set at <10 / 100mL for *E.coli* and <3 / 100mL for enterococci for the Bernardo Bay and HGD sample sites. No target densities are included for total coliform since those values are historically high for Lake Hodges. Additionally, monitoring must demonstrate that there is no migration of the spill toward HGA and HGB from HGD and Bernardo Bay. CDPH directs the Badger Filtration plant to increase the level of treatment to provide an additional log for virus(5 log total) and Giardia (4 log total) inactivation.

September 2, 2007 (Sunday)

The Water Department Lab collects and analyzes five lake bacti samples.

The Santa Fe Water District begins processing Lake Hodges raw water through the Badger Filtration Plant and is free to transfer Lake Hodges raw water to the San Dieguito reservoir.

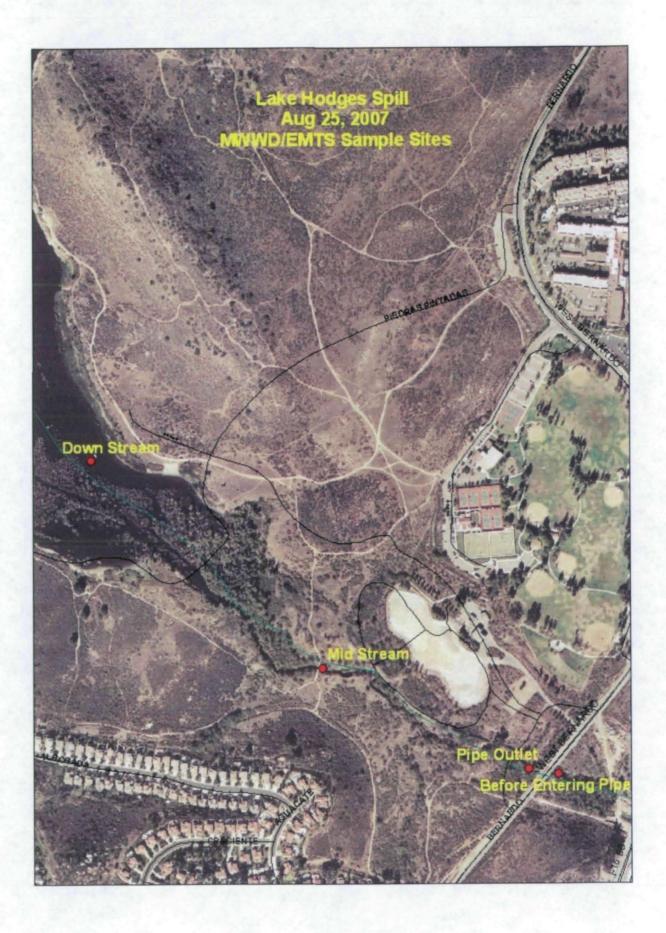
September 3 thru 12, 2007 (Monday)

The Water Department Lab collects and analyzes five lake bacti samples each day. There are no bacti standards for raw water sources used for drinking water processing. The Santa Fe Water District also requests additional bacti monitoring since Lake Hodges was being used as a drinking water source at the time of the spill.

The boat and fishing program that is administered by the Water Department remains open on each Wednesday, Saturday and Sunday through the period August 20 through September 12, 2007. There is no suspension of boating or fishing activities. Body contact recreation is not at issue during this time, since sail-boarding program is not active.

September 11, 2007 (Tuesday)

Bioassessment samples are collected and analyzed by the MMVM Lab at the request of the WWC Division. See "Green Valley Creek, Rancho Bernardo, Initial Biological Assessment, September 2007" document (See Enclosure 8).



	SPILL IMPACTED WATERSHED					LAKE HODGES			
SAMPLE		COLIFORM (cfu/100mL)		ENTEROCOCCUS	SAMPLE		COLIFORM (mpn/100mL)		ENTEROCOCCUS
DATE	SOURCE	TOTAL	FECAL	(cfu/100mL)	DATE	SOURCE	TOTAL	E COLI	(mpn/100mL)
25-Aug-07	Before entering pipe	ND	300e	26e	25-Aug-07		Not	sampled	
	Pipe outlet	ND	300e	840					
	Midstream	4,000e	44	94					1
-	Downstream	ND	420	110					·
26-Aug-07	Before entering pipe	ND	12e	28e	26-Aug-07	HGA	8,700	<10	1
	Pipe outlet		lo sample, s	ource dry		HGB	5,200	<10	<1
	Midstream	>160,000	>120,000	>120,000		HGC	9,800	<10	1
	Downstream	ND	110	72		HGD	12,000	<10	12
27-Aug-07	Before entering pipe	620,000	20e	340e	27-Aug-07		Not	sampled	
-	Pipe outlet	· · ·	lo sample, s	ource dry	1		i i	i i	i
	Midstream	>1,600,000	>1,200,000	620,000	1				i i
	Downstream	20,000e	1,000	40e	1			ĺ	i
28-Aug-07	Before entering pipe	40,000e	4,800	80e	28-Aug-07	HGA	5,500	<10	<1
Ť	Pipe outlet	200,000e	3,800e	160e		HGB	6,500	10	2
	Midstream	640,000	84,000	1,200e		HGC	7,700	10	2
	Downstream	18,000e	4,200	80e	1	HGD	7,700	120	30
		í í	,		1	Bernardo Bay	24,000	350	38
29-Aug-07	Before entering pipe	<20,000	2,000e	460	29-Aug-07		Not	sampled	
•	Pipe outlet	34,000e	3,200e	1,200	1				1
	Midstream	20,000e	20,000e	580	1				
	Downstream	2,000e	400	100e	1				i i
					1				-
30-Aug-07	Before entering pipe	20,000e	760	40e	30-Aug-07	HGA	2,300	<10	<1
-	Pipe outlet	26,000e	1,100	1,000e	1	HGB	9,200	<10	5.2
	Midstream	34,000e	11,000	620	1	HGC	24,000	<10	3.1
	Downstream	<2,000	220e	40e]	HGD	8,200	10	14
					1	Bernardo Bay	20,000	74	8.5
31-Aug-07	Before entering pipe	10,000e	220e	60e	31-Aug-07	HGA	2,500	<10	1
-	Pipe outlet	<20,000	320e	420	1	HGB	16,000	<10	3
	Midstream	80,000e	8,000	980	1	HGC	3,900	<10	6.2
	Downstream	6,000e	40e	40e	1	HGD	12,000	<10	50
					1	Bernardo Bay	>24,000	31	19
1-Sep-07	Before entering pipe	No	further same	ling required	1-Sep-07	· · · ·			-
	Pipe outlet		· · · · · · · · · · · · · · · · · · ·						
	Midstream	1					See Tabl	e 2	
	Downstream	1							

TABLE 1

ND No data; non-coliform count is greater than 200 colonies per plate.

TABLE 1 COMMENTS

SPILL IMPACTED WATERSHED: Precipitation occurred in the surrounding areas on August 26, 2007; 1.45 inches in Escondido and 0.05 inches in Rancho Bernardo. Since the spill was reported to have ended on August 24 and bacti counts on August 25 were somewhat lower than those determined on succeeding days, the rain event may have contributed to the elevated counts. The highest counts for Fecal Coliform densities were obtained on two consecutive days at the Mid Stream sample site. The samples collected from the inlet and the outlet of the corrugated pipe, where the spill is thought to have entered the creek, consistently show lower bacterial densities than samples collected at the Mid Stream sampling location. This suggests that the water quality at the Mid Stream location may possibly be impacted by urban run-off or other factors not related to the spill.

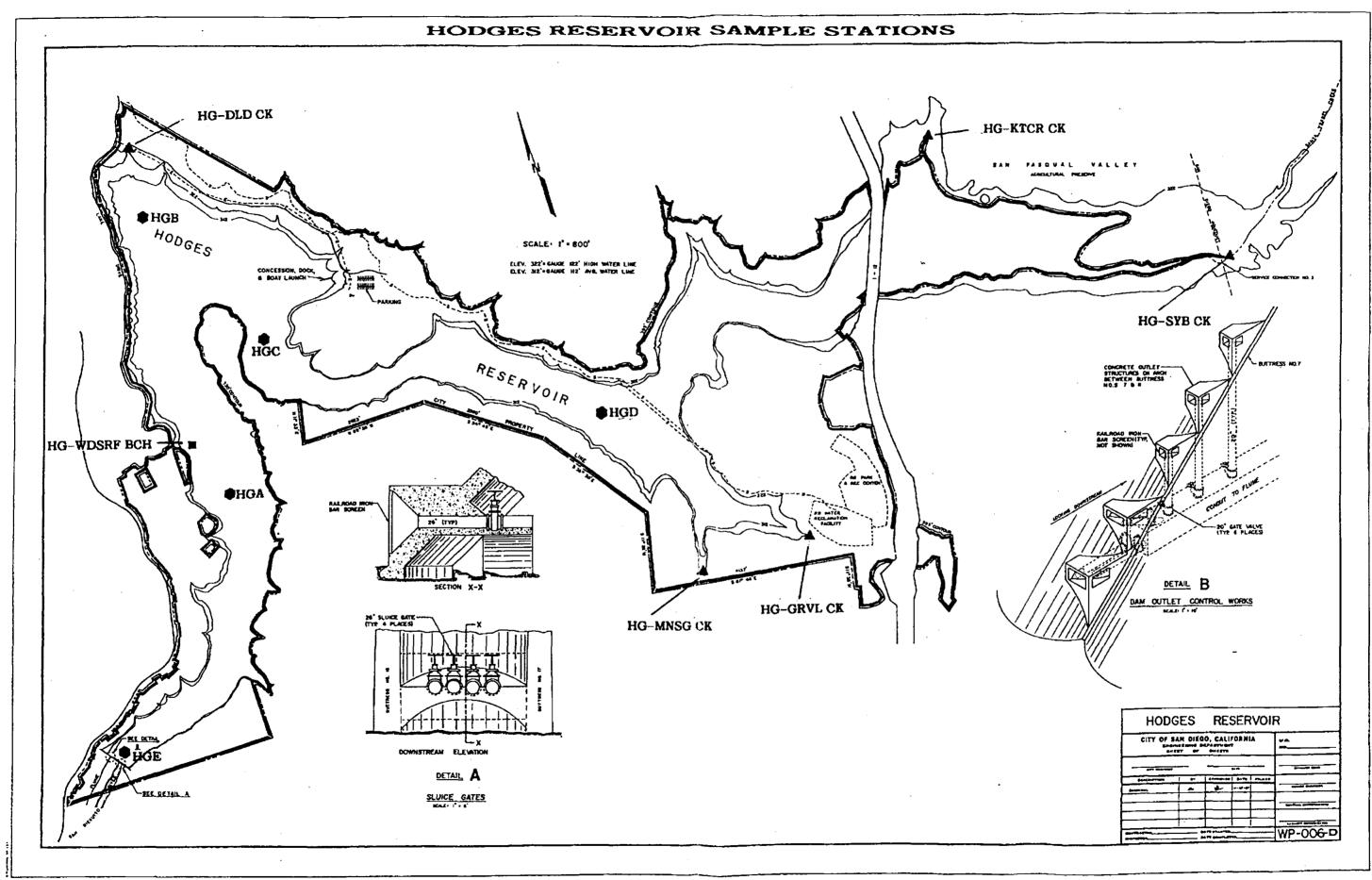
Reports of these bacterial results were sent to WWC and the SDCDEH on a daily basis.

LAKE HODGES: Target densities for *E. coli* and enterococci are set at <3 / 100mL by CDPH. No target densities are included for total coliform since those values are historically high for Lake Hodges. In having previous experience with sewage spills, the MMVM Lab considers *E. coli* as the better indicator of a sewage spill. There is little variation of *E. coli* densities from day to day except a few days following the rain event. Rain runoff into the lake may explain the slightly elevated E. coli and enterococci counts on August 28 and a few subsequent dates thereafter.

TABLE 2								
LAKE HODGES								
SA	MPLE		FORM 100mL)	ENTEROCOCCUS				
DATE	SOURCE	TOTAL	E COLI	(mpn/100mL)				
1-Sep-07	HGA	2,500	<10	<1				
	HGB	24,000	<10	<1				
	HGC	13,000	<10	_2				
ļ	HGD	20,000	<10	1				
	Bernardo Bay	11,000	10	6.3				
2-Sep-07	HGA	7,700	<10	1				
	HGB	10,000	<10	8.6 4.1				
	HGC HGD	24,000	<10 <10	4.1				
	Bernardo Bay	11,000	<10	1 1				
3-Sep-07	HGA	10,000	<10	2				
	HGB	10,000	<10	<1				
	HGC	13,000	<10	7.5				
	HGD	>24,000	<10	2				
	Bernardo Bay	16,000	<10	<1				
4-Sep-07	HGA	3,700	<10	<1				
	HGB	12,000	<10	5.2				
	HGC	24,000	<10	1				
	HGD	17,000	<10	7.5				
É C ++ 07	Bernardo Bay	20,000	<10	4.1				
5-Sep-07	HGA HGB	9,800 17,000	<10 <10	<1				
	HGC	24,000	<10	<1				
	HGD	24,000	<10	4.1				
	Bernardo Bay	24,000	<10	3.1				
6-Sep-07	HGA	12,000	<10	1				
	HGB	20,000	<10	2				
	HGC	20,000	<10	2				
	HGD	>24,000	<10	9.6				
	Bernardo Bay	24,000	<10	14				
7-Sep-07	HGA	12,000	<10	1				
	HGB	17,000	<10	2				
	HGC HGD	24,000	<10 <10	2 8.4				
	Bernardo Bay	20,000 >24,000	<10	20				
8-Sep-07	HGA	7,700	<10	2				
• • • • •	HGB	20,000	<10	5.2				
	HGC	>24,000	<10	2				
	HGD	20,000	<10	3				
	Bernardo Bay	20,000	<10	7.5				
9-Sep-07	HGA	12,000	<10	<1				
	HGB	17,000	<10	2				
	HGC	20,000	<10	1				
	HGD Bernardo Bay	<u>17,000</u> 17,000	<10 <10	<u>14</u> 13				
10-Sep-07		17,000 6,700	<10	<1				
10-0ep-07	HGB	6,700 14,000	<10	<1				
	HGC	24,000	<10	<1				
	HGD	16,000	<10	<1				
	Bernardo Bay	17,000	<10	<1				
11-Sep-07	HGA	8,700	<10	<1				
	HGB	<24,000	<10	<1				
	HGC	17,000	<10	<1				
	HGD	16,000	<10	<1				
10.0	Bernardo Bay	17,000	<10	1				
12-Sep-07	HGA	5,800	<10	1				
	HGB HGC	<u>14,000</u>	<10	<u><1</u> 1				
	HGD	17,000 20,000	<10 <10	<1				
	Bernardo Bay	14,000	<10	1				
L	Loomardo Day	14,000	- 10	<u>`</u>				

TABLE 2 COMMENTS

E.coli and enterococci densities are very low and show little variation although they do stabilize at the lowest densities during the last 3 days of sampling. The most significant enterococci counts occur at Bernardo Bay nearest the watershed of interest and at the sample site nearest Bernardo Bay.



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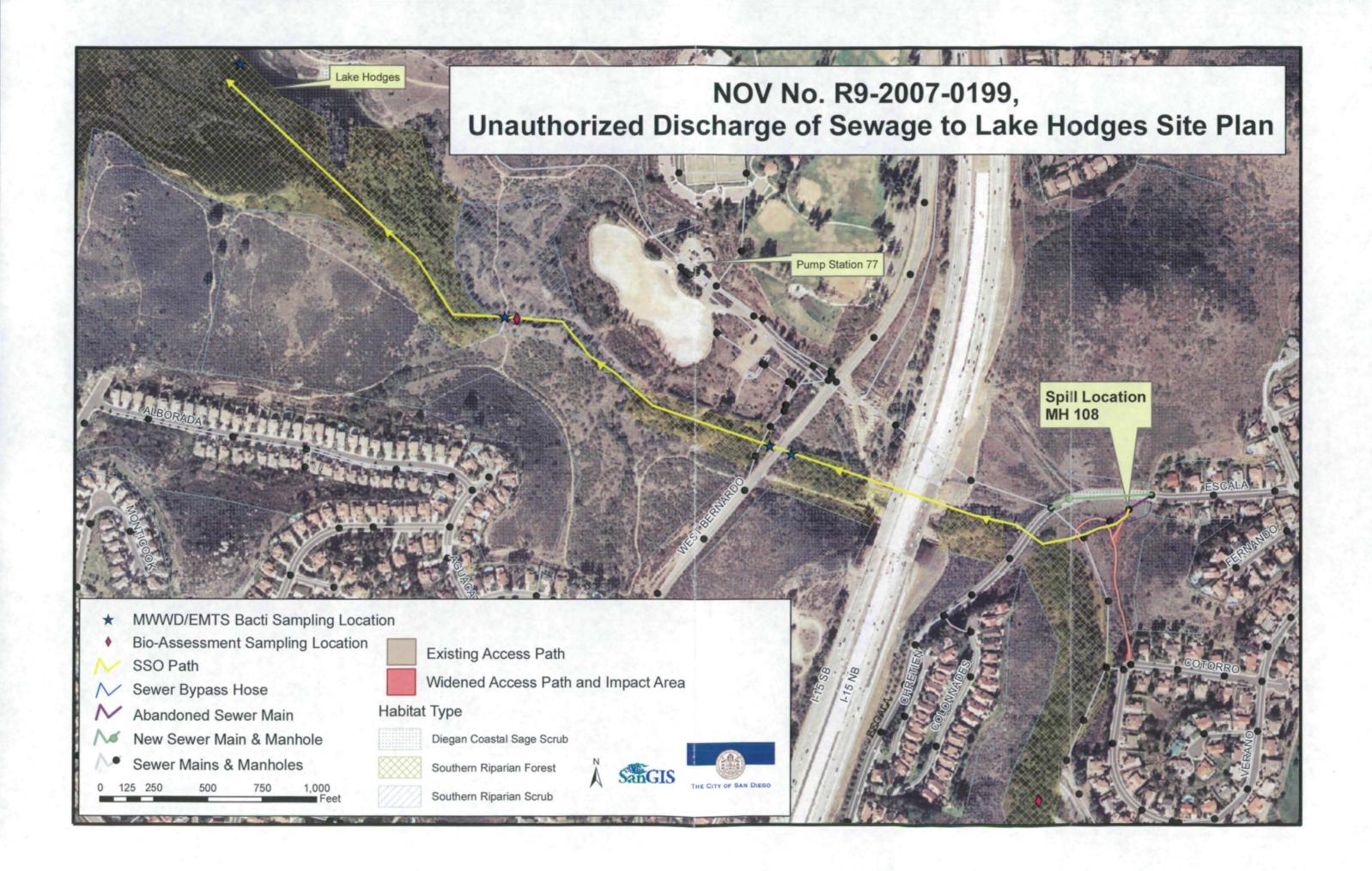
Enclosure 3

List of Threatened and Endangered Species Potential to Occur

~		ala Drive Sewer Sp Jake Hodges Area		<u>.</u>
]	Chreatened and End	0		Occur*
Common Name	Scientific Name	Status	Potential to Occur	Impacts (as a result of Sewer Spill)
Animals				
Coastal California gnatcatcher	Polioptila californica californica	Federal Threatened, State Species of Concern	High	Little to none due to mobility of species and minimal habitat disturbance
Least Bell's Vireo	Vireo bellii pusillus	Federal and State Endangered	Moderate	Little to none due to mobility of species and minimal habitat disturbance
Southwestern willow flycatcher	Empidonax traillii extimus	Federal and State Endangered	Moderate	Little to none as species has not been identified in the direct vicinity of the spill area
Plants		J	L	<u></u>
San Diego Button-celery	Eryngium aristulatum var. parishii	Federal and State Endangered	Low	None as appropriate habitat does not exist within impact area
San Diego Ambrosia	Ambrosia pumila	Federal Endangered	Low	None as species not identified in direct vicinity of spill area
Encinitas baccharis	Baccharis vanessae	Federal Threatened, State Endangered	Low	None, species not identified in direct vicinity of spill area
San Diego thorn-mint	Acanthomintha ilicifolia	Federal Threatened, State Endangered	Low	Little to none as species is not likely to occur within impact area
Orcutt's spineflower	Chorizanthe orcuttiana	Federal and State Endangered	Low	None as species not likely to occur within impact area

* Threatened and Endangered Plants and Animals list from the California Department of Fish and Game California Natural Diversity Database (CNDDB) within the Escondido Quad, SANGIS sensitive species data, Multiple Species Conservation Program (MSCP) mapping, Rare Plants of San Diego County (Reiser, 2001), and focused biological surveys completed in the area for other sewer related projects. Enclosure 4

Site Plot Plan



Enclosure 5

Soil Sampling Analysis

Escala Drive Rancho Bernardo Canyon Sewer Spill

Soil Sampling Analysis

Prepared by:

Cha Moua, Associate Engineer-Civil

-1-

OBJECTIVE

The purpose of this report is to provide a detailed explanation of the soil sampling analysis, assumptions and methods used to estimate the volume of wastewater absorbed by the ground immediately downstream from the spill site.

BACKGROUND

A spill occurred from Manhole K09N-108 on an 8-inch diameter pipe just south of 12242 Escala Drive in Rancho Bernardo. The spill was reported at about 10 am on August 20, 2007, and was contained by 3:45 pm on August 24, 2007. The spill on Manhole K09N-108 was caused by rags, a mop head, and grease that blocked the flow in the 8-inch VC main, and blew out a manhole (MH 108) and riser on the hillside. The rate of spill was calculated to be about 64.240 gpm (See Enclosure 1 - Spill Volume Calculations Report). A total of 392,185 gallons of sewage was spilled into an open area of 9,206 square feet before flowing into the Green Valley Creek. Approximately 11,000 gallons were recovered by Wastewater Collection Division crew using Vactor Trucks. The open area touched by the spill was mapped by Engineering and Program Management Division, Environmental Section personnel using GPS devices (Figure 1).

SOIL SAMPLE ACTIVITIES

The Soil Moisture tests were performed by the City of San Diego, Wastewater Collection Division Engineering and Field Engineering Division, Lab Section personnel on August 31, 2007. In order to compare the moisture contents of the wet and dry soils, two samples were taken inside the spill area, and two outside. Each sample site was excavated about 1-foot in diameter, and 16-inches deep (Figure 1). Soil samples were taken from Top Dry, Top Wet, Lower Dry and Lower Wet sites, and the results of the moisture contents were 3.5%, 5.6%, 3.5%, and 8.5% respectively. The soil is classified as brown sand with granite.

It was evident from the digging operations that the soil at Top Wet, and Lower Wet sites had saturated about 5-inches and 6-inches deep respectively; the soil looked very dry beyond 5 to 6-inches deep. However, it should also be noted that a significant amount of rain fell in the surrounding areas on August 26, 2007, 1.45 inches in Escondido and 0.05 inches in Rancho Bernardo.

The Porosity tests were conducted on September 6, 2007 outside in the spill area to determine the porosity of the surrounding soil. Soil samples were taken from Test #1, and Test #2 sites (Figure 1), and the results of the soil porosity were 10.7% and 11% respectively.

VOLUME OF SEWAGE ABSORBS BY OPEN AREA

For the sake of simplicity, assuming that the area touched by the sewage was uniformly saturated at an average depth of 5.5-inches as stated above, and that the rain was negligible, the total volume of sewage absorbed by the open area immediately downstream of the spill site is calculated to be 3,912 gallons (see calculations below).

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Spill Volume (Absorbs by Open Area) Calculations

<u>Given</u> :	Area touched by spill Soil saturation depth Porosity, n	
Lab Results:	Volume of Solids, Vs Volume of Water, Vv Volume of Air, Va	$v = 0.1244 \text{ ft}^3$

1. Total Volume of Soil Touched by Sewage

Vt =
$$(9,206 \text{ ft}^2) \times (5.5 \text{ in}) \times (1 \text{ ft})/12 \text{ in}$$

= 4,219 ft³

2. From the Lab Results, Vw = 12.4% of Vt; therefore, the total volume of sewage absorbs by the soil is:

 $Vw = 12.4 x 4,219 ft^{3} / 100$ = 523 ft^{3} or 523 ft^{3} x (7.48 gal/1 ft^{3}) = 3,912 gallons.

Reference

Robert D. Holtz, Ph.D., P.E., and William D. Kovacs, Ph.D., P.E. 1981. An Introduction to Geotechnical Engineering







The City of San Diego Field Division – Materials Testing Laboratory

Test Results

Job Title:	Escalada Spill	Work Order #:	008201
Res. Engineer:	Cha Moua	Date Tested:	9/6/07
Contractor:	n/a	Time on Job:	n/a
Tested By:	Randy Encinas	Time off Job:	n/a

Type of Test: Porosity Test

Location:

Test #1 was sampled at the lower level (Down by the Creek). Test #2 was sampled at the upper level (Approx. 200' away from the Creek)

Test #	Description	Results	Test #	Description	Results
1	porosity	10.7%			
2	porosity	11%			

Remarks:

Materials sampling location as per Mr. Cha Moua direction.

From:David OrtegaTo:Christopher TothDate:Tue, Sep 4, 2007 10:43 AMSubject:Re: Ground Saturation Test at RB

hello i sample two locations on upper level and one lower closer to the creek moisture saples of two areas one dry one wet top dry 3.5% top wet 5.6% lower dry 3.5% lower wet 8.4%

>>> Christopher Toth 9/4/2007 10:15 AM >>> ok, thanks, Chris

>>> Cha Moua 9/4/2007 10:14 AM >>> Chris,

I'll ask David if he can perform the porosity of the samples he took.

Cha

>>> Christopher Toth 9/4/2007 10:03 AM >>>

did we do any soil analyses that indicate what the basic porosity of the soil samples are? We can use the basic permeability of the soil samples to estimate what potential the drainage path had to collect the sewage prior to it reaching the lake shore. Chris

>>> Cha Moua 9/4/2007 7:38 AM >>> Chris,

Field Engineering lab did the saturation test on Friday (August 31) last week; however, during the field inspection I have learned from Jose Oropeza that it rained hard on Saturday, August 25. Therefore, the saturation test that the lab performed would not be valid since the moisture content of the soil would be from both the rain water and sewage.

Cha

>>> Christopher Toth 8/30/2007 4:31 PM >>>

great news, Cha. Thanks for taking the lead on this project, Chris

>>> Cha Moua 8/30/2007 4:29 PM >>> Chris,

I have arranged with Field Engineeering Lab to do the subject test tomorrow. We will go the site with Mike R. in the morning.

Cha

Cha Moua - Re: Fwd: Escalada Spill

and a state of the state of the

From:	Randy Encinas
То:	Cha Moua
Date:	11/1/2007 10:38 AM
Subject:	Re: Fwd: Escalada Spill

They classified it as a brown sand with granite

>>> Cha Moua 11/1/2007 10:34 AM >>> Randy,

Thank you very much....How would you classify the soil?

Cha

>>> Randy Encinas 11/1/2007 10:32 AM >>> Vs=.8076 ft^3 Vw=.1244 ft^3 Va=.068 ft^3

>>> Cha Moua 10/31/2007 3:49 PM >>> Zuhair,

From the two porosity tests that Randy performed, I also would like to get the results for Va, Vw, and Vs for each of the test.

Va=volume of air, Vw=volume of water, and Vs=volume of solids.

Thanks....Cha

>>> Zuhair Al-Attia 10/30/2007 3:43 PM >>> Hi Cha, Attached is the report received from Randy, Pls. let me know if you have any question regarding this matter. Thx. Zee

>>> Cha Moua 10/30/2007 9:06 AM >>> My MS #902, but when the report is ready, I'll pick it up.

Cha

>>> Zuhair Al-Attia 10/30/2007 8:50 AM >>> Hi Randy, Could you pls. send copy of the report to Mr. Moua. Pls. Mr. Moua send us your M.S. #. Thx. Zee

>>> Cha Moua 10/30/2007 7:45 AM >>> Hi Zuhair,

We have just received a NOV from the Regional Board regarding the subject spill, I was wondering if you could

file://C:\Documents and Settings\CIM.AD\Local Settings\Temp\GW}00001.HTM 11/1/2007

Daily Temperatures And Precipitation

National Weather Service - San Diego, California

ASUS66 KSGX 270322 AAA RTPSGX :SOUTHWESTERN CALIFORNIA TEMPERATURE AND PRECIPITATION SUMMARY :NATIONAL WEATHER SERVICE SAN DIEGO CA :530 PM PDT SUN AUG 26 2007 :**** ADDED WILD ANIMAL PARK ***** :TODAYS HIGH AND OVERNIGHT LOW TEMPERATURES AS OF 5 PM TODAY. * DENOTES 24 HOUR HIGH TEMPERATURES BETWEEN 4 PM YESTERDAY : AND 4 PM TODAY. OCCASIONALLY THE HIGH TEMPERATURE MAY HAVE : OCCURRED AFTER 4 PM YESTERDAY. :PRECIPITATION FOR THE PAST 24 HOURS. M DENOTES MISSING. T DENOTES TRACE OF PRECIPITATION : .B SAN 0826 P DH16/TX/TN/PPD/SD : : ID : STATION ELEV : HIGH / LOW / PCPN / SNODEP FEET INCHES ...COASTAL AREAS... * YORBA LINDA 350 : YBLC1: 85 / 64 / 0.00 / FUL : FULLERTON AIRPORT 96 : 91 / 68 / 0.00 / * ANAHEIM 335 : 90 / * SANTA ANA 135 : 86 / ANAC1: 67 / 0.00 / STAC1: * SANTA ANA 65 / 0.00 / SNA : JOHN WAYNE AIRPORT 55 : 83 / 67 / т / * NEWPORT BEACH 10 : 72 / 3L3 : 67 / 0.00 / * LAGUNA BEACH 35 : 80 / 63 / 0.00 / LAGC1: SJYC1: * SAN JUAN CANYON 375 : M / М / М / L34 : * OCEANSIDE HARBOR 10 : 79 / 68 / 0.24 / OCEANSIDE AIRPORT 28 : 83 / OKB : 66 / 0.44 / VSTC1: * VISTA 330 **:** 88 / 67 / 0.05 / CRQ : CARLSBAD AIRPORT 328 : 88 / 68 / 0.30 / SOL : SOLANA BEACH 75 : 79 / 68 / Т / * DEL MAR DMRC1: 100 : 86 / 69 / 0.00 / NKX : MIRAMAR 477 : 91 / 68 / т / MONTGOMERY FIELD 420 : 91 / 69 / MYF : 0.00 / SEA WORLD SAN DIEGO 10 : 77 / 69 / SWDC1: 0.00 / SAN DIEGO 15 : 85 / SAN : 70 / 0.00 / * CORONADO 25 : CDOC1: М / М / M / * CABRILLO NATL MNMT 364 : 78 / 65 / 0.00 / L13 : CVAC1: * CHULA VISTA 56 : М / Μ/ M / Μ / IPLC1: * IMPERIAL BEACH 22 : M / Μ / 525 : 90 / 67 / SDM : BROWN FIELD Т / : ...INLAND AREAS... 5

:						
ONT :	ONTARIO	943	:	88 /	67 /	0.00 /
CNO :	CHINO AIRPORT	652	:	88 /	64 /	т /
L67 :	RIALTO	1420	:	95 /	66 /	0.00 /
AJO :	CORONA	531	:	87 /	68 /	0.00 /
RAL :	RIVERSIDE AIRPORT	818	:	M /	М /	M /
UCR :	RIVERSIDE UCR	986	:	97 /	67 /	0.00 /
RIV :	RIVERSIDE MARCH	1542		88 /		Т /
BUO :	BEAUMONT	2680		95 /		
EORC1:	* ELSINORE	1285		M /		
HEMC1:	* HEMET	1811	-		M /	
TEMC1:	* TEMECULA	1020			68 /	
FALC1:	* FALLBROOK	698		88 /	66 /	
ESCC1:	* ESCONDIDO	600		90 /	66 /	
				•		
ASCC1:	* WILD ANIMAL PARK	420		96 /	66 /	
RAMC1:	RAMONA FIRE	1470		93 /	83 /	
RNM :	RAMONA AIRPORT	1393		91 /	66 /	
SGX :	RANCHO BERNARDO	690		93 /	67 /	
POWC1:	* POWAY	648		M /	M /	
ALPC1:	* ALPINE	1695		95 /		
SNTC1:	* SANTEE	340	:	94 /	69 /	0.12 /
ELJC1:	* EL CAJON	405	:		68 /	0.35 /
SPVC1:	* SPRING VALLEY	270	:	M /	Μ /	М /
LMGC1:	* LEMON GROVE	427	:	M /	М /	М /
:						
•						
:	MOUNTAIN AREAS					
	MOUNTAIN AREAS					
:	MOUNTAIN AREAS SANTA ANA RADAR	3092	:	м /	м /	0.08 /
: : Sox :	SANTA ANA RADAR			•		
: : SOX : WRIC1:	SANTA ANA RADAR * WRIGHTWOOD	5980	:	81 /	59 /	0.00 /
: SOX : WRIC1: ARWC1:	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD	5980 5205	: :	81 / M /	59 / M /	0.00 / M /
: SOX : WRIC1: ARWC1: BBLC1:	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE	5980 5205 6760	: : :	81 / M / 76 /	59 / M / 55 /	0.00 / M / 0.01 /
: SOX : WRIC1: ARWC1: BBLC1: IDYC1:	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE * IDYLLWILD	5980 5205 6760 5380	::	81 / M / 76 / 87 /	59 / M / 55 / 62 /	0.00 / M / 0.01 / 0.01 /
: SOX : WRIC1: ARWC1: BBLC1: IDYC1: PLRC1:	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE * IDYLLWILD * PALOMAR MOUNTAIN	5980 5205 6760 5380 5550	::	81 / M / 76 / 87 / 84 /	59 / M / 55 / 62 / 59 /	0.00 / M / 0.01 / 0.01 / 0.50 /
: SOX : WRIC1: ARWC1: BBLC1: IDYC1: PLRC1: JUL :	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE * IDYLLWILD * PALOMAR MOUNTAIN JULIAN	5980 5205 6760 5380 5550 4240	:::::::::::::::::::::::::::::::::::::::	81 / M / 76 / 87 / 84 / 86 /	59 / M / 55 / 62 / 59 / 68 /	0.00 / M / 0.01 / 0.01 / 0.50 / 0.12 /
: SOX : WRIC1: ARWC1: BBLC1: IDYC1: PLRC1: JUL : MLNC1:	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE * IDYLLWILD * PALOMAR MOUNTAIN JULIAN * MT. LAGUNA	5980 5205 6760 5380 5550 4240 5920	:::::::::::::::::::::::::::::::::::::::	81 / M / 76 / 87 / 84 / 86 / 76 /	59 / M / 55 / 62 / 59 / 68 / 60 /	0.00 / M / 0.01 / 0.01 / 0.50 / 0.12 / 0.00 /
: SOX : WRIC1: ARWC1: BBLC1: IDYC1: PLRC1: JUL : MLNC1: CZZ :	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE * IDYLLWILD * PALOMAR MOUNTAIN JULIAN	5980 5205 6760 5380 5550 4240	:::::::::::::::::::::::::::::::::::::::	81 / M / 76 / 87 / 84 / 86 /	59 / M / 55 / 62 / 59 / 68 / 60 /	0.00 / M / 0.01 / 0.01 / 0.50 / 0.12 / 0.00 /
: SOX : WRIC1: ARWC1: BBLC1: IDYC1: PLRC1: JUL : MLNC1: CZZ : ;	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE * IDYLLWILD * PALOMAR MOUNTAIN JULIAN * MT. LAGUNA CAMPO	5980 5205 6760 5380 5550 4240 5920	:::::::::::::::::::::::::::::::::::::::	81 / M / 76 / 87 / 84 / 86 / 76 /	59 / M / 55 / 62 / 59 / 68 / 60 /	0.00 / M / 0.01 / 0.01 / 0.50 / 0.12 / 0.00 /
: SOX : WRIC1: ARWC1: BBLC1: IDYC1: PLRC1: JUL : MLNC1: CZZ :	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE * IDYLLWILD * PALOMAR MOUNTAIN JULIAN * MT. LAGUNA	5980 5205 6760 5380 5550 4240 5920	:::::::::::::::::::::::::::::::::::::::	81 / M / 76 / 87 / 84 / 86 / 76 /	59 / M / 55 / 62 / 59 / 68 / 60 /	0.00 / M / 0.01 / 0.01 / 0.50 / 0.12 / 0.00 /
: SOX : WRIC1: ARWC1: BBLC1: IDYC1: PLRC1: JUL : MLNC1: CZZ : : :	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE * IDYLLWILD * PALOMAR MOUNTAIN JULIAN * MT. LAGUNA CAMPO DESERT AREAS	5980 5205 6760 5380 5550 4240 5920 2615	: : : : : :	81 / M / 76 / 87 / 84 / 86 / 76 / 91 /	59 / M / 55 / 62 / 59 / 68 / 60 / 62 /	0.00 / M / 0.01 / 0.01 / 0.50 / 0.12 / 0.00 / 0.00 /
: SOX : WRIC1: ARWC1: BBLC1: IDYC1: PLRC1: JUL : MLNC1: CZZ : : : HESC1:	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE * IDYLLWILD * PALOMAR MOUNTAIN JULIAN * MT. LAGUNA CAMPO DESERT AREAS * HESPERIA	5980 5205 6760 5380 5550 4240 5920 2615 3055	: : : : : :	81 / M / 76 / 87 / 84 / 86 / 76 / 91 / 91 /	59 / M / 55 / 62 / 59 / 68 / 60 / 62 / 80 /	0.00 / M / 0.01 / 0.01 / 0.50 / 0.12 / 0.00 / 0.00 /
: SOX : WRIC1: ARWC1: BBLC1: IDYC1: PLRC1: JUL : MLNC1: CZZ : : : HESC1: APLC1:	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE * IDYLLWILD * PALOMAR MOUNTAIN JULIAN * MT. LAGUNA CAMPO DESERT AREAS * HESPERIA APPLE VALLEY	5980 5205 6760 5380 5550 4240 5920 2615 3055 2780	: : : : : :	81 / M / 76 / 87 / 84 / 86 / 76 / 91 / 91 / 97 / 94 /	59 / M / 55 / 62 / 59 / 68 / 60 / 62 / 80 / 81 /	0.00 / M / 0.01 / 0.01 / 0.50 / 0.12 / 0.00 / 0.00 /
: SOX : WRIC1: ARWC1: BBLC1: IDYC1: PLRC1: JUL : MLNC1: CZZ : : : HESC1: APLC1: PSP :	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE * IDYLLWILD * PALOMAR MOUNTAIN JULIAN * MT. LAGUNA CAMPO DESERT AREAS * HESPERIA APPLE VALLEY PALM SPRINGS	5980 5205 6760 5380 5550 4240 5920 2615 3055 2780 425	: : : : : : : : : : : : : : : : : : : :	81 / M / 76 / 87 / 84 / 86 / 76 / 91 / 91 / 97 / 94 / 101 /	59 / M / 55 / 62 / 59 / 68 / 60 / 62 / 80 / 81 / 86 /	0.00 / M / 0.01 / 0.01 / 0.50 / 0.12 / 0.00 / 0.00 / 0.00 / T /
: SOX : WRIC1: ARWC1: BBLC1: IDYC1: PLRC1: JUL : MLNC1: CZZ : : : HESC1: APLC1:	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE * IDYLLWILD * PALOMAR MOUNTAIN JULIAN * MT. LAGUNA CAMPO DESERT AREAS * HESPERIA APPLE VALLEY	5980 5205 6760 5380 5550 4240 5920 2615 3055 2780 425 -21	: : : : : : : : : : : : : : : : : : : :	81 / M / 76 / 87 / 84 / 86 / 76 / 91 / 91 / 97 / 94 /	59 / M / 55 / 62 / 59 / 68 / 60 / 62 / 80 / 81 /	0.00 / M / 0.01 / 0.01 / 0.50 / 0.12 / 0.00 / 0.00 / 0.00 /
: SOX : WRIC1: ARWC1: BBLC1: IDYC1: PLRC1: JUL : MLNC1: CZZ : : : HESC1: APLC1: PSP :	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE * IDYLLWILD * PALOMAR MOUNTAIN JULIAN * MT. LAGUNA CAMPO DESERT AREAS * HESPERIA APPLE VALLEY PALM SPRINGS	5980 5205 6760 5380 5550 4240 5920 2615 3055 2780 425 -21	: : : : : : : : : : : : : : : : : : : :	81 / M / 76 / 87 / 84 / 86 / 76 / 91 / 91 / 97 / 94 / 101 /	59 / M / 55 / 62 / 59 / 68 / 60 / 62 / 80 / 81 / 86 /	0.00 / M / 0.01 / 0.01 / 0.50 / 0.12 / 0.00 / 0.00 / 0.00 / 0.00 / T /
: SOX : WRIC1: ARWC1: BBLC1: IDYC1: PLRC1: JUL : MLNC1: CZZ : : : HESC1: APLC1: PSP : IDOC1:	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE * IDYLLWILD * PALOMAR MOUNTAIN JULIAN * MT. LAGUNA CAMPO DESERT AREAS * HESPERIA APPLE VALLEY PALM SPRINGS * INDIO	5980 5205 6760 5380 5550 4240 5920 2615 2615 3055 2780 425 -21 -117		81 / M / 76 / 87 / 84 / 86 / 76 / 91 / 91 / 91 / 94 / 101 / 106 /	59 / M / 55 / 62 / 59 / 68 / 60 / 62 / 80 / 81 / 86 / 88 /	0.00 / M / 0.01 / 0.50 / 0.12 / 0.00 / 0.00 / 0.00 / T / 0.00 /
: SOX : WRIC1: ARWC1: BBLC1: IDYC1: PLRC1: JUL : MLNC1: CZZ : : : HESC1: APLC1: PSP : IDOC1: TRM :	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE * IDYLLWILD * PALOMAR MOUNTAIN JULIAN * MT. LAGUNA CAMPO DESERT AREAS * HESPERIA APPLE VALLEY PALM SPRINGS * INDIO THERMAL	5980 5205 6760 5380 5550 4240 5920 2615 3055 2780 425 -21 -117		81 / M / 76 / 87 / 84 / 86 / 76 / 91 / 91 / 91 / 94 / 101 / 106 / 98 /	59 / M / 55 / 62 / 59 / 68 / 60 / 62 / 80 / 81 / 86 / 88 / 88 / 80 /	0.00 / M / 0.01 / 0.00 / 0.00 / 0.00 / 0.00 / 0.00 / T / 0.00 / T /
: SOX : WRIC1: ARWC1: BBLC1: IDYC1: PLRC1: JUL : MLNC1: CZZ : : : HESC1: APLC1: PSP : IDOC1: TRM : BROC1:	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE * IDYLLWILD * PALOMAR MOUNTAIN JULIAN * MT. LAGUNA CAMPO DESERT AREAS * HESPERIA APPLE VALLEY PALM SPRINGS * INDIO THERMAL BORREGO	5980 5205 6760 5380 5550 4240 5920 2615 2780 425 -21 -117 805 390		81 / M / 76 / 87 / 84 / 86 / 76 / 91 / 91 / 97 / 94 / 101 / 106 / 98 / 95 /	59 / M / 55 / 62 / 59 / 68 / 60 / 62 / 80 / 81 / 86 / 88 / 88 / 80 / 69 /	0.00 / M / 0.01 / 0.00 / 0.12 / 0.00 / 0.00 / 0.00 / T / 0.00 / T / 0.00 /
: SOX : WRIC1: ARWC1: BBLC1: IDYC1: PLRC1: JUL : MLNC1: CZZ : : : HESC1: APLC1: PSP : IDOC1: TRM : BROC1: OCTC1:	SANTA ANA RADAR * WRIGHTWOOD * LAKE ARROWHEAD * BIG BEAR LAKE * IDYLLWILD * PALOMAR MOUNTAIN JULIAN * MT. LAGUNA CAMPO DESERT AREAS * HESPERIA APPLE VALLEY PALM SPRINGS * INDIO THERMAL BORREGO * OCOTILLO WELLS	5980 5205 6760 5380 5550 4240 5920 2615 2780 425 -21 -117 805 390		81 / M / 76 / 87 / 84 / 86 / 76 / 91 / 91 / 97 / 94 / 101 / 106 / 98 / 95 / 103 /	59 / M / 55 / 62 / 59 / 68 / 60 / 62 / 80 / 81 / 86 / 88 / 80 / 89 / 73 /	0.00 / M / 0.01 / 0.00 / 0.12 / 0.00 / 0.00 / 0.00 / T / 0.00 / T / 0.00 / 0.00 / 0.00 / 0.00 / 0.00 / 0.00 / 0.00 / 0.00 / 0.00 /

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Water Sampling Results

DATE: August 27, 2007

TO: Jose Oropeza, Senior Water Utility Supervisor

FROM: Laila Othman, Marine Microbiology and Vector Management Supervisor

SUBJECT: Lake Hodges Spill Samples Bacti Results

Bacteriological Results for the samples collected from and around Lake Hodges as a result of August 25, 2007 sewer spill are shown below. All sites will be re-sampled until two consecutive clean results are obtained.

	SAMPLE				FORM* 100mL)	ENTEROCOCCUS** (CFU/100mL)
DATE	TIME	LOCATION	GPS (nad 83, dec-min)	TOTAL	FECAL	
25Aug07	1810	Mid Stream	33° 02.702 N 117° 04.793 W	4,000e	44	94
	1825	Down Stream	33° 02.892 N 117° 05.050 W	ND	420	110
	1845	Pipe Outlet	Not determined at this time	ND	300e	840
	1850	Before Entering Pipe	33° 02.611 N 117° 04.562 W	ND	300e	26e

*MF method - 9222 B (Total Coliforms); 9222 D (Fecal Coliforms)

**MF method - EPA 1600

ND No data; non-coliform count is greater than 200 colonies per plate.

Please call me at 619 758-2312 if there are any questions.

DATE: August 28, 2007

TO: Jose Oropeza, Senior Water Utility Supervisor

FROM: Laila Othman, Marine Microbiology and Vector Management Supervisor

SUBJECT: Lake Hodges Spill Samples Bacti Results, Tracking # 3005880

Bacteriological Results for the samples collected from and around Lake Hodges as a result of Escala Drive sewer spill on August 25, 2007 are shown below. All sites will be re-sampled until two consecutive clean results are obtained.

SAMPLE				FORM* 100mL)	ENTEROCOCCUS** (CFU/100mL)	
DATE	TIME	LOCATION	GPS (nad 83, dec-min)	TOTAL	FECAL	
26Aug07	1510	Down Stream, possible entry point at Lake Hodges	33° 02.892 N 117° 05.050 W	ND	110	72
	1525	Mid Stream, from creek under wooden bridge	33° 02.702 N 117° 04.793 W	>160,000	>120,000	>120,000
	1557	Before Entering Pipe, corrugated pipe under West Bernardo Drive	33° 02.611 N 117° 04.562 W	ND	12e	28e
27Aug07	1055	Down Stream, possible entry point at Lake Hodges	33° 02.892 N 117° 05.050 W	20,000e	1,000	40e
	1125	Mid Stream, from creek under wooden bridge	33° 02.702 N 117° 04.793 W	>1,600,000	>1,200,000	620,000
	1150	Before Entering Pipe, corrugated pipe under West Bernardo Drive	33° 02.611 N 117° 04.562 W	620,000	20e	340e

*MF method - 9222 B (Total Coliforms); 9222 D (Fecal Coliforms)

**MF method - EPA 1600

ND No data; non-coliform count is greater than 200 colonies per plate.

Please call me at 619 758-2312 if there are any questions.

DATE: August 29, 2007

TO: Jose Oropeza, Senior Water Utility Supervisor

FROM: Laila Othman, Marine Microbiology and Vector Management Supervisor

SUBJECT: Lake Hodges Spill Samples Bacti Results, Tracking # 3005880

Bacteriological Results for the samples collected from and around Lake Hodges as a result of Escala Drive sewer spill on August 25, 2007 are shown below. All sites will be re-sampled until two consecutive clean results are obtained.

	SAMPLE				ORM* 00mL)	ENTEROCOCCUS** (CFU/100mL)	
DATE	TIME	LOCATION	GPS (nad 83, dec-min)	TOTAL	FECAL	i	
28Aug07	0925	Down Stream, possible entry point at Lake Hodges	33° 02.891 N 117° 05.044 W	18,000e	4,200	80e	
	0945	Mid Stream, from creek under wooden bridge	33° 02.701 N 117° 04.795 W	640,000	84,000	1,200e	
	1010	Pipe Outlet, corrugated pipe outlet under West Bernardo Drive	33° 02.611 N 117° 04.565 W	200,000e	3,800e	160e	
	1020	Before Entering Pipe, corrugated pipe inlet under West Bernardo Drive	33° 02.612 N 117° 04.562 W	40,000e	4,800	80e	

*MF method - 9222 B (Total Coliforms); 9222 D (Fecal Coliforms)

**MF method - EPA 1600

ND No data; non-coliform count is greater than 200 colonies per plate.

Please call me at 619 758-2312 if there are any questions.

DATE: August 30, 2007

TO: Jose Oropeza, Senior Water Utility Supervisor

FROM: Laila Othman, Marine Microbiology and Vector Management Supervisor

SUBJECT: Lake Hodges Spill Samples Bacti Results, Tracking # 3005880

Bacteriological Results for the samples collected from and around Lake Hodges as a result of Escala Drive sewer spill on August 25, 2007 are shown below.

SAMPLE			COLIF (CFU/)	ORM* 100mL)	ENTEROCOCCUS** (CFU/100mL)	
DATE	TIME	LOCATION	GPS (nad 83, dec-min)	TOTAL	FECAL	
29Aug07	0930	Down Stream, possible entry point at Lake Hodges	33° 02.891 N 117° 05.044 W	2,000e	400	100e
	0945	Mid Stream, from creek under wooden bridge	33° 02.701 N 117° 04.795 W	20,000e	20,000e	580
	1010	Pipe Outlet, corrugated pipe outlet under West Bernardo Drive	33° 02.611 N 117° 04.565 W	34,000e	3,200e	1,200
	1012	Before Entering Pipe, corrugated pipe inlet under West Bernardo Drive	33° 02.612 N 117° 04.562 W	<20,000	2,000e	460

*MF method - 9222 B (Total Coliforms); 9222 D (Fecal Coliforms)

**MF method - EPA 1600

ND No data; non-coliform count is greater than 200 colonies per plate.

Please call me at 619 758-2312 if there are any questions.

DATE: August 31, 2007

TO: Jose Oropeza, Senior Water Utility Supervisor

FROM: George B. Alfonso, Marine Microbiology and Vector Management

SUBJECT: Lake Hodges Spill Samples Bacti Results, Tracking # 3005880

Bacteriological Results for the samples collected from and around Lake Hodges as a result of Escala Drive sewer spill on August 25, 2007 are shown below.

SAMPLE			COLIFORM* (CFU/100mL)		ENTEROCOCCUS** (CFU/100mL)	
DATE	TIME	LOCATION	GPS (nad 83, dec-min)	TOTAL	FECAL	
30Aug07	0840	Down Stream, possible entry point at Lake Hodges	33° 02.891 N 117° 05.044 W	< 2,000	220e	40e
	0855	Mid Stream, from creek under wooden bridge	33° 02.701 N 117° 04.795 W	34,000e	11,000	620
	1000	Pipe Outlet, corrugated pipe outlet under West Bernardo Drive	33° 02.611 N 117° 04.565 W	26,000e	1,100	1,000e
	1005	Before Entering Pipe, corrugated pipe inlet under West Bernardo Drive	33° 02.612 N 117° 04.562 W	20,000e	760	40e

*MF method - 9222 B (Total Coliforms); 9222 D (Fecal Coliforms)

**MF method - EPA 1600

ND No data; non-coliform count is greater than 200 colonies per plate.

Please call me at 619 758-2312 if there are any questions.

cc: Alan Langworthy Ric Amador Clay Clifton Laila Othman

DATE: September 4, 2007

TO: Jose Oropeza, Senior Water Utility Supervisor

FROM: Laila Othman, Marine Microbiology and Vector Management Supervisor

SUBJECT: Lake Hodges Spill Samples Bacti Results, Tracking # 3005880

Bacteriological Results for the samples collected from and around Lake Hodges as a result of Escala Drive sewer spill on August 25, 2007 are shown below.

SAMPLE				COLIFORM* (CFU/100mL)		ENTEROCOCCUS** (CFU/100mL)
DATE	TIME	LOCATION	GPS (nad 83, dec-min)	TOTAL	FECAL	
31Aug07	0920	Down Stream, possible entry point at Lake Hodges	33° 02.891 N 117° 05.044 W	6,000e	40e	40e
	0935	Mid Stream, from creek under wooden bridge	33° 02.701 N 117° 04.795 W	80,000e	8,000	980
	0955	Pipe Outlet, corrugated pipe outlet under West Bernardo Drive	33° 02.611 N 117° 04.565 W	<20,000	320e	420
	1000	Before Entering Pipe, corrugated pipe inlet under West Bernardo Drive	33° 02.612 N 117° 04.562 W	10,000e	220e	60e

*MF method - 9222 B (Total Coliforms); 9222 D (Fecal Coliforms)

**MF method - EPA 1600

ND No data; non-coliform count is greater than 200 colonies per plate.

Please call me at 619 758-2312 if there are any questions.

Enclosure 7

Escala Dr Sewer Emergency Ranch Bernardo Canyon Biological Assessment

Escala Drive Sewer Emergency Rancho Bernardo Canyon Biological Assessment



Metropolitan Wastewater Department Engineering and Program Management Division Environmental Section

October 12, 2007

Prepared By:

Keli Baló, Associate Planner

Escala Drive Sewer Emergency Rancho Bernardo Canyon Biological Assessment

This memo reports on the results of a post impact survey on August 27, 2007 in the Rancho Bernardo Canyon area. A sewer spill occurred on Friday August 24 which was addressed by WWC canyon crews, and was contained by Saturday August 25, 2007. A bypass pump was installed to redirect flow around the blockage in the sewer line. Sewage had built up behind a blockage in the sewer line and blew out a manhole (108) and riser on the hillside. This resulted in over 300,000 gallons of raw sewage to spill into the canyon, flowing into the wetland tributary to Lake Hodges.

To contain the spill, large equipment was brought into the canyon. An existing 8 foot wide access path in Rancho Bernardo Canyon that leads from the street to many manholes in the canyon area was widened as a result of the spill. The existing path was widened to approximately 12-13 feet wide in most sections. In addition to the widening of existing access paths, the path leading up to the spill was disturbed, the spill itself disturbed the hillside surrounding manhole 108, and the hillside where the bypass hoses were placed was disturbed. To contain the spill, sewage flow was bypassed through hoses around the blockage from manhole 109 to 107.

Project Location

The Escala Drive Sewer Emergency (Project) is located in the City of San Diego (City) just north of the United States/Mexico International Border. The project is located in Rancho Bernardo Canyon, directly east of Interstate 15 and south of Escala Drive in the Rancho Bernardo Community Planning Area of San Diego, California (Figure 1).

Project Description

The Project included emergency actions to stop a sanitary sewer overflow at manhole 108 in Rancho Bernardo Canyon which leaked untreated sewage into Lake Hodges. Repair activities included widening the existing access path to temporarily by-pass sewage from manhole 109 to manhole 107 and other measures to redirect sewage flow back into the main. Repair activities include the installation of approximately 500 feet of sewer pipe at a depth of 5 feet for approximately 430 feet and a depth of 5-28 feet for 70 feet within Escala Drive redirecting sewer flow to a main in the street. Future work includes the abandonment of the sewer main and manholes which lead into a larger trunk sewer line in the canyon. An existing 8-foot wide access path in the canyon was widened during the initial response and an area immediately surrounding the overflowing manhole was disturbed. Impacts to vegetation include approximately 0.10 acre of disturbed coastal sage scrub and are temporary.

M&A #02-103-36



<u>Methods</u>

On August 27, 2007, MWWD personnel walked the Project site to analyze impacts to biological resources in the canyon as a result of the sewer spill and repair activities. Photographs were taken of the project location, access paths and manholes. Using a satellite image and field observation, vegetation mapping was conducted of the project area long with general calculations of disturbance. All plant and animal observations were noted along with general site conditions.

Existing Conditions

Rancho Bernardo Canyon is a canyon area located approximately 1/8 mile from Lake Hodges and immediately east of the Interstate 15 freeway south of Pomerado Road. Surrounding land uses include open space and residential development. The emergency project site is located within the City MSCP subarea and within the MHPA preserve area.

The canyon is dominated by Diegan coastal sage scrub, disturbed coastal sage scrub, disturbed habitat, and supports riparian habitat (southern willow scrub) in the canyon bottom. The brush covered slope surrounding manhole 108 and below Escala Drive appears to be a revegetated slope likely revegetated following the construction and fill of the upper roadway area. The dominant species found on this slope is brittlebush (*Encelia farinosa*) which is a native species in southern California deserts but not in the coastal regions. Plant species observed onsite are listed in Appendix A.

Diegan Coastal Sage Scrub

Diegan coastal sage scrub onsite is characterized by species including California sagebrush (Artemisia californica), deerweed (Lotus scoparius), broom baccharis (Baccharis sarothroides), coyote bush (Baccharis pilularis), black sage (Salvia mellifera), flat-topped buckwheat (Eriogonum fasiculatum), brittlebush, mustard (Hirschfeldia incana), ripgut grass (Bromus diandrus), tocalote (Centaurea melitensis), and fennel (Foeniculum vulgare). A majority of the sage scrub habitat adjacent to the access paths and manholes is disturbed or dominated by brittlebush.

Disturbed Habitat

Disturbed habitat onsite is characterized by patches of non-native weeds and bare soil areas. Weeds found within the disturbed habitat include tocalote, fennel, horehound (*Marrubium vulgare*), mustard (*Hirschfeldia incana*), and sow thistle (*Sonchus oleraceus*).

Sensitive Species

One sensitive plant species was observed during the site visit. No focused plant or animal surveys were conducted to identify potential sensitive species as the potential to occur is low due to the ground disturbance associated with the sewer installation, residential development and road construction.

California Adolphia (*Adolphia californica*) Listing: CNPS List 2.1 State/Federal: none Distribution: Coastal San Diego County; Baja California, Mexico Status Onsite: Scattered individuals found in coastal sage scrub, none impacted

Impacts

Approximately 0.10 acre or 4,400 square feet of disturbed coastal sage scrub was temporarily impacted as a result of the spill (Figure 2). Photograph from the spill location and canyon access areas is included in Appendix B.

The majority of impacts to coastal sage scrub resulted from widening the existing access path in the canyon from Cotorro Way to manhole 108. The impacts were limited to driving over vegetation adjacent to the pathway and widening a foot path to allow for equipment access and staging. No grading or soil disturbing activities resulted from the widened access. The sewer spill itself caused erosion at the immediate spill location and down the canyon slope. The erosion that occurred near manhole 108 cut the hillside 3 feet deep in some sections for approximately 15 feet downstream of manhole 108. Small shrubs are still present near manhole 108 but the soils underneath the plants have washed away leaving the roots exposed. Although sewage detritus is evident hundreds of feet downstream of the manhole, the sewage did not erode the soil surface, no impacts to vegetation were detected, and therefore are not included in this impact analysis. It is assumed that sewage continued to flow from manhole 108 into Lake Hodges through a culvert located west of the spill. The sewer spill area is shown on Figure 2. It is unknown whether any sensitive species were impacted by the sewer spill and subsequent repair activities. The potential for sensitive species to have been present is low due to the disturbed nature of the canyon area. No California adolphia plants were observed directly adjacent to the spill and repair activity impact areas. If individuals were impacted as a result of the spill this impact would not be considered significant and would mitigated for by 1:1 tier II habitat mitigation within the City MHPA.

MWWD plans to permanently redirect sewer flow out of the canyon at this location and direct the flow into the street above the canyon (Escala Drive). Clean-up activities and abandonment of the sewer main at this location will not require additional ground disturbing work and should not result in additional impacts to coastal sage scrub habitat. Work in the canyon will be monitored by Environmental section staff or a biologist. Following the completion of all clean up work a final impact summary will be completed



along with a restoration plan. It is anticipated that most of the habitat impacted by the spill will re-establish on its own. The area around manhole 108 which was eroded by the spill will need to be repaired by filling in the ruts, restoring the soil surface, installing erosion control, hydroseeding, and/or planting. The only areas that would be proposed for planting and/or seeding are the areas where the soil surface was disturbed.

Proposed Mitigation Measures

All areas disturbed as part of the emergency are planned for erosion control and active revegetation efforts. Habitat impacted onsite will be mitigated offsite at another location. The Otay Mesa Mitigation Bank is proposed for satisfying the Tier II habitat mitigation needs associated with this emergency. Approximately 0.1 acre of Tier II habitat was impacted by the emergency. A 1:1 mitigation ratio shall be applied to impacts for a total of 0.1 acre of Tier II habitat mitigation required.

To reduce the potential impacts to sensitive resources in the project area during continued construction, minimization measures are proposed.

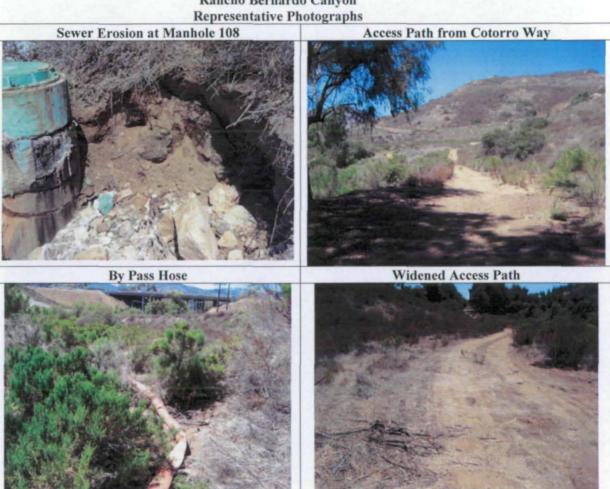
- 1. All equipment must utilize existing access paths for access to work areas.
- 2. Equipment used within the canyon should be canyon proficient and rubber tired.
- 3. Project equipment will not be parked in the canyon overnight.
- 4. Construction crews will use pre-defined staging areas for any parking of equipment or stockpiling of materials.
- 5. A pre-construction meeting will take place onsite to identify any sensitive resources or additional parameters for sewer line abandonment work prior to additional construction in the canyon area.
- 6. The Park and Recreation Department will be notified of work schedule
- 7. Photographs will be taken of the project area before, during, and after the work to document the condition of the site and the extent of any impacts to the surrounding area.

<u>Appendix A</u> <u>Escala Drive Emergency</u> Rancho Bernardo Canyon Plant Species List

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Apiaceae*Foeniculum vulgarefennelAsteraceae
AsteraceaeAmbrosia psilostachyaragweedArtemisia californicasagebrushBaccharis pilulariscoyote bushBaccharis sarothroidesbroom baccharisBrickellia californicabrickellbush*Centaurea melitensistocaloteDeinandra fasciculatatarplant*Encelia farinosabrittlebushEriogonum fasciculatumflat-topped buckwheatHeterotheca grandifloratelegraph weedIsocoma menziesiigoldenbush*Sonchus oleraceussowthistle
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*Sonchus oleraceus sowthistle Brassicaceae *Hirschfeldia incana mustard
*Hirschfeldia incana mustard
*Hirschfeldia incana mustard
·
Fabaceae
Lotus scoparius deerweed
Lamiaceae
*Marrubium vulgare horehound
Salvia apiana white sage
Salvia mellifera black sage
Poaceae
Avena barbata wild oat
Bromus diandrus ripgut grass
Biolius dialidius inpgut grass
Polygonaceae
Eriogonum fasciculatum flat-top buckwheat
Rhamnaceae
Adolphia californica California adolphia
Solanaceae
Datura wrightii jimsonweed
*Nicotiana glauca tree tobacco
Solanum sp. Nightshade

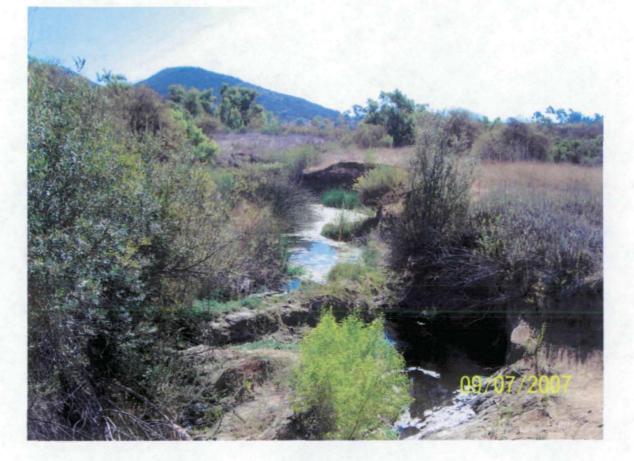
<u>Appendix B</u> <u>Escala Drive Emergency</u> Rancho Bernardo Canyon Representative Photographs



Enclosure 8

Green Valley Creek Initial Biological Assessment Sept 2007 Report

GREEN VALLEY CREEK, RANCHO BERNARDO INITIAL BIOLOGICAL ASSESSMENT SEPTEMBER 2007



Prepared for: Metropolitan Wastewater Department Wastewater Collection Division 9150 Topaz Way San Diego, CA. 92123

Prepared by: Environmental Monitoring and Technical Services Division Marine Microbiology and Vector Management Section 2392 Kincaid Road San Diego, CA 92101

Background

The sewage spill of August 20, 2007 released approximately 390,720 gallons of sewer (of which 11,000 gallons were recovered), into the Green Valley Creek, east of Interstate-15 (Photo 1). The spill on manhole #108 was caused by rags, a mop head, and grease that blocked the flow within the 8-inch VC main.

An Environmental Monitoring and Technical Services' (EMTS) staff biologist prepared this initial Biological Assessment evaluation in response to a request for assistance from the Wastewater Collection Division (WWC).

This study describes the findings of two days of post-spill inspections and the results of the bioassessment samples collected on September 11, 2007 according to methodology recommended for Point Source Sampling Design (CSBP, Harrington, Born, 2003). This study presents results of current conditions. It does not provide a comparison to historical conditions.



	/
Sewage Spill Point, manhole #108	7

Photo 1

Green Valley Creek

Urban creeks are increasingly valued for the aesthetic, recreational and wildlife benefits they bring to a city. Green Valley Creek, which is located in the San Dieguito Watershed (Hydrologic Unit 905.2), is a small urban creek that flows from the east to the west through the residential community of Rancho Bernardo. It provides a green buffer zone between the housing developments and the golf courses, and it provides important habitat for plants and wildlife, which are more and more being encroached in a largely urban area. The creek drains into the eastern shore of Lake Hodges, a water storage reservoir that also has many recreational uses (fishing, kayaking, hiking, boating and sailing).



Biological Assessment (Bioassessment) and Benthic Macroinvertebrates

Biological Assessment uses aquatic insects and other macroinvertebrates, their number, diversity, type, and sensitivity (or tolerance) to certain pollutants to calculate a series of metrics that will provide an overall water quality rating. The presence, absence, abundance, and diversity of these organisms in a water body are used to classify the status of the water body as impaired or non-impaired owing to the benthic condition. These aquatic insects are attractive as indicators because they represent a diverse group of long-lived, sedentary species that react strongly and often predictably to human influences on their habitat (Barbour, et. al., 1999). The five metrics used as a means of numerically discussing the stream's water quality were:

1. Taxa Richness: these metrics reflect the diversity of the aquatic assemblage where increasing diversity correlates with increasing health of the assemblage and suggests that niche space, habitat and food sources are sufficient to sustain survival and reproduction.

2. Percent Tolerance: these metrics reflect the relative sensitivity of the community to aquatic disturbances. Values usually increase as the effects of pollution increase.

3. EPT Richness: assemblages and diversity of these three organisms (ephemeroptera, plecoptera and trichoptera) decrease in response to environmental disturbances.

4. Functional Feeding Groups (FFG): this group of metrics classifies aquatic insects according to their role in processing organic material and how adapted they are to consume foods of different sizes and origins, the general mechanism of food acquisition, and its trophic role.

5. Family Biotic Index: the FBI summarizes the pollution tolerance values of each family collected and the number of individuals within each family. The derived FBI values are placed on a graded scale table that numerically rate water quality.

Study Area

2.

The Point Source Sampling Design is used when a discernable perturbation, such as a sewage spill, originating from a discrete point, enters a stream at some point in the watershed.

Two individual riffles or stations were selected for the sample collection.

 The first or "unaffected" station, or control riffle, which is located "out of the influence of the spill event", is located approximately ½ mile upstream from the entry point, near the flood control channel and rip-rap, just west of the golf course.



The second riffle is downstream from where the spill entered the stream. This station, referred to as "affected" is located west of West Bernardo Drive (west of I-15), and adjacent to the Lake Hodges trail system, by PS-77.



Eacistation was sampled following the protocols established by the California Department of Fish and Game (CA-DFG), in the "California Stream Bioassessment Procdures" (CSBP). This work outlines the procedures for benthic sampling, preserving and soring, processing and laboratory practices.

Results

Results of the multimetric analysis of the two sampling stations are shown in Table 1, and in the different graphs that follow it. Table 2 shows the water chemical characteristics in the steam at benthic macroinvertebrate sampling time.

TaxaRichness: is the total number of distinct taxa (Families), present in the samples, where diversity directly correlates to stream health. As represented in graphs 1 and 2, the data shows that both stations are not very diverse and have very low number of families.

Percent Tolerance: the Tolerance Value scale (0 - 10), reflects the relative sensitivity of the aquatic community to disturbances to the habitat they live in. The metric values usually increase as the effects of pollution (sedimentation, particulate organic matter, run-off, etc.), increase.

Graph 3 shows that the insects and non-insects sampled and analyzed had TV values between 4 (Tipula sp), and 8, which indicate that these individuals are well adapted to the present environment conditions.

EPT Richness: the three Families represented in this metric are very good indicators of the existing water quality in Green Valley Creek. Although a few of the species in the Ephemeroptera and Trichoptera Orders have adapted to live in impaired water, in general their presence or absence will reflect on how clean or polluted a water body is. In this case, the sample collected upstream from the spill site had only one Family present in the Ephemeroptera Order. The downstream sample had one representative each in the Ephemeroptera and Trichoptera Orders (Graph 4). Both Order representatives have a TV number assigned to them (5 and 6 respectively), that places them in the middle of the scoring scale.

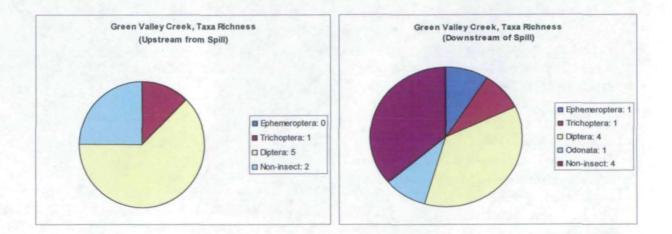
Functional Feeding Group (FFG): these metrics provide information on the balance of feeding strategies in the aquatic assemblage. The FFG is a substitute for complex processes of thropic interaction, production and food source availability. An imbalance of the FFGs, as seen in this particular set of samples, reflect an unstable and stressed condition. The representation of the FFGs can be found in graph 5.

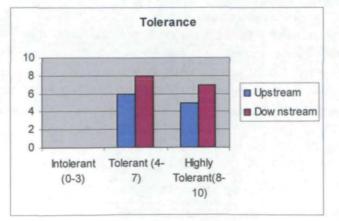
Family Biotic Index (FBI): the Family Biotic Index is a single-metric scoring system that is widely used for assessing the biotic impacts of organic loading, impoundment, and certain types of chemical and thermal pollution. The FBI score for a given sample is calculated by multiplying the number of individuals of each taxon in a sample by the taxon's assigned Tolerance Value (Hilsenhoff, 1987), totaling these products and dividing the result by the total number of individuals of each taxon in the sample that

have been assigned a Tolerance Value. The range of values is 0 - 10, with 0 indicating pollution intolerance and 10 indicating high pollution tolerance.

Discussion

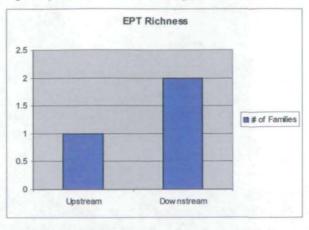
Taxa Richness (TR) is the simplest measure of diversity. Taxa Richness decreases with a decrease in water quality, as the less tolerant organisms disappear and are replaced by the more tolerant groups of aquatic insects. When TR is reviewed along with the metric Abundance (table 1), this appears to be the case for Green Valley Creek. The upstream sample had eight (8) distinct Families and the downstream had eleven (11). These together are two indicators of changes in invertebrate community structure and composition. Total Abundance is the total number of individuals of all taxonomic categories collected at a sampling station. The upstream station sample had only 240 organisms in the sample, and the downstream had 792 (300 identified). The results of benthic Abundance and Taxon Richness demonstrate a certain level of eutrophication. Eutrophication is the process of over fertilization of a body of water by nutrients. This will often result in excessive production of organic biomass and is typified by small (or none), numbers of pollution intolerant organisms, or when large numbers of pollution tolerant organisms are present, they represent only a few species that have a higher TV score. More pronounced euthrophication is commonly associated with decreases in taxon richness (Barbour, et. al., 1999). Eutrophication can be a natural process or it can be accelerated by an increase of nutrient loading to a water body by human activity.





EPT Richness, the next measure of water quality that was looked at, just reaffirms the

previous conclusions. Aquatic insects of the orders Ephemeroptera, Plecoptera, and Trichoptera, commonly referred to as mayflies, stoneflies and caddisflies, are among the most pollution sensitive and disturbance intolerant organisms, that can be found in biological stream communities. Because of their vulnerable nature, EPT organisms predominantly occur in non-stressed environments. Within the entire EPT's representative organisms, some



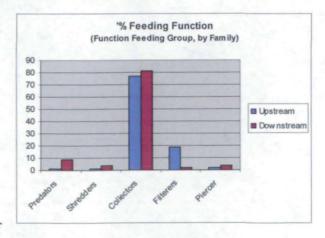
have overtime periods of time, evolved and adapted to a wide range of environments, and are more tolerant to impacts to the body of water in which they live in. There was only one representative of each EPT Order identified from the Green Valley Creek samples. Four specimens of the trichoptera *Hydroptila sp.* were collected in the upstream sample. This organism has a TV of 6. The downstream sample produced 12 *Hydroptila sp.*, and 12 Ephemeroptera of the *Baetis sp.*, which both have a TV equal to 5.

Organic energy supplies to the stream environment are categorized according to size, as follows:

Course Particulate Organic Matter (CPOM) is greater than1mm Fine particulate organic matter (FPOM) is from 1 mm to 0.0005 mm Dissolved Organic Matter (DOM) is less than 0.0005 mm

CPOM enters the stream primarily as needles and leaves from the surrounding vegetation. FPOM comes from the processing of CPOM by microbes and other larger organisms, including aquatic insects.

The metric Functional Feeding Group (FFG) is indicative of insect's roles in the processing of CPOM and FPOM. The FFG approach enables an assessment (numerically, by standing crop biomass or by production), of the degree to which the invertebrate biota of



a given aquatic system is dependent upon a particular food resource.

Green Valley's Creek FFG distribution is similar to almost all urban streams within San Diego's lower watershed. County. These streams, which have been impacted by human activities, such as, runoff, impoundment, nutrient loading, sedimentation, and vegetation removal or replacement, are associated with insects that feed mostly on CPOM and DOM. In general, insect groups that have adapted to collect, gather, scrape or filter their food, have also adapted to living in impacted water bodies.

Collectors are the most generalized and most abundant FFG in mid and low-reach streams because their food source (FPOM), is also the most abundant in this type of aquatic environment.

Collectors comprised 78% upstream, and 82% downstream (of the spill), of the benthic community in this study.

As explained above, Family Biotic Index (FBI) is a metric scoring system that is well accepted and widely used in assessing human impacts to a water body. A range of values have been converts to a score and description of the expected condition, as in the table below.

Both samples collected from Green Valley Creek placed poorly in the FBI score. The "upstream" sample scored 6.44, and the "downstream" scored 7.43.

Family Biotic Index	Water Quality	Degree of Organic Pollution
0.00-3.75	Excellent	Organic pollution unlikely
3.76-4.25	Very good	Possible slight organic pollution
4.26-5.00	Good	Some organic pollution probable
5.01-5.75	Fair	Fairly substantial organic pollution
5.76-6.50	Fairly poor	likely
6.51-7.25	Poor	Substantial organic pollution likely
7.26-10.00	Very poor	Very substantial organic pollution likely
		Severe organic pollution likely

Hillsenhoff's Family Biotic Index Explanation

Communities with scores equal or less than 3.75 are considered to have few pollution tolerant individuals, and higher water quality. Those communities that have a score higher than 6.50, to have a large percentage of the community of individuals that is highly tolerant to pollution, and a lower water quality.

Conclusions

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Were there Benthic Macroinvertebrates (BMIs) present in the creek?

Yes, they were present in both samples, although their diversity and abundance was very low.

Comparison of BMI samples collected upstream and downstream from manhole #108.

The BMI evaluation shows that this creek is showing signs of stress and impairment. There was no remarkable difference between the two samples. Both samples had:

Low Taxa Richness
 Low EPT Richness
 Low Abundance of individuals

4. High derance Values for individuals analyzed

(The Chir@mid midge fly larvae, which has a Tolerance Value of 6, and the Amphipoda *Hyalella azteca* (TV=8), we the most abundant insects respectively upstream and downstream. These two organisms are also membs of the Collectors Functional Feeding Group, which is another indication of impairment.)

5. High Fmily Biotic Index score

Table 3 dscribes biological metrics which define characteristics of the BMI assemblages that chang in some predictable way with increased human disturbance. In addition to the five metrics described in this study, other metrics described in Table 3 were calculated but not discussed here. Those results are as follows:

	Upstream	Downstream
EPT Index	1.7	7.3
% EPT	1.7	7.3
% Intolerant Organisms	0	0
% Hydropsychidae	0	0
% Baetidae	0	0
% Predators	.8	8
% Shredders	.8	0
% Scrappers	0	0

Are these findings associated with, or the result of the recent sewage spill?

Macroinvertebrates are an important monitoring tool used to measure continuous, sporadic, and/or chronic effects of pollution and stream degradation both from point and non-point source discharges. They are also indicators of stream recovery.

Data on invertebrate communities, in conjunction with habitat and water chemistry data provide the necessary tools for monitoring impacts on streams and aquatic systems. The data indicates that the existing assemblages in Green Valley Creek is and has been impaired for some time. These insects have lived under these impaired conditions for awhile. Also, the majority, if not all, of the insects and non-insects examined under the microscope were in the older stages of larval development. These organisms have long (months and sometimes, years) aquatic larval development stages. This is what makes them good indicators of pollution, as opposed to for example, a mosquito, which can go from egg to adult in ten days.

Three weeks had passed between the spill and the BMI sample collection. The insects analyzed were definitely older than 21 days. If the spill had killed, removed, scoured or impacted these assemblages in any way, than the samples would have looked substantially different.

In addition, during the two visits made to the site on 9/5 and 9/11/2007, the following were observed in large pools downstream from the spill site: 3-4" tadpoles, small fish, a crayfish, dragonfly nymphs, and mayfly naiads.

Green Valley Creek is providing a habitat for insects to reproduce and develop, and supporting wildlife. It is not a pristine creek but it could be worse.

	Care on Valley as	
Richness Measures	Upstream Riffle	Downstream Riffle
Taxa Richness (TR)	8	11
EPT Taxa Richness	1	2
Ephemeroptera TR	0	1
Trichoptera TR	1	1
Plecoptera TR	0	0
Chironomid TR	1	1
Diptera TR	5	4
Non-Insect TR	2	4
Composition Measures		
EPT Index	1.7	7.3
% EPT	1.7	7.3
% Ephemeroptera	0	3.6
% Tricoptera	1.7	3.6
% Plecoptera	0	0
% Chironomid	76.6	8.5
% Diptera	80	23.3
Tolerance Measures		
% Dominant Taxa	76.6	61.8
% Intolerant Organisms	0	0
% Tolerant Organisms	20.8	82.7
% Hydropsychidae	0	0
% Baetidae	0	0
Feeding Measures		
% Predators	0.8	8.5
% Filterers	18.8	3.8
% Shredders	0.8	0
% Collectors	78.7	82.4
% Scrappers	0	0
% Piercers	1.7	3.6
Other Measures		
Abundance	240	792
Family Biotic Index (FBI)	6.44	7.43

Table 1

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Chemical	Green Valley Creek	Green Valley Creek
Characteristics	Upstream Riffle	Downstream Riffle
Water		
Temperature(Celsius)	24.4	20.3
pH	7.52	7.71
Dissolved Oxygen(mg/L)	8.7	9.2
Specific		
Conductance(Ms/cm)	4.04	14.31

Table 2

Table 3: Taxonomic Effort: environmental response to increased human disturbances

BMI Metric	Description	Response to Impairment
	Richness Measures	
Taxa Richness	Total number of individual taxa	Decrease
Cumulative Taxa	Total number of cumulative taxa	Decrease
Ephemeroptera Taxa	Number of mayfly taxa (genus or species)	Decrease
Plecoptera Taxa	Number of stonefly taxa (genus or species)	Decrease
Trichoptera Taxa	Number of caddisfly taxa (genus or species)	Decrease
EPT Taxa	Number of taxa in the Ephemeroptera (mayfly), Plecoptera (stonefly) and Trichoptera (caddisfly) insect orders	Decrease
Cumulative EPT Taxa (%)	Number of cumulative taxa in the Ephemeroptera (mayfly), Plecoptera (stonefly) and Trichoptera (caddisfly) insect orders	Decrease
Dipteran Taxa	Number of "true" fly taxa, which excludes midges	Increase
Non-Insect Taxa	Number of non-insect taxa	Increase
	Composition Measures	
EPT Index (%)	Percent composition of mayfly, stonefly and caddisfly larvae	Decrease
Sensitive EPT Index (%)	Percent composition of mayfly, stonefly and caddisfly larvae with tolerance values between 0 and 3	Decrease
Percent Baetidae	Percent composition of mayfly family nymphs	Decrease
Percent Chironomidae	Percent composition of midge larvae	Increase
Percent Hydropsychidae	Percent composition of caddisfly family nymphs	Decrease
Percent Diptera	Percent composition of "true" fly larvae, which excludes midges	Decrease
Percent Non-insect Taxa	Percent composition of non-insect taxa	Increase
Shannon Diversity Index	General measure of sample diversity that incorporates richness and evenness (Shannon and Weaver 1963)	Decrease
	Tolerance/Intolerance Measures	
Tolerance Value (TV)	Value between 0 and 10 weighted for abundance of individuals designated as pollution tolerant (higher values) or intolerant (lower values)	Increase
Percent Intolerant Organisms	Percent of organisms in sample that are highly intolerant to impairment as indicated by a tolerance value of 0, 1 or 2	Decrease
Percent Tolerant Organisms	Percent of organisms in sample that are highly tolerant to impairment as indicated by a tolerance value of 8, 9 or 10	Increase

• ____

••	Percent Dominant Taxon	Percent composition of the single most abundant taxon	Increase
•		Functional Feeding Groups (FFG)	
	Percent Collectors	Percent of macrobenthos that collect or gather fine particulate matter	Increase
	Percent Filterers	Percent of macrobenthos that filter fine particulate matter	Increase

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3.

Percent Grazers	Percent of macrobenthos that graze upon periphyton	Variable
		vanabic
Percent Predators	Percent of macrobenthos that feed on other organisms	Variable
Percent Shredders	Percent of macrobenthos that shreds coarse particulate matter	Decrease
	Abundance	
Abundance (#/ sample)	Estimated number of BMIs in sample calculated by extrapolating from the proportion of organisms counted in the subsample	Variable

List of Acronyms

BMI	Benthic Macroinvertebrate
CA-DFG	California Department of Fish and Game
СРОМ	Coarse Particulate Organic Matter
CSBP	California Stream Bioassessment Protocols
DOM	Dissolved Organic Matter
EPT	Ephemeroptera, Plecoptera, Trichoptera
EMTS	Environmental Monitoring and Technical Services
FBI	Family Biotic Index
FFG	Functional Feeding Group
FPOM	Fine Particulate Organic Matter
GVC	Green Valley Creek
TR	Taxa Richness
TV	Tolerance Value
WWC	Wastewater Collections

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References

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Enclosure 9

San Diego MWWD Facility Information Sheet

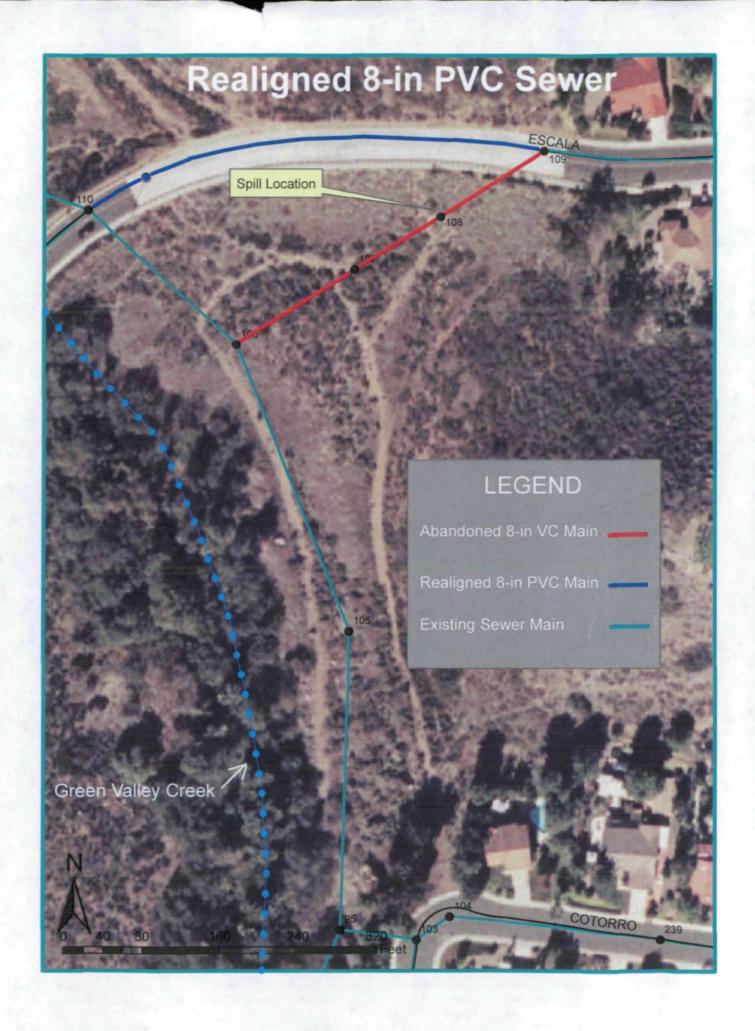
San Diego MWWD Facility Information Sheet

FSN	49476										
Sewei	r Main Info										
LENGTH	DIAM	SIZE	MATL_CD								
105	8	i	VC								
Mainte	nance Calend	lar									
FACILIT	Y_NM	FREQ	UENCY	STATUS_	SCHEDULETYPE	<u>COMMENTS</u>					
Pipe FS	N# 49476		36	Available	Cycle Frequency						
	MAINTENANCE TY ROD	P <u>E</u>	<u>SCHEDULED 0</u> 03/16/2007	<u>STATUS</u> AVAIL	CREW TYPE CANYON	RULE 36 Month (Cleaning)					
Mainte	enance Reque	est History	/								
MRN	Date	Activity	Unit #	Crew Leader	SCHEDULE_NOT	ES REMARKS	Grease	Sludge	Roots	lsClear	
8773	08/28/2007	NC - Other	9,999	ADMIN		lost book				No	
2918	03/16/2004	C - Cleaned	733	Ward, Gary		RECOMMEND 12 MONTH FREQUENCY.	None	None	None	Yes	
3008	02/15/2004	C - Cleaned	519	Jenkins, Isaac		RECOMMEND 36 MONTH FREQUENCY.	None	None	None	Yes	
Facili	ty Event Histo	ory									
Date		Activity		Crew Lead	er	REMARKS					
08/28/20	07	Maintenanc	e	ADMIN		lost book					
08/24/20	07	Stoppage/S	so	Nellis, Core	ey, Siaumau, Greg, Jordan	8 bit 749 while sealing manhole in the area she notice manho overflowing into canyon, she notified supervisor (8794) to se relieved blockage & contain overflow. This SSO Report is Pre monday. Grease, Mop Head & Rags Blockage.	nd crews t				
03/16/20	04	Maintenanc	e	Ward, Gary	/	RECOMMEND 12 MONTH FREQUENCY.					
02/15/20	04	Maintenanc	e	Jenkins, Isa	3ac	RECOMMEND 36 MONTH FREQUENCY.					

cility Event	History - Ar	rchive					
MR # / SR #	Date	Unit #	Crew Leader	ACTION	OLD	NEW	COMMENTS_FINDINGS
	06/07/2005			Sched Change	YES	YES	Updated from latest SWIFT Update
	03/14/2005			Sched Change	YES	YES	Updated from latest SWIFT Update
	12/20/2004		ADMIN	Sched Change	ROD	FLUSH	Moving mains to FLUSH from ROD due to more FLUS resources than ROD.
	07/29/2004		ADMIN	Sched Change	120	36	Main Cleaning Frequency is being set to 36 Month from 120 Month to conform with EPA Guidlines for canyon
	07/29/2004		ADMIN	Sched Change	03/16/2014	3/16/2007	cleaning. Main is being rescheduled from 03/16/2014 to 3/16/200 to conform with EPA Guidlines for canyon cleaning.
2918	03/16/2004	733	Gary Ward	Cleaned			Clear. RECOMMEND 12 MONTH FREQUENCY.
2918	03/16/2004	733	Gary Ward	Sched Change	120	120	Rejected. CurValue=120. Clear.
3008	02/15/2004	519	Isaac Jenkins	Cleaned			Clear. RECOMMEND 36 MONTH FREQUENCY.
3008	02/15/2004	519	Isaac Jenkins	Sched Change	99	120	Accepted.
	10/03/2003			Sched Change		HOBERNARDC	Updated status per canyon pipe look up table from HDF dated 9/19/03
0	05/15/2003	9003	Kent Vian	Sched Change			Updated PM_TYP_DESC, MAIN_STATUS_CD, WORI TYPE to the canyon list per HDR.

Enclosure 10

Realigned 8-in PVC Sewer



Attachment Interview Summary, Mr. Serakos

Memo To File

SSO Event ID:656795 (CIWQS)Agency:City of San DiegoLocation:12242 Escala, San DiegoSSO Qty.:381,185 gallonsDate of SSO:August 20-24, 2007

Phone Interview with Reporter (Citizen who reported the odor/spill incident) Date/Time Called: August 14, 2008 (1500 hrs)

Name: Mr. Serakos Tel. No.: 858-487-2323

Summary of phone conversation:

I told Mr. Serakos that the purpose of my phone call was regarding the sewer sewage overflow complaint he reported to the City on August 20, 2007. He said that he reported only "sewage odor" observation around his house and did not notice any spill or discharge around his property at Escala Drive and Fernando Way. He said that his wife first noticed the sewage odor on that morning and that he reported it to the City right away.

He also told me that City crew came out later to do construction work for about three months and did not know what exactly they were doing.

End of phone conversation.

Conclusion:

The call/interview was to determine the extent of discharge, if any, prior to the reported spill incident on August 20, 2008. Mr. Serakos did not notice any sewage odor incident prior to that day he reported the incident.

Mr. Serakos cannot confirm whether the reported "sewage odor" occurred prior to August 20, 2008.

Telephone Conversations

Date: September 16, 2008 Ms. Courtney Smith, City Council staff, District 5

I called Courtney Smith regarding the "sewage odor" report she received on August 20, 2007. She said that Ms. Leonidas Serakos called her office and reported about a sewage odor near Ms. Serakos's house on 18284 Fernando Way, San Diego. On the same day, she entered the complaint information on the City's computer (Route Slip No. 05-07-08-113). According to her, the Route Slip was forwarded to the Customer Service on the same day for review and determination of responsible City staff/department to respond. Calls or complaints vary a lot from day to day operation and the Customer Service will process the calls/complaints and forward them to the responsible department staff for action.

Date: September 17, 2008 Mr. Brian Drummy, Public Information Officer (SD)

I called to request information regarding the timing of events that lead to the reporting vs. response timeframe (took four days to respond the reported Bad Sewer Odor – BSO). He promised to provide information soon.



THE CITY OF SAN DIEGO

October 6, 2008

Mr. Leo Sarmiento Water Resources Control Engineer Office of Enforcement State Water Resources Control Board 1001 I Street, 16th Floor Sacramento, CA 95814

Dear Mr. Sarmiento:

Subject: Response to Email Request for Information related to Notice of Violation No. R9-2007-0199

The purpose of this letter is to respond to your recent emails (Enclosure 1), dated September 15, 2008, September 24, 2008, and September 25, 2008, regarding a City of San Diego sanitary sewer overflow (SSO) that entered Lake Hodges on August 20, 2007. The City previously responded to Notice of Violation No. R9-2007-0199 on November 26, 2007.

You traveled to San Diego on September 10, 2008, and met with Mr. Christopher Toth, Deputy Director of Wastewater Collection Division, several Wastewater Collection Division staff, and Ms. Joann Cofrancesco, Water Resource Control Engineer, San Diego Regional Water Quality Control Board, at our Wastewater Collection Division office located at 9150 Topaz Way. After this meeting Mr. Robert York, General Water Utility Supervisor, escorted you and Ms. Cofrancesco to the SSO event location and showed you details of the sewer system geography and subsequent sewer system construction improvements now completed at this location.

The following paragraphs provide a response to each question raised in your recent emails:

Request 1:

Itemized/ estimated costs incurred by the City of programs/ pipe replacement/ etc. (specific to the SSO incident) to prevent/minimize similar cases to happen in the future.

Response 1:

Following this SSO incident, City of San Diego staff determined that the sewer pipe leading into the canyon area adjacent to 12242 Escala Drive was deteriorated enough to consider replacement. A decision was made to re-route the sewer pipe from the canyon area and connect this sewer pipe with the same downstream trunk sewer in Escala Drive. By re-routing this sewer pipe in the existing street, the City could avoid environmental issues associated with a project



Metropolitan Wastewater Department 9192 Topoz Way • San Diego, CA 92123 Tel (858) 292-6300 Fax (858) 292-6310 Page 2 of 6 Mr. Leo Sarmiento October 6, 2008

that disturbs natural habitat. The construction project to re-route this sewer pipe along Escala Drive cost the City approximately \$209,000 (Enclosure 2).

The City's Metropolitan Wastewater Department continues to manage its system-wide Sewer Cleaning program. Sewer pipes with similar non Right of Way conditions adjacent to roadways are evaluated on an ongoing basis in an effort to utilize conventional sewer rodding trucks and/or hydro-flusher trucks for cleaning these sewer pipes whenever possible.

Request 2:

Results of actions/programs (i.e. decreasing number of SSOs, quicker response time that prevents discharges to surface waters, enhanced maintenance monitoring of the collection system, etc.).

Response 2:

The City of San Diego is committed to improving the condition and performance of the wastewater collection system and to reduce the number of SSOs. This commitment is demonstrated by the directives, policy changes, and allocation of resources directed towards the development and enhancement of existing programs, and the creation of new programs that address wastewater collection system condition and performance.

In Calendar Year 2002, the City of San Diego prepared 11 Wastewater Collection System plan documents. These plan documents define maintenance activities, prioritization of facility replacements, and other functions to be performed by the Metropolitan Wastewater Department. These plan documents are listed herein:

- System-Wide Cleaning Program Plan
- Accelerated Cleaning Program Plan
- Root Control Program Plan
- Sewer Pipe Inspection and Condition Assessment Plan
- Sewer Repair, Rehabilitation, and Replacement Plan
- Fats, Oils, and Grease (FOG) Blockage Control Plan
- Canyon Area Spill Elimination Plan
- Pump Station and Force Main Spill Reduction Action Plan
- Plan to Address "Other" Sanitary Sewer Overflows
- Capacity Assessment Plan
- Capacity Assurance Plan

The City of San Diego has successfully executed these Wastewater Collection System Plans since Calendar Year 2002. As a result of these efforts, the number of SSO occurrences greatly has been reduced (Enclosure 3). On a calendar year-basis (through the month of August) since Calendar Year 2000, the City of San Diego has reduced the number of SSOs by approximately 80%. Furthermore, in Calendar Year 2008, the City of San Diego has experienced 48 SSOs, 4 fewer SSOs than it experienced in Calendar Year 2007 for the same time period.

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The City of San Diego utilizes sophisticated Computer Maintenance Management System (CMMS) software to plan and execute its Wastewater Collection System Plans. These software programs include:

- **PSTools**. This program provides collection system maintenance planning capabilities so that main cleaning crews are dispatched to clean sewer pipes at the proper time and with the appropriate cleaning tools and ancillary equipment. This program also stores the condition findings of each pipe's cleaning events and utilizes this data to adjust future cleaning frequencies according to these condition findings. The software program's database serves as a repository for all maintenance activities taken on all active sewer pipes in the entire Municipal Sewerage System.
- <u>SHARQ.</u> This program records and catalogs the digital CCTV data generated by contract and City force CCTV inspections of the collection system to provide easily accessible visual documentation of defects and problem areas in the collections system. This information is utilized by engineering personnel for creating and prioritizing pipe sections for inclusion in CIP projects. The information is also used to focus cleaning, repair and replacement activities & collection system maintenance documentation. This program also provides ad-hoc GIS mapping capabilities for both computer screen displays and for printing on all end users' printers.
- <u>CSTools</u>. This program provides wastewater collection system spot-repair and sewer lateral planning capabilities so that City sewer construction crews are dispatched to repair sewer mains and sewer laterals according to an efficient schedule with the appropriate construction tools and ancillary equipment. This software program's database provides a repository for all construction section repair activities taken on all active sewer mains and sewer laterals in the entire Municipal Sewerage System.
- <u>SWIM</u>. This program provides for computer-based emergency dispatch communication between the Station 38 Center and the Emergency Response section staff in the Wastewater Collection Division. All emergency dispatch work orders and regular customer service request events are initially logged, communicated, and documented using the SWIM software. This program's database serves as a repository for all sewer-related service request information that is communicated to the City of San Diego.
- **FEWD8.** This program provides the database repository for all food service establishment facility data, inspection schedules and associated inspection activity logs. This software program provides the data source for the FSTools software described below.
- **FSTools.** This program provides planning capabilities to schedule city staff for food service establishment inspection activities. It is GIS-based and provides a visual format to extract FEWD8 database inspection schedule data and plan daily, weekly and monthly food service establishment inspection plans and associated routes.
- <u>EMPAC</u>. This program provides wastewater pump station maintenance planning and control functions for all sewer pump stations in the City of San Diego. City crews utilize work orders generated by EMPAC with its associated maintenance procedure and materials lists to perform routine sewer pump station repair and maintenance.

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These software programs have allowed the City of San Diego to effectively manage its extensive municipal sewer collection system. A comprehensive set of electronic sewer maps have been developed in the past five years which show all the features of the City's sanitary sewer system. These maps are regularly updated to include new or rehabilitated sewer infrastructure.

PSTools maintenance schedules for non-Right-of-Way sewer mains have been reviewed in light of the August 2007 SSO event. Sewer main maintenance practices of similar sewer pipes adjacent to canyon areas have been analyzed to improve the maintenance schedules and methods used for servicing these types of sewer mains.

The City of San Diego is currently preparing its Sewer System Management Plan (SSMP) in conformance with the State Water Resources Control Board Order No. 2006-0003-DWQ. This new SSMP document will augment the comprehensive Wastewater Collection System Plans now in place and will provide guidance to the Metropolitan Wastewater Department as it furthers its commitment to reduce the number and extent of SSOs. Under the guidance provided by the new SSMP document, the City of San Diego's CMMS and Standard Operating Procedures direct the frequency of sewer main cleaning and pump station maintenance activities. Sewer collection system maintenance work is determined based upon operation and maintenance experience, past performance, manufacturers' recommendations, and site-specific conditions. The City of San Diego also has installed GPS software on its sewer maintenance vehicles to enhance the utilization of the vehicles.

Request 3:

Status of proposed mitigation (MWWD's Otay Mesa Upland Mitigation Bank) How much? When implemented? – see item no. 8 of City's Response Letter dated Nov. 26, 2007.

Response 3:

As a result of the Lake Hodges SSO event, the Metropolitan Wastewater Department purchased credits from the City of San Diego's Marron Valley Cornerstone Lands Conservation Bank. The credits represented 0.1 acres of Upland Bank lands at an approximate cost of \$2,250 (Enclosure 4).

Request 4:

Status of proposed actions (see item nos. 11 and 12 of City's Response Letter) – what educational guidance/materials were done on regular and annual basis?

Response 4:

On October 31, 2007, the Metropolitan Wastewater Department Public Information Office (PIO) provided written guidance to the Citizen's Assistance Office on the proper procedures for routing reports made by the public regarding SSOs or potential SSO-related concerns (Enclosure 5). A regular, annual update of communication was provided to the Citizen's Assistance Office by the PIO on September 18, 2008 (Enclosure 6). This communication contained an updated

Page 5 of 6 Mr. Leo Sarmiento October 6, 2008

educational guidance document regarding SSOs, bad sewer odors, and sewer laterals. It is easy to read and prepared in a "Questions and Answers" format that is popular with the general public. This communication also included a recent <u>San Diego Union Tribune</u> newspaper article which includes the City of San Diego Metropolitan Wastewater Department hotline telephone number for residents to use for sewer spill and bad sewer odor reporting purposes.

Request 5:

A description of the sequence of events on how the Route Slip was generated, transmitted, and received by each office/department within the four-day period (August 20-24, 2007).

Response 5:

A Citizen's Assistance Route Slip was generated on August 21, 2007, from the Council District 5 Office and transmitted to the Metropolitan Wastewater Department's Public Information Office (Enclosure 7). The nature of the Route Slip was a citizen complaint filed by Mr. Leonidas Serakos, 18284 Fernando Way, San Diego California, regarding an intermittent bad sewer odor (BSO) in the vicinity of his residence. On August 22, 2007, Mr. Brian Drummy, PIO, received the Route Slip for processing within the Metropolitan Wastewater Department. Mr. Drummy worked to get telephone contact information regarding the citizen who originated the complaint. In this process, Mr. Drummy coordinated with the City of San Diego's Citizen' Assistance Office (Enclosure 8). Ultimately Mr. Drummy conducted an internet search on August 23, 2007, and obtained a business telephone number for Mr. Serakos. Mr. Drummy left a telephone message with Mr. Serakos; Mr. Serakos called Mr. Drummy back on August 24, 2007 and discussed with him the specific details of his BSO complaint.

After talking by telephone with Mr. Serakos, Mr. Drummy called the City of San Diego's Station 38 Communications Center by using the City's Sewer Emergency phone number, 1-619-525-3525.

The Station 38 Center immediately contacted the duty Wastewater Collection Division Emergency Services section supervisor in the Wastewater Collection Division. Emergency Services crews then were dispatched to investigate the BSO at approximately 11:56 AM on August 24, 2007. The staff traveled to the Fernando Way area to further investigate this BSO complaint and to seal sewer manholes in the vicinity of the residences there. While sealing manholes in this vicinity on Escala Drive, Wastewater Collection Division staff identified an SSO occurring in a canyon adjacent to Escala Drive at approximately 2:00 PM. Records of the SWIM CMMS work assignments generated on August 24, 2007, associated with this BSO investigation and SSO event are enclosed (Enclosure 9).

In August, 2007, the Metropolitan Wastewater Department received 63 BSO reports from the Station 38 Center; there were 4 SSOs in the San Diego municipal sewer system during the same time period. For calendar year 2007 we received 403 BSO complaints vs 77 spills, many of them unrelated to a BSO complaint. While the Metropolitan Wastewater Department investigates every BSO report it receives, only a small percentage of BSO reports correlate with actual SSO events.

Page 6 of 6 Mr. Leo Sarmiento October 6, 2008

Should you have any additional questions or comments related to this information, please contact Mr. Christopher Toth, Deputy Director, Wastewater Collection Division, at your earliest convenience.

Respectfully Submitted,

Robert F. Ferrier Assistant Director Metropolitan Wastewater Department

RJF:CJT:oc

cc: Jim Barrett, Director of Public Utilities Christopher Toth, Deputy Metropolitan Wastewater Director, Wastewater Collection Division

Enclosures:

- 1. Emails from Leo Sarmiento to Christopher Toth, dated September 15, 2008, September 24, 2008, and September 25, 2008.
- 2. MWWC/WWC Cost Schedule for Construction Work on Escala Drive, dated September 22, 2008
- 3. Sewer Spill Statistics, Calendar Year, through August 2008
- 4. Memorandum w/ attachments from Laura Ball to Steve Geitz, dated March 14, 2008
- 5. Email from Brian Drummy to Lyndsey Rower, dated October 31, 2007
- 6. Mail from Brian Drummy to Donna Cottingham, dated September 18, 2008
- 7. Route Slip 05-07-08-113, from Council District 5, dated August 21, 2007
- 8. Email from Lyndsey Rower to Brian Drummy, dated August 22, 2007
- 9. SWIM Work Order Records dated August 24, 2007

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ENCLOSURE

Toth, Christopher

From: Leo Sarmiento [LSarmiento@waterboards.ca.gov]

Sent: Thursday, September 25, 2008 2:45 PM

To: Toth, Christopher

Cc: Joann Cofrancesco

Subject: RE: Lake Hodges SSO Meeting (September 10, 2008)

Thanks Chris for the update. Also, could you direct me to your website (if posted) the City's Sewer System Management Plan (SSMP) as required under your SSO Permit (Order No. 2006-0003-DWQ). As we discussed, you mentioned the number of SSO's had decreased since the August 2007 SSO. You may include your discussion/response to any specific actions/items in the SSMP that resulted to that decrease or nay revisions made to the SSMP. Thanks again.

Leo

>>> "Toth, Christopher" <CToth@sandiego.gov> 9/24/2008 11:06 AM >>>

Leo, I am hoping to have a letter transmitted to you by the end of next week. I will work to include the items you have mentioned today in this response letter. Thanks again, Chris

From: Leo Sarmiento [mailto:LSarmiento@waterboards.ca.gov]
Sent: Wednesday, September 24, 2008 10:54 AM
To: Toth, Christopher
Cc: Joann Cofrancesco
Subject: RE: Lake Hodges SSO Meeting (September 10, 2008)

Chris,

Any status of the requested information? Also, I am interested to know the sequence of events on how the Route Slip was generated, transmitted and received by each office/department within the four-day period (August 20-24, 2007). Based on the Route Slip information, it was routed to the Metro. WW Dept. on August 21, 2007 via electronic mail from Route Slip Coordinator 236-6970 (MS 56C). On August 22, 2007 (9:30 am), an email was sent to Rower Lyndsey from Brian Drummy suggesting to include tel. no. of reporter in Route Slips. When was this Route Slip/BSO report received by your response/investigative team? Any information on this matter is appreciated.

Please call me if you have any questions. Thank you.

Leo Sarmiento Water Resources Control Engineer Office of Enforcement | SWRCB | CalEPA ph 916.327.8043 | fax 916.341.5896 email: LSarmiento@waterboards.ca.gov >>> "Toth, Christopher" <CToth@sandiego.gov> 9/15/2008 5:08 PM >>>

Thanks, Leo. We'll work to provide you with this information in the near future. We will convey this information in a letter addressed to you. Thanks, Chris

From: Leo Sarmiento [mailto:LSarmiento@waterboards.ca.gov]
Sent: Monday, September 15, 2008 3:54 PM
To: Toth, Christopher
Cc: York, Robert; Joann Cofrancesco
Subject: Lake Hodges SSO Meeting (September 10, 2008)

Chris,

Thank you for your time and information during our meeting last Wednesday . As we discussed, I would like to request the following information:

1) Itemized/estimated costs incurred by the City of programs/pipe replacement/etc. (specific to the SSO incident) to prevent/minimize similar cases to happen in the future.

2) Results of actions/programs (i.e., decreasing number of SSOs, quicker response time that prevents discharges to surface waters, enhanced maintenance monitoring of collection system, etc.).

3) Status of proposed mitigation (MWWD's Otay Mesa Upland Mitigation Bank) How much? when implemented? - see item no. 8 of City's Response Letter dated Nov. 26, 2007.

4) Status of proposed actions (see item nos. 11 and 12 of City's Response Letter) - what educational guidance/materials were done on regular and annual basis?

Again thank you for your time.

Leo Sarmiento Water Resources Control Engineer Office of Enforcement | SWRCB | CalEPA ph 916.327.8043 | fax 916.341.5896 email: LSarmiento@waterboards.ca.gov

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Materials Pipe, 4*PVC Pipe, 4*ABS Sch 40 Pipe, 6*ABS sch 40 Pipe, 6*PVC 4*ABS 22-1/2 ELL 4*PVC 22-1/2 ELL 4*PVC 45 ELL 4*ABS WYE	Unit Cost C \$1.30 \$2.15 \$5.89 \$3.26 \$7.43 \$7.43 \$7.43 \$7.89 \$14.78		TOTAL \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	29				SAW CUT PER HR Soil Engineer 48"x36"Riser	* Unit Cost Unit Cost \$743.24 \$25.00 \$930.00 \$2,500.00 \$5.60 \$204.10 \$36.00	Quant Quant 1.00 1.00	nnent Divi	TOTAL \$743.24 \$0.00 \$930.00 \$2,500.00 \$0.00 \$0.00 \$0.00 \$0.00
Materials Pipe, 4*PVC Pipe, 4*ABS Sch 40 Pipe, 6*ABS sch 40 Pipe, 6*PVC 4*ABS S2-1/2 ELL 4*PVC 22-1/2 ELL 4*PVC 45 ELL 4*ABS WYE 4*AS WYE 4*A*CU/PVC COUP	Unit Cost 6 \$1.30 \$2.15 \$5.89 \$3.26 \$7.43 \$7.43 \$7.43 \$7.89 \$14.78 \$45.63		TOTAL \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	3				SAW CUT PER HR Soil Engineer 48"x36"Riser 36"x48"Concrete Cone	* Onits not easi Unit Cost \$743.24 \$25.00 \$930.00 \$2,500.00 \$5.60 \$204.10 \$36.00 \$213.00	Quant Quant 1.00 1.00 1.00 1.00	nnent Divi	TOTAL \$743.24 \$0.00 \$930.00 \$2,500.00 \$0.00 \$0.00 \$0.00 \$213.00
Materials Pipe, 4*PVC Pipe, 4*ABS Sch 40 Pipe, 6*ABS sch 40 Pipe, 6*PVC 4*ABS 22-1/2 ELL 4*PVC 22-1/2 ELL 4*PVC 45 ELL 4*ABS WYE 4*AS WYE 4*A*CPVC COUP 4*C/O End Caps	Unit Cost C \$1.30 \$2.15 \$5.89 \$3.26 \$7.43 \$7.43 \$7.43 \$7.43 \$7.89 \$14.78 \$45.63 \$3.03		TOTAL \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00 \$0.00	8				SAW CUT PER HR Soil Engineer 48"x36"Riser 36"x48"Concrete Cone 36"x15"Concrete Riser	* Onits not easi Unit Cost \$743.24 \$25.00 \$930.00 \$2,500.00 \$5.60 \$204.10 \$36.00 \$213.00 \$135.80	Quant Quant 3,00 1,00 1,00 1,00 5,00	nnent Divi	TOTAL 5743.24 \$0.00 \$930.00 \$0.00 \$0.00 \$0.00 \$0.00 \$213.00 \$0.00 \$2450.00 \$0.00 \$260.00 \$0.00 \$2150.00 \$0.00 \$2150.00 \$0.00
Materials Pipe, 4*PBC Sch 40 Pipe, 6*ABS Sch 40 Pipe, 6*PVC 4*ABS 22-1/2 ELL 4*PVC 22-1/2 ELL 4*PVC 45 ELL 4*ABS WYE 4*x4* CL/PVC COUP 4*X4* CL/PVC COUP 4*X4* CL/PVC COUP 4*X4* CL/PVC WYE	Unit Cost 0 \$1.30 \$2.15 \$5.89 \$3.26 \$7.43		TOTAL \$0.00	8				SAW CUT PER HR Soil Engineer 48"x36"Riser 36"x48"Concrete Cone 36"x15"Concrete Riser STEEL PLATES	 Onits not easi Unit Cost \$743,24 \$25,00 \$930,00 \$25,60,00 \$5,60 \$5,60 \$264,10 \$36,00 \$213,00 \$135,80 \$3,254,13 	Quant Quant 1.00 1.00 1.00 1.00	nnent Divi	TOTAL \$743.24 \$0.00 \$930.00 \$0.00 \$0.00 \$0.00 \$213.00 \$679.00 \$3,254.13
Materials Pipe, 4*PVC Pipe, 4*ABS Sch 40 Pipe, 6*ABS sch 40 Pipe, 6*PVC 4*ABS 22-1/2 ELL 4*PVC 22-1/2 ELL 4*PVC 45 ELL 4*A*CL/PVC 45 ELL 4*A*CL/PVC COUP 4*C/O End Caps 4*PVC WYE 4*FLEX WYE	Unit Cost 6 \$1.30 \$2.15 \$5.89 \$3.26 \$7.43 \$7.44 \$7.445 \$7.386		TOTAL \$0.00	S				SAW CUT PER HR Soil Engineer 48"x36"Riser 36"x48"Concrete Cone 36"x15"Concrete Riser STEEL PLATES SHORING	* Onits and mail Unit Cost \$743.24 \$25.00 \$930.00 \$2,500.00 \$2,500.00 \$204.10 \$36.00 \$213.00 \$135.80 \$31254.13 \$160.00	Quant Quant 1.00 1.00 1.00 1.00 1.00 5.00 1.01	nnent Divi	TOTAL TOTAL \$743.24 \$0.00 \$930.00 \$0.00 \$0.00 \$0.00 \$213.00 \$679.00 \$3,254.13 \$0.00
Materials Pipe, 4*PBC Sch 40 Pipe, 6*ABS Sch 40 Pipe, 6*PVC 4*ABS 22-1/2 ELL 4*PVC 22-1/2 ELL 4*PVC 45 ELL 4*ABS WYE 4*x4* CL/PVC COUP 4*X4* CL/PVC COUP 4*X4* CL/PVC COUP 4*X4* CL/PVC WYE	Unit Cost C \$1.30 \$2.15 \$5.89 \$3.26 \$7.43 \$7.43 \$7.43 \$7.43 \$7.89 \$14.78 \$45.63 \$3.03 \$14.45 \$23.86 \$30.49		TOTAL \$0.00					SAW CUT PER HR Soil Engineer 48"x36"Riser 36"x48"Concrete Cone 36"x15"Concrete Riser STEEL PLATES SHORING SHORING BOX	* Units can mail Unit Cost \$743.24 \$25.00 \$32.500.00 \$5.60 \$204.10 \$36.00 \$135.80 \$3.254.13 \$135.80 \$3.254.13 \$135.80 \$3.254.13 \$135.80 \$3.254.13 \$160.00 \$12,000.00	Quant 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	nnent Divi	TOTAL \$743.24 \$0.00 \$930.00 \$2.500.00 \$0.00 \$0.00 \$0.00 \$213.00 \$679.00 \$3.254.13 \$0.00 \$3.254.13 \$0.00 \$3.254.13
Materials Pipe, 4*PVC Pipe, 4*ABS Sch 40 Pipe, 6*ABS sch 40 Pipe, 6*PVC 4*ABS 22-1/2 ELL 4*PVC 22-1/2 ELL 4*PVC 45 ELL 4*A*CL/PVC 45 ELL 4*A*CL/PVC COUP 4*C/O End Caps 4*PVC WYE 4*FLEX WYE	Unit Cost 6 \$1.30 \$2.15 \$5.89 \$3.26 \$7.43 \$7.44 \$7.445 \$7.386		TOTAL \$0.00			· · · · ·		SAW CUT PER HR Soil Engineer 48"x36"Riser 36"x48"Concrete Cone 36"x15"Concrete Riser STEEL PLATES SHORING	* Onits and mail Unit Cost \$743.24 \$25.00 \$930.00 \$2,500.00 \$2,500.00 \$204.10 \$36.00 \$213.00 \$135.80 \$31254.13 \$160.00	Quant Quant 1.00 1.00 1.00 1.00 1.00 5.00 1.01	nnent Divi	TOTAL TOTAL \$743.24 \$0.00 \$930.00 \$0.00 \$0.00 \$0.00 \$213.00 \$679.00 \$3,254.13 \$0.00
Materials Pipe, 4*PVC Pipe, 4*ABS Sch 40 Pipe, 6*ABS sch 40 Pipe, 6*PVC 4*ABS 22-1/2 ELL 4*PVC 22-1/2 ELL 4*PVC 45 ELL 4*A*C/PVC COUP 4*C/O End Caps 4*PVC WYE 4*FLEX WYE 6*FLEX WYE	Unit Cost C \$1.30 \$2.15 \$5.89 \$3.26 \$7.43 \$7.43 \$7.43 \$7.43 \$7.89 \$14.78 \$45.63 \$3.03 \$14.45 \$23.86 \$30.49		TOTAL \$0.00			· · · ·		SAW CUT PER HR Soil Engineer 48"x36"Riser 36"x48"Concrete Cone 36"x15"Concrete Riser STEEL PLATES SHORING SHORING BOX	* Units can mail Unit Cost \$743.24 \$25.00 \$32.500.00 \$5.60 \$204.10 \$36.00 \$135.80 \$3.254.13 \$135.80 \$3.254.13 \$135.80 \$3.254.13 \$135.80 \$3.254.13 \$160.00 \$12,000.00	Quant 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	nnent Divi	TOTAL \$743.24 \$0.00 \$930.00 \$2.500.00 \$0.00 \$0.00 \$0.00 \$213.00 \$679.00 \$3.254.13 \$0.00 \$3.254.13 \$0.00 \$3.254.13
Materials Pipe, 4*DVC Pipe, 4*ABS Sch 40 Pipe, 6*ABS sch 40 Pipe, 6*DVC 4*ABS 22-1/2 ELL 4*PVC 22-1/2 ELL 4*PVC 22-1/2 ELL 4*PVC 45 ELL 4*ABS WYE 4*AS WYE 4*X4* CUPVC COUP 4*C/O End Caps 4*PLEX WYE 6*FLEX WYE 6*FLEX WYE 6*FLEX WYE 6*ABS 22-1/2 ELL 6*WYE	Unit Cost C \$1.30 \$2.15 \$5.89 \$3.26 \$7.43 \$7.44 \$7.445 \$7.36 \$7.49 \$7.22 \$7.23 \$7.23 \$7.24		TOTAL \$0.00			· · · ·		SAW CUT PER HR Soil Engineet 48"x36"Riser 36"x48"Concrete Conc 36"x15"Concrete Riser STEEL PLATES SHORING SHORING BOX TRAFFIC CONTROL	* Units can mail Unit Cost \$743.24 \$25.00 \$2.50.00 \$2.50.00 \$5.60 \$204.10 \$36.00 \$213.00 \$13.25.80 \$3.254.13 \$160.00 \$12,000.00 \$12,000.00	Quant 1,00 1,00 1,00 1,00 1,00 1,00 1,00 1,0	nnent Divi	TOTAL \$743.24 \$0.00 \$930.00 \$2.500.00 \$0.00 \$0.00 \$213.00 \$679.00 \$3,254.13 \$0.00 \$12,000.00 \$3,254.13
Materials Pipe, 4*PVC Pipe, 4*ABS Sch 40 Pipe, 6*ABS sch 40 Pipe, 6*ADS sch 40 Pipe, 6*ADS sch 40 Pipe, 6*ADS 22-1/2 ELL 4*PVC 45 ELL 4*ABS WYE 4*S4*C/O End Caps 4*PVC WYE 4*PLEX WYE 6*ABS 22-1/2 ELL 6*ABS 22-1/2 ELL 6*WYE 6*WYE 6*WYE 8"x4*Ptvc Wye	Unit Cost C \$1.30 \$2.15 \$5.89 \$3.26 \$7.43 \$7.43 \$7.43 \$7.43 \$7.89 \$14.78 \$45.63 \$3.03 \$14.45 \$23.86 \$3.049 \$22.22 \$38.42 \$58.10		TOTAL \$0.00					SAW CUT PER HR Soil Engineer 48"x36"Riser 36"x48"Concrete Cone 36"x15"Concrete Riser STEEL PLATES SHORING SHORING BOX TRAFFIC CONTROL South Bay Fence West Coast Rock	* Units can mail Unit Cost \$743.24 \$25.00 \$25.60.00 \$2,500.00 \$2,500.00 \$2,500.00 \$213.00 \$135.80 \$3,254.13 \$160.00 \$12,000.00 \$13,000 \$12,000.000\$1000.000\$10000\$1000\$1000\$1000\$1	Quant 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	nnent Divi	TOTAL \$703.24 \$0.00 \$930.00 \$2,500.00 \$0.00 \$0.00 \$0.00 \$0.00 \$213.00 \$23,254,13 \$0.00 \$12,000.00 \$12,000.00 \$9,061.51 \$440.00 \$8,497.18
Materials Pipe, 4*PVC Pipe, 4*ABS Sch 40 Pipe, 6*ABS sch 40 Pipe, 6*PVC 4*ABS 22-1/2 ELL 4*PVC 45 ELL 4*PVC 45 ELL 4*ABS WYE 4*x4* CL/PVC COUP 4*C/O End Caps 4*PVC WYE 6*FLEX WYE 6*FLEX WYE 6*TLEX WYE <td>Unit Cost 0 \$1.30 \$2.15 \$5.89 \$3.26 \$7.43 \$7.43 \$7.43 \$7.43 \$7.43 \$7.43 \$7.89 \$14.78 \$45.63 \$3.03 \$14.45 \$23.86 \$30.49 \$22.22 \$38.42 \$58.10 \$7.67</td> <td></td> <td>TOTAL \$0.00</td> <td></td> <td></td> <td></td> <td></td> <td>SAW CUT PER HR Soil Engineer 48"x36"Riser 36"x48"Concrete Cone 36"x15"Concrete Riser STEEL PLATES SHORING SHORING BOX TRAFFIC CONTROL South Bay Fence West Coast Rock Hawthome Excavator</td> <td>• Units non mail Unit Cost \$743.24 \$25.00 \$23.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,413.80 \$3,254.13 \$160.00 \$12,000.00 \$12,000.00 \$12,000.00 \$13,800 \$14,000 \$14,000 \$14,000 \$14,000 \$14,000 \$14,000 \$14,000 \$14,0777 \$14,0777 \$14,0777 \$14,07777 \$14,0777777777777777777777777777777777777</td> <td>Quant</td> <td>nnent Divi</td> <td>xion TOTAL \$743.24 \$0.00 \$930.00 \$0.00 \$0.00 \$0.00 \$213.00 \$679.00 \$3,254.13 \$0.00 \$12,000.00 \$12,000.00 \$12,000.00 \$440.00 \$440.00 \$497.18 \$16,774.78</td>	Unit Cost 0 \$1.30 \$2.15 \$5.89 \$3.26 \$7.43 \$7.43 \$7.43 \$7.43 \$7.43 \$7.43 \$7.89 \$14.78 \$45.63 \$3.03 \$14.45 \$23.86 \$30.49 \$22.22 \$38.42 \$58.10 \$7.67		TOTAL \$0.00					SAW CUT PER HR Soil Engineer 48"x36"Riser 36"x48"Concrete Cone 36"x15"Concrete Riser STEEL PLATES SHORING SHORING BOX TRAFFIC CONTROL South Bay Fence West Coast Rock Hawthome Excavator	• Units non mail Unit Cost \$743.24 \$25.00 \$23.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,413.80 \$3,254.13 \$160.00 \$12,000.00 \$12,000.00 \$12,000.00 \$13,800 \$14,000 \$14,000 \$14,000 \$14,000 \$14,000 \$14,000 \$14,000 \$14,0777 \$14,0777 \$14,0777 \$14,07777 \$14,0777777777777777777777777777777777777	Quant	nnent Divi	xion TOTAL \$743.24 \$0.00 \$930.00 \$0.00 \$0.00 \$0.00 \$213.00 \$679.00 \$3,254.13 \$0.00 \$12,000.00 \$12,000.00 \$12,000.00 \$440.00 \$440.00 \$497.18 \$16,774.78
Materials Pipe, 4*PVC Pipe, 4*ABS Sch 40 Pipe, 6*ABS sch 40 Pipe, 6*PVC 4*ABS 22-1/2 ELL 4*PVC 22-1/2 ELL 4*PVC 45 ELL 4*PVC 45 ELL 4*A*C1/PVC COUP 4*A*C1/PVC COUP 4*A*C1/PVC WYE 4*FLEX WYE 6*FLEX WYE 6*FLEX WYE 6*FLEX WYE 6*FLEX WYE 6*FLEX WYE 6*FVe SDR35 Pipe 10*x4* WYE	Unit Cost C \$1.30 \$2.15 \$5.89 \$3.26 \$7.43 \$3.03 \$14.45 \$23.86 \$3.03 \$14.45 \$23.86 \$3.04 \$22.22 \$3.86 \$3.04 \$22.22 \$3.86 \$3.04 \$22.22 \$3.86 \$3.05 \$1.445 \$22.22 \$3.86 \$3.04 \$22.22 \$3.86 \$3.05 \$1.445 \$22.22 \$3.86 \$3.03 \$1.445 \$22.22 \$3.86 \$3.03 \$1.445 \$22.22 \$3.86 \$3.03 \$1.445 \$23.86 \$3.03 \$1.445 \$22.22 \$3.86 \$3.03 \$1.45 \$2.63 \$3.03 \$1.45 \$2.63 \$3.03 \$1.45 \$2.63 \$3.03 \$1.445 \$2.63 \$3.03 \$1.445 \$2.63 \$3.05 \$1.445 \$2.63 \$3.06 \$2.767		TOTAL \$0.00			· · · ·		SAW CUT PER HR Soil Engineer 48"x36"Riser 36"x48"Concrete Cone 36"x15"Concrete Riser STEEL PLATES SHORING SHORING BOX TRAFFIC CONTROL South Bay Fence West Coast Rock Hawthome Exeavator Burns & Sons	• Units non mail Unit Cost \$743.24 \$25.00 \$930.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,400.00 \$135.80 \$135.80 \$132,80 \$132,80 \$135.80 \$132,900.00 \$132,9	Quant 2 00 1 000	nnent Divi	store TOTAL \$743.24 \$0.00 \$930.00 \$0.00 \$0.00 \$0.00 \$2,500.00 \$0.00 \$213.00 \$679.00 \$3,254.13 \$0.00 \$12,000.00 \$440.00 \$440.00 \$449.718 \$16,774.78 \$7,634.00
Materials Pipe, 4*PVC Pipe, 4*ABS Sch 40 Pipe, 6*ABS sch 40 Pipe, 6*PVC 4*ABS Sch 40 Pipe, 6*PVC 4*ABS Sch 42 Pipe, 6*PVC 4*PVC 45 ELL 4*PVC 45 ELL 4*PVC 45 ELL 4*PVC 45 ELL 4*PVC WYE 4*EX WYE 6*ABS 22-1/2 ELL 6*WYE 6*ABS 22-1/2 ELL 6*WYE 8*EX WYE 6*ABS 22-1/2 ELL 6*WYE 8*EX WYE 6*ABS 22-1/2 ELL 6*WYE 10*PVC Cooplings	Unit Cost \$1.30 \$2.15 \$5.89 \$3.26 \$7.43 \$7.43 \$7.43 \$7.43 \$7.43 \$7.43 \$45.63 \$3.03 \$14.45 \$23.86 \$30.49 \$22.22 \$38.42 \$58.10 \$7.67 \$17.30 \$7.67	Quant	TOTAL \$0.00					SAW CUT PER HR Soil Engineer 48"x36"Riser 36"x48"Concrete Cone 36"x15"Concrete Riser STEEL PLATES SHORING SHORING BOX TRAFFIC CONTROL South Bay Fence West Coast Rock Hawthome Excavator Burns & Sous Hertz Skid Steer	* Units non mail Unit Cost \$743.24 \$25.00 \$930.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$135.80 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$2.459.80 \$140.00 \$2.459.80 \$140.00 \$2.459.80 \$140.00 \$2.459.80 \$140.00 \$2.459.80 \$140.00 \$2.459.80 \$150.80 \$2.459.80 \$150.80	Quant 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	nnent Divi	xion TOTAL \$743.24 \$0.00 \$930.00 \$2,500.00 \$0.00 \$0.00 \$0.00 \$2,13.00 \$679.00 \$12,060.00 \$12,060.00 \$12,060.00 \$12,060.00 \$12,060.00 \$440.00 \$8,497.18 \$16,774.78 \$7,747.88 \$7,634.00 \$2,459.80
Materials Pipe, 4*PVC Pipe, 4*ABS Sch 40 Pipe, 6*ABS sch 40 Pipe, 6*PVC 4*ABS 22-1/2 ELL 4*PVC 22-1/2 ELL 4*PVC 45 ELL 4*PVC 45 ELL 4*A*C1/PVC COUP 4*A*C1/PVC COUP 4*A*C1/PVC WYE 4*FLEX WYE 6*FLEX WYE 6*FLEX WYE 6*FLEX WYE 6*FLEX WYE 6*FLEX WYE 6*FVe SDR35 Pipe 10*x4* WYE	Unit Cost C \$1.30 \$2.15 \$5.89 \$3.26 \$7.43 \$7.67 \$7.701 \$7.399 \$2.2,63.63	Quant	TOTAL \$0.00			· · · ·		SAW CUT PER HR Soil Engineer 48"x36"Riser 36"x48"Concrete Conc 36"x15"Concrete Riser STEEL PLATES SHORING SHORING BOX TRAFFIC CONTROL South Bay Fence West Coast Rock Hawthome Excavator Burns & Sons Hertz Skid Steer Cement Work	* Units non mail Unit Cost \$743.24 \$25.00 \$23.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,600.00 \$135.80 \$3,254.13 \$160.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$13,24,13 \$140.00 \$12,200.00 \$14,200.00 \$135.80 \$13,24,13 \$140.00 \$12,200.00 \$14,400.00 \$14,400.	Quant Quant 1.00	nnent Divi	sten TOTAL \$743.24 \$0.00 \$9350.00 \$2,500.00 \$0.00 \$0.00 \$0.00 \$213.00 \$679.00 \$3,254.13 \$0.00 \$12,000.00 \$12,000.00 \$12,000.00 \$12,000.00 \$12,000.00 \$12,50.00 \$12,000.00 \$14,000.
Materials Pipe, 4*PVC Pipe, 4*ABS Sch 40 Pipe, 6*ABS sch 40 Pipe, 6*PVC 4*ABS Sch 40 Pipe, 6*PVC 4*ABS Sch 42 Pipe, 6*PVC 4*PVC 45 ELL 4*PVC 45 ELL 4*PVC 45 ELL 4*PVC 45 ELL 4*PVC WYE 4*EX WYE 6*ABS 22-1/2 ELL 6*WYE 6*ABS 22-1/2 ELL 6*WYE 8*EX WYE 6*ABS 22-1/2 ELL 6*WYE 8*EX WYE 6*ABS 22-1/2 ELL 6*WYE 10*PVC Cooplings	Unit Cost \$1.30 \$2.15 \$5.89 \$3.26 \$7.43 \$7.43 \$7.43 \$7.43 \$7.43 \$7.43 \$45.63 \$3.03 \$14.45 \$23.86 \$30.49 \$22.22 \$38.42 \$58.10 \$7.67 \$17.30 \$7.67	Quant	TOTAL \$0.00					SAW CUT PER HR Soil Engineer 48"x36"Riser 36"x48"Concrete Cone 36"x15"Concrete Riser STEEL PLATES SHORING SHORING BOX TRAFFIC CONTROL South Bay Fence West Coast Rock Hawthome Excavator Burns & Sous Hertz Skid Steer	* Units non mail Unit Cost \$743.24 \$25.00 \$930.00 \$2.500.00 \$2.500.00 \$2.500.00 \$2.500.00 \$135.80 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$140.00 \$2.459.80 \$140.00 \$2.459.80 \$140.00 \$2.459.80 \$140.00 \$2.459.80 \$140.00 \$2.459.80 \$140.00 \$2.459.80 \$150.80 \$2.459.80 \$150.80	Anno 2000 - 2000	nnent Divi	TOTAL \$743.24 \$0.00 \$930.00 \$2,500.00 \$0.00 \$0.00 \$21.300 \$0.00 \$21.3.00 \$21.3.00 \$21.3.00 \$21.3.00 \$21.3.00 \$21.2.000.00 \$20.00 \$21.2.000.00 \$21.2.000.00 \$21.2.000.00 \$21.2.000.00 \$2440.00 \$8,497.18 \$16,774.78 \$7,634.00 \$23.2.17.41 \$87.56
Materials Pipe, 4*BS Sch 40 Pipe, 6*BS Sch 40 Pipe, 6*BS Sch 40 Pipe, 6*BS Sch 40 Pipe, 6*PVC 4*ABS S2-1/2 ELL 4*PVC 45 ELL 4*PVC 45 ELL 4*PVC 45 ELL 4*PVC WYE 4*X4* CUPVC COUP 4*C/O End Caps 4*PUC WYE 4*FLEX WYE 6*ABS 22-1/2 ELL 6*WYE 6*ABS 22-1/2 ELL 6*WYE 8*R4Pvc Wye 8*Pvc SDR35 Pipe 10*Pvc Cooplings 10*PvcSDR35 Pipe	Unit Cost C \$1.30 \$2.15 \$5.89 \$3.26 \$7.43 \$7.47	Quant	TOTAL \$0.00			· · · ·		SAW CUT PER HR Soil Engineer 48"x36"Riser 36"x48"Concrete Conc 36"x15"Concrete Riser STEEL PLATES SHORING SHORING BOX TRAFFIC CONTROL South Bay Fence West Coast Rock Hawthome Excavator Burns & Sons Hertz Skid Steer Cement Work	* Units non mail Unit Cost \$743.24 \$25.00 \$23.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,600.00 \$135.80 \$3,254.13 \$160.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$135.80 \$12,200.00 \$135.80 \$12,200.00 \$135.80 \$13,24,13 \$140.00 \$12,200.00 \$14,200.00 \$135.80 \$13,24,13 \$140.00 \$12,200.00 \$14,400.00 \$14,400.	Quant Quant 1.00	nnent Divi	sten TOTAL \$743.24 \$0.00 \$930.00 \$2,500.00 \$0.00 \$0.00 \$0.00 \$213.00 \$679.00 \$3,254.13 \$0.00 \$12,000.00 \$12,000.00 \$12,000.00 \$12,000.00 \$12,000.00 \$12,50.00 \$12,000.00 \$12,50.00 \$12,000.00 \$12,50.00 \$12,000.00 \$12,50.00 \$12,000.00 \$12,50.00 \$13,254.13 \$0.00 \$14,00
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Materials Pipe, 4*PVC Pipe, 4*ABS Sch 40 Pipe, 6*ABS sch 40 Pipe, 6*ABS sch 40 Pipe, 6*ABS sch 40 Pipe, 6*PVC 4*APVC 22-1/2 ELL 4*PVC 45 ELL 4*PVC 45 ELL 4*APVC 45 ELL 5*APS 22-1/2 ELL 6*ABS 22-1/2 ELL 6*APVE 8*APVC 40 8*PVC 50R35 Pipe 10*PVC Cooplings 10*PvC 50R35 Pipe Forgusson's pipe parts Atlas Pumping	Unit Cost 6 \$1.30 \$2.15 \$5.89 \$3.26 \$7.43 \$7.43 \$7.43 \$7.43 \$7.89 \$14.78 \$45.63 \$3.03 \$14.45 \$23.86 \$30.49 \$22.22 \$38.42 \$58.10 \$7.67 \$173.01 \$7.3.99 \$2,363.63 \$947.29 \$3,883.00	Quant	TOTAL \$0.00 \$0.3,88					SAW CUT PER HR Soil Engineer 48"x36"Riser 36"x48"Concrete Cone 36"x15"Concrete Riser STEEL PLATES SHORING SHORING BOX TRAFFIC CONTROL South Bay Fence West Coast Rock Hawthorne Exeavator Burns & Sons Hortz Skid Steer Cement Work Spankys Porta Potty C & M Crane	• Units can mail Unit Cost \$743.24 \$25.00 \$930.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,500.00 \$2,413 \$153.80 \$3,254.13 \$160.00 \$12,000.00 \$1,000.00 \$1,000.00 \$2,459.80 \$3,7,217.41 \$87.56 \$1,184.00	Anno 2000 - 2000	nnent Divi	store TOTAL \$743.24 \$0.00 \$930.00 \$0.00 \$0.00 \$0.00 \$213.00 \$0.00 \$213.00 \$3,254.13 \$0.00 \$12,000.00 \$3,254.13 \$0.00 \$12,000.00 \$3,001.51 \$440.00 \$3,459.18 \$16,774.78 \$7,634.00 \$27,56 \$1,184.00

\$208,957.94

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Unit 746 went out and set up by-pass in canyon. Saw cut 160° of street to start install. Ground is very rocky. Ordered a breaker for the excavator. Excavator that is currently being used is too small and will not pick up shoring. Overhead cables are too low. SDGE is contacted to remove cables. Had C&M crane come out and assist in putting in shoring into trench. Dug down to 25° deep and located water main. Contacted Water Dept. Main is not in use. Water main is very deep do to that originally the street did not go thru and it was once a canyon where the old water main is located. Also, the Water Dept. came out on a daily basis due to the fact that the live water main was closely running parallel with our trench and the water main needed to be shut down while performing work in the 25° deep trench. Cut & Core came out and cored into the 25° deep manhole. Concreted pipe connection into mh. Put in 70° of pipe and poured base for new manhole Built mh up to 10°. Had shoring picked up and cleaned up area. Excavator was picked up and street was re-opened on 10-02-07. Street Dept, came in an orayin to abandon them. Removed risers from mha

ENCLOSURE Z-

City of San Diego Metropolitan Wastewater Department Wastewater Collection Division

Sewer Spill Statistics, Calendar Year, through August 2008

TOTAL Spills	2000 YTD	2001 YTD	2002 YTD	2003 YTD	2004 YTD	2005 YTD	2006 YTD	2007 YTD	2008 YTD	% Change from 2000
	245	165	145	103	79	46	57	52	48	-80.4%
Volume (`000 gal)	34,958.1	1,862.5	928.8	656.7	4,747.1	80.0	70.6	438.8	49.8	N/A

Spills to PUBLIC WATERS	2000 YTD	2001 YTD	2002 YTD	2003 YTD	2004 YTD	2005 YTD	2006 YTD	2007 YTD	2008 YTD	% Change from 2000
	24	32	15	9	4	8	9	3	6	-75.0%
Volume ('000 gal)	34,725.4	1,759.7	797.2	643.7	4,618.2	73.5	55.1	409.6	10.4	N/A

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Prepared by Sue Reynolds, Sr Mgt Analyst, WWC

ENCLOSORE ·4



THE CITY OF SAN DIEGO MAYOR JERRY SANDERS

MEMORANDUM

DATE:	March 14, 2008
TO:	Steve Geitz, Supervising Property Agent, Real Estate Assets
FROM:	Laura Ball, Senior Planner, Metropolitan Wastewater Department
SUBJECT:	Purchase of new credits in the Marron Valley Cornerstone Lands Conservation Bank for I-805 & 94 Emergency Impacts, Norfolk Canyon Emergency Impacts and Long Term Access, Rancho Bernardo Canyon Emergencies and 60 th St. Sewer Replacement Project

MWWD would like to purchase credits from the City's Marron Valley Cornerstone Lands Conservation Bank (Bank) for use as mitigation in the following projects:

I-805 & 94 Canyon (40th & C Emergency Repair) Norfolk Canyon Emergency Impacts Norfolk Canyon Long Term Access Project Rancho Bernardo Canyon Emergencies (Rancho Bernardo 15 East and Escala) 60th St. Sewer Replacement Project

The project impacts and required mitigation are summarized in the table below.

Page 2

Steve Geitz, Supervising Property Agent, Real Estate Assets March 14, 2008

Project	Tier II impacts in MHPA (Acres)	Miti- gation Ratio	Tier II impact outside MHPA (Acres)	Miti- gation Ratio	Tier HIA impact in MHPA (Acres)	Mitig- ation Ratio	Tier IIIA impact outside MHPA (Acres)	Mitig- ation Ratio	Tier IIIB impact outside MHPA (Acres)	Mitig -ation Ratio	Miti- gation Required (Acres)
I-805 & 94 Canyon (40 th & C Emergency Repair)							.032	0.5:1	0.022	0.5:1	0.027
Combined Norfolk Canyon Emergency Impacts	0.911	1:1			0.108	1:1					1.019
Norfolk Canyon Long Term Access Project					0.02	1:1					0.02
Rancho Bernardo Canyon Emergency Impacts (RB 15 East & Escala)	0.41	1:1									0.41
60 th Street Sewer Replacement			0.095	1:1					0.048 Total mit	0.5:1	0.119

An interfund DP for total of \$40,673 is being routed Water Department Fund #41518, Account #78370 for the total 1.595 acres of mitigation required. This includes the transfer \$35,888 for the dedication of 1.595 acre (at a cost of \$22,500/acre) in the Bank, and \$4,785 (\$3,000/acre) for the Marron Endowment Fund.

If you have any questions or comments regarding the purchase of credits, please contact me at 858-292-6417.

LB/lb

Distribution: Lina Chim, Auditor Mike Elling, MWWD Myra Herrmann, EAS Jeanne Krosch, MSCP Paul Kilburg, Park and Recreation Joe Myers, ECP Jeffrey Szymanski, EAS

Los Penasquitos North

Mendamsko emperatisztu

Impact Project	Mitigation Type	Impact Habitat Type	Acreag	e Location	Impact Date
Lower Rose Creek Emergency Maintenance	Creation	SWS	0.21	Off-site in watershed	2/20/2004
Lower Rose Creek Emergency Maintenance	Creation	FM	0.03	Off-site in watershed	2/20/2004
Penasquitos View Emergency	Creation	CAM	0.002	In-canyon	8/18/2004
Acuna LT	Creation	DWET	0.01	Off-site in watershed	2/1/2005
Lopez Emergency Cleaning	Creation	SWS	0.08	In-canyon	2/13/2005
Lopez Emergency Cleaning	Creation	RF	0.004	In-canyon	2/13/2005
Lopez Emergency Cleaning	Creation	EW	0.001	In-canvon	2/13/2005
Lopez Emergency Cleaning	Creation	MFS	0.04	In-canyon	2/13/2005
Lopez Canyon Manhole 102 Maintenance	Creation	NVC	0.001	In-canyon	8/18/2005
Total Mitigation Acres: 3.584 acres					

Marron Valley Cornerstone Lands Conservation Bank

Impact Project	Mitigation Type	Impact Habitat Type	Acreag	· · · · · · · · · · · · · · · · · · ·	Impact Date
upland					
Hwy 163 North LT	Upland Bank	NNG	0.19	Off-site out of watershe	
Shepherd LT	Upland Bank	NNG	0.09	Off-site in watershed	
Stevenson Long Term Access Project	Upland Bank	NNG	0.28	Off-site out of watershe	
60th Street Pipe Relocation/Permanent Access	Upland Bank	NNG	0.024	Off-site out of watershe	
60th Street Pipe Relocation/Permanent Access	Upland Bank	DCSS	0.095	Off-site out of watershe	
Trinidad & Euclid	Upland Bank	SMC	0.13	Off-site out of watershe	5/9/2001
54th & Maisel	Upland Bank	DCSS	0.04	Off-site out of watershe	7/2/2001
Stevenson	Upland Bank	POS	0.04	Off-site out of watershe	8/8/2001
Stevenson	Upland Bank	DCSS	0.14	Off-site out of watershe	8/8/2001
Buchanan	Upland Bank	DCSS	0.04	Off-site out of watershe	3/11/2002
Buchanan	Upland Bank	POS	0.13	Off-site out of watershe	3/11/2002

Impact Project	Mitigation Type	Impact Habitat Type	Acreag	e Location	Impact Date
Buchanan	Upland Bank	SMC	0.12	Off-site out of watershe	3/11/2002
Norfolk (Fairmont & Montezuma)	Upland Bank	BBS	0.06	Off-site out of watershe	4/22/2002
Norfolk (Fairmont & Montezuma)	Upland Bank	SMC	0.106	Off-site out of watershe	4/22/2002
Norfolk (Fairmont & Montezuma)	Upland Bank	DCSS	0.398	Off-site out of watershe	4/22/2002
Norfolk (Fairmont & Montezuma)	Upland Bank	POS	0.151	Off-site out of watershe	4/22/2002
Buchanan (10th & Johnson Ave. Emergency Repair)	Upland Bank	DCSS	0.13	Off-site out of watershe	9/6/2002
45th & Boston	Upland Bank	NNG	0.07	Off-site out of watershe	12/13/2002
Shepherd	Upland Bank	DCSS	0.01	Off-site out of watershe	2/1/2003
I-805 & 94 Canyon (40th & C Emergency Repair)	Upland Bank	SMC	0.016	Off-site out of watershe	2/6/2003
I-805 & 94 Canyon (40th & C Emergency Repair)	Upland Bank	NNG	0.011	Off-site out of watershe	2/6/2003
Buchanan (Highway 163 & Lincoln Street Emergency)	Upland Bank	SMC	0.0536	Off-site out of watershe	4/11/2003
Buchanan (Highway 163 & Lincoln Street Emergency)	Upland Bank	DCSS	0.0181	Off-site out of watershe	e 4/11/2003
Buchanan LT	Upland Bank	POS	0.026	Off-site out of watershe	e 1/1/2004
Buchanan LT	Upland Bank	SMC	0.0415	Off-site out of watershe	1/1/2004
Rancho Bernardo 15 East	Upland Bank	DCSS	0.31	Off-site out of watershe	3/17/2004
Norfolk Canyon Maintenance Project	Upland Bank	DCSS	0.302	Off-site out of watershe	6/10/2004
Norfolk Canyon Maintenance Project	Upland Bank	SMC	0.002	Off-site out of watershe	6/10/2004
Norfolk LT	Upland Bank	SMC	0.02	Off-site out of watershe	7/1/2004
Buchanan/Caminito Fuente	Upland Bank	DCSS	0.02	Off-site out of watershe	9/15/2004
Stevenson Canyon Manhole 138 Emergency	Upland Bank	NNG	0.18	Off-site out of watershe	3/23/2006
Rancho Bernardo 15 East (Escala Emergency)	Upland Bank	DCSS	0.1	Off-site out of watershe	8/24/2007
Dakota Canyon Replacement/Relocation/Access Total Mitigation Acres: 3.9142 acres	Upland Bank	DCSS	0.57	Off-site out of watershe	1/22/2008

Marron Valley Cornerstone Lands Conservation Bank

demotory, September 15, 2003, 20

ENCLOSURE 5

From:	Brian Drummy
То:	Rower, Lyndsey
Date:	Wednesday, October 31, 2007 11:18:48 AM
Subject:	RS # 05-07-08-113

Hello Lyndsey,

Here is an update on the project that was precipitated by Mr. Serakos' call to the Council office regarding a sewer odor in the area of Escala Drive and Fernando Way. (Route Slip # 05-07-08-113) Metropolitan Wastewater Department (MWWD) crews responded to the route slip and found an overflow caused by a sewer blockage and a partially collapsed manhole in the canyon area south of Escala Drive. The blockage was cleared and a bypass system was established to handle the wastewater flow. A project to upgrade the wastewater pipes on Escala Road was started in late August. Approximately 500 feet of new wastewater main was installed on Escala Road, along with a new manhole structure. The project, which required closure of Escala Road to traffic for several weeks, was completed in October.

As a reminder, all calls from citizens reporting bad sewer odors should be referred immediately to the Sewer emergency hotline. A timely report will ensure an immediate response by MWWD crews to find the source of the odor and take appropriate corrective actions. The number is 619-515-3525. If there are any other questions or concerns, feel free to contact me at 858-292-6415.

Brian Drummy Senior Public Information Officer Metropolitan Wastewater Department 858-292-6415 bdrummy@sandiego.gov

CC:

Castillo, Olivia; Lade, Heather

Page 1 of 1 ENCLOSURE 6

Toth, Christopher

From:	Drummy, Brian
Sent:	Thursday, September 18, 2008 3:05 PM
То:	Cottingham, Donna
Cc:	Rower, Lyndsey; Castillo, Olivia; Toth, Christopher
Subject:	Outreach material
5	Info About Course Laterala adfutuat Fix It Ouida adf

Attachments: Info About Sewer Laterals.pdf; Just Fix It Guide.pdf

Hello Donna,

Chris Toth and I agreed today that Citizen's Assistance should be among the first to receive our new sewer information sheet so it can be distributed to Council staff and other interested parties. It's part of our on-going effort to keep City staff and the public informed about the ins and outs of the sewer system. As you can see, one side of the brochure deals specifically with sewer laterals – responsibilities for maintenance, repairs, common problems and solutions, and emergency procedures. The other side contains some common questions and answers about sewer laterals. And you'll notice the first question covers what should be done if a citizen notices a bad sewer odor. Feel free to make copies for distribution to Council staff, or send it out in an e-mail.

I'm also enclosing a copy of the "Just Fix It" guide that is published regularly in the San Diego Union-Tribune. Ruth McKinney Braun was kind enough to include a mention of how to report bad sewer odor (in addition to sewer spills) when she listed Metropolitan Wastewater's Emergency phone number.

If you need any additional information, feel free to call me at 26415. Brian Drummy

City of San Diego Information about Sewer Laterals – Street or Alley Main Connection*

Questions & Answers

Q: There is a bad odor coming from my drains. Who do I call?

- A: For sewer odors restricted to the inside of the home or building, call a licensed plumber or drain-cleaning specialist, many of which are listed in the local yellow pages. For sewer odors outside of the home or building, call the City of San Diego's Water and Sewer Emergency Line at (619) 515-3525.
- Q: Sewage from my sewer lateral has backed up into my home or building. Who do I call?
- A: For assistance with sewer backups, call a licensed plumber or drain-cleaning specialist, many of which are listed in the local yellow pages. You will need to select and hire this person or company yourself. The City of San Diego cannot make a recommendation.
- Q: Sewage has spilled from my cleanout and into the City right-of-way. What should I do?
- A: Control and contain the spill, as much as possible, with sandbags, dirt or cat litter. Turn off the water, if necessary. Then call the City of San Diego's Water and Sewer Emergency Line at (619) 515-3525. A crew will investigate and determine who is responsible for the costs of clean up. If the spill is the result of a blockage or a collapse of the sewer lateral on your property, you will be responsible for the cost of clean up.
- Q: Sewage has spilled from my cleanout and onto my property. What should I do?
- A: Control and contain the spill, as much as possible, with sandbags, dirt or cat litter. Turn off the water, if necessary. Then call a licensed plumber or drain-cleaning specialist, many of which are listed in the local yellow pages. You will need to select and hire this person or company yourself. The City of San Diego cannot make a recommendation.

Q: My plumber tells me there is a blockage in my sewer lateral. What should I do?

- A: If you have an obstruction in your lateral, it should be cleared up by a licensed plumber or drain-cleaning specialist, many of which are listed in the local yellow pages. If the plumber finds the lateral broken or finds a blockage in the lateral that cannot be cleared, the lateral needs repair. Responsibility of the repair depends upon the location of the problem. If the problem is beyond the property line and in the City right-of-way, the plumber should call the City's Sewer Emergency Line at (619) 515-3525. If the problem is between the house and the property line, make arrangements with the licensed plumber or contractor to repair it.
- Q: My plumber says the City requires a property line cleanout. Is this true?
- A: No, the City of San Diego does not require property line cleanouts.

Q: My plumber says the City charges for plumber's reports. Is this true?

- A: No, the City does not charge to file a plumber's report.
- Q: My plumber says the City will reimburse me for the expenses I incurred. Is this true?
- A: No, there is no reimbursement for plumbing expenses. You are responsible for the maintenance of your sewer lateral. The City of San Diego will only repair at no charge to you the portion of the lateral that lies beyond the property line and in the City right-of-way.

Sewer Laterals Street or Alley Main Connection*

Property owners are responsible for maintenance of the sewer lateral from the point where it connects with the home or building to the point where it connects with the City sewer main. Maintenance includes:

- Keeping the lateral free of any obstruction, such as roots, grease or debris
- Repairing the lateral up to the property line

The Cify of San Diego will repair a break or collapse in the lateral, if it is beyond the property line and in the City right of way.

JUST FIX IT | A SAN DIEGO GUIDE FOR GETTING THINGS DONE

Does something need fixing in your neighborhood? Your first call should be to the government agency responsible for taking care of the problem.

Most infrastructure problems, including potholes and broken streetlights, are handled by a city's public works department. In unincorporated areas, such as Ramona, Lakeside and Fallbrook, San Diego County is responsible. Caltrans handles freeway maintenance, and the Metropolitan Transit System takes care of maintenance for trolleys and buses in most of the county. The North County Transit District is in charge of repairs for bus and Coaster systems.

In general, the phone lines listed below are staffed Monday to Friday during regular business hours.

Some local governments have hotlines dedicated to specific problems and some have complaint forms on their Web sites that can be submitted online. We've included that information below.

Infrastructure problems at schools are usually handled by a school principal. If you don't get results, call your school district and ask for the person in charge – of maintenance or facilities.

If you make your request by phone, we highly recommend ask-

ing for a tracking number so you can monitor the status of your request. If you file your complaint online, print out a copy of your request or any acknowledgment provided.

MUNICIPAL GOVERNMENTS City of San Diego

Environmental Services (includes waste code violations on public or private property): Fill out a Trash/Litter/Recycling Service Request form at apps.sandlego.gov/econtainer or call (858) 694-7000.

Graffiti Hotline (619) 525-8522, sandiego.gov/graffiti

Metropolitan Wastewater (sewer spills and bad sewer odor): (619) 515-3525; stormwater pollution hotline: (619) 235-1000.

Neighborhood Code Compliance

(includes suspected noise, land development, disabled access, signs and zoning violations): (619) 236-5500

Park and Recreation sandlego.gov/

park-and-recreation/ general-info/mypark.shtml

Streets (includes road repairs, streetlights, street signs; storm drains, maintenance of trees in public spaces and traffic signals): (619) 527-7500. A request for service can be filed online at apps.sandiego.gov/streetdiv

Transportation Engineering (in-

cludes requests for traffic signs, lights, markings, speed calming and parking): (619) 533-3126. A request for service can be filed online at sandiego.gov/ engineering-cip/services/public/ request.shtml

Water (includes water leaks, meter leaks or pressure problems): (619) 515-3525

Coronado

Public Services: (619) 522-7380

A request for service can be filed online at coronado.ca.us. Click on "Public Services Work Order Request" under Quick Links.

San Diego County

(unincorporated areas, including Alpine, Borrego Springs, Fallbrook, Julian, Lakeside, Ramona, Rancho San Diego, Spring Valley and Valley Center)

Public Works road maintenance: (877) 684-8000

Traffic signals and streetlights: (858) 874-4155

Traffic signs: (858) 874-4063

A request for service can be filed online at co.san-diego.ca.us. Click on "Customer Concerns" un-. der Quick Links on the home page.

TRANSPORTATION AND OTHER AGENCIES

Caltrans

Main switchboard; (619) 688-6670

A request for service can be filed online at dot.ca.gov/dist11. Click on "Contact us" on the home page. Scroll down to find the electronic form.

Metropolitan Transit System

Customer service for trolleys and buses: (619) 557-4555

A request for service can be filed online at sdcommute.com. Click on "Customer Service" at the bot tom of the home page.

North County Transit District

Customer service: (760) 966-6500

Calls need to be made between 8 a.m. and 5 p.m. Monday through Friday.

Requests for service cannot be filed online.

San Diego Regional Airport Authority (Lindbergh Field)

Main switchboard: (619) 400-2400

The authority can be contacted al san.org. Click on "San Diego International Airport" and then "Contact Us."

San Diego Unified Port District

Customer service: (619) 686-620(

The port can be contacted at portofsandiego.org. Click on "Contact Us" at the top of the page.

HOW TO CONTACT LOCAL OFFICIALS

SAN DIEGO UNIFIED SCHOOL BOARD

Luis Acle District: D Phone: (619) 725-5550 Email: board@sandi.net

John de Beck District: C Phone: (619) 725-5550 Email: board@sandi.net

Shelia Jackson District: E Phone: (619) 725-5550 Email: sjackson@sandi.net

Mitz Lee District: A Phone: (619) 725-5550 Email: board@sandi.net

Katherine Nakamura District: B Phone: (619) 725-5550 Email: board@sandi.net

SAN DIEGO CITY COUNCIL

Mayor Jerry Sanders (619) 236-6330 jerrysanders@sandiego.gov District 1, Scott Peters (619) 236-6611

scottpeters@sandiego.gov

District 2, Kevin Faulconer (619) 236-6622 kevinfaulconer@sandiego.gov

District 3, Toni Atkins (619) 236-6633 toniatkins@sandiego.gov

District 4, Tony Young (619) 236-6644 anthonyyoung@sandiego.gov



District 6, Donna Frye (619) 236-6616 donnafrye@sandiego.gov

District 7, Jim Madaffer (619) 236-6677 jmadaffer@sandiego.gov

District 8, Ben Hueso (619) 236-6688 benhueso@sandiego.gov



travel

EVERY SUNDAY

ENCLOSURE 7

Citizens' Ass		Origination Council - 1	ng Office: District 5	Route Slip Number: 05-07-08-113
Route City of San	_m.	Staff: Courtney	Smith	Date Routed: 08/21/2007
Chy of San	Diego	Phone: (619) 236-		Close Date:
CITIZEN'S NAME/ADDRESS MA	KING COMPLA			DEPARTMENTS
Leonidas Serakos 18284 Fernando Way San Diego, CA 92128-1213				Metropolitan Wastewater Dept Interim Due Date: 08/28/2007 Final Due Date: Extension:
EMAIL:				
WORK TELEPHONE:	HOME TELEI	PHONE:		
SUBJECT OF COMPLAINT OR IN Sewer: really bad sewer smell	NQUIRY:	<u>www.w.e.e.</u>		Route Slip Coordinator 236-6970, M.S. 56C
LOCATION OF COMPLAINT OR Escala Road	INQUIRY:	nur 1947 - Anna Anna - a nur anna an Anna Anna Anna Anna Anna Anna		ι.
Type of response: ☑ Send electronic copy with attachme forwarding to the originating office □ Mail department letter directly to ci Citizens' Assistance for forwarding	tizen, and send an	n electronic coj		
Details of complaint or inquiry:				
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Department Response:		· · · ·	Department	File No.:
Reply below and/or attached shee	ts.			d see copies of letter sent to citizen.
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Details of department's response:				
Response By:	Dept,/Pl	hone:		Date:

8. ENCLOSURE

From:	Lyndsey Rower
То:	Brian Drummy
Date:	Wednesday, August 22, 2007 9:34:45 AM
Subject:	Re: phone numbers

I will forward this to Donna and see what she says. She is out until Monday, the citizens don't always give their phone but I will see what I can do.

Thank you, Lyndsey Rower Route Slip Coordinator Citizens' Assistance Customer Service Department 619-236-6970

>>> Brian Drummy 8/22/2007 9:30 AM >>>

Hi Lyndsey,

Is it possible to make it a requirement (or at least a very strong suggestion) that routes slips contain contact phone numbers for the citizen who called in the complaint? The latest Route Slip here at Metro (05-07-08-113) is a case in point. A phone call, in many cases, can save a lot of time and effort in responding to the Route Slips, especially when it involves something in the very northern reaches of the city. Thanks,

Brian

ENCLOSUNE 9.

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SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

PROPOSED DRAFT

HEARING PROCEDURE FOR ADMINISTRATIVE CIVIL LIABILITY COMPLAINT NO. R9-2009-0042 ISSUED TO

CITY OF SAN DIEGO SEWAGE COLLECTION SYSTEM

SCHEDULED FOR OCTOBER 14, 2009

PLEASE READ THIS HEARING PROCEDURE CAREFULLY. FAILURE TO COMPLY WITH THE DEADLINES AND OTHER REQUIREMENTS CONTAINED HEREIN MAY RESULT IN THE EXCLUSION OF YOUR DOCUMENTS AND/OR TESTIMONY.

Background

The Assistant Executive Officer of the Regional Water Quality Control Board, San Diego Region (Regional Water Board) has issued an Administrative Civil Liability (ACL) Complaint pursuant to California Water Code Section 13385 (CWC) against City of San Diego (Discharger) alleging that it has violated Prohibitions C.1 and C.2 of Order No. 2006-0003-DWQ and Section 13385(a)(5) of the California Water Code by discharging 381,185 gallons of untreated sewage into Lake Hodges, a water of the United States. The Complaint proposes that administrative civil liability in the amount of \$620,278 be imposed as authorized by CWC Section 13385. Unless the Discharger waives its right to a hearing and pays the proposed liability, a hearing will be held before the Regional Water Board during its meeting of October 14, 2009, in San Diego.

Purpose of Hearing

The purpose of the hearing is to receive relevant evidence and testimony regarding the proposed ACL Complaint. At the hearing, the Regional Water Board will consider whether to adopt, modify, or reject the proposed assessment. If the Regional Water Board adopts an assessment, an ACLC Order will be issued.

The public hearing on October 14, 2009, will commence as announced in our Regional Water Board meeting agenda. The meeting will be held at the Regional Water Board Office at 9174 Sky Park Court, Suite 100, in San Diego. An agenda for the meeting will be issued at least ten days before the meeting and will be posted on the Regional Water Board's web page at: www.waterboards.ca.gov/sandiego.

Hearing Procedures

The hearing will be conducted in accordance with this hearing procedure. This proposed draft version of the hearing procedure has been prepared by the Prosecution Team, and is subject to revision and approval by the Regional Water Board's Advisory Team. A copy of the procedures governing an adjudicatory hearing before the Regional Water Board may be found at Title 23 of the California Code of Regulations, § 648 et seq., and is available at http://www.waterboards.ca.gov or upon request. In accordance with Section 648, subdivision (d), any procedure not provided by this Hearing Procedure is deemed waived. Except as provided in Title 23 of the California Code of Regulations (CCR), § 648(b), Chapter 5 of the Administrative Procedures Act (commencing with § 11500 of the Government Code) does not apply to adjudicatory hearings before the Regional Water Board. This Notice provides additional requirements and deadlines related to the proceeding.

THE PROCEDURES AND DEADLINES HEREIN MAY BE AMENDED BY THE ADVISORY TEAM IN ITS DISCRETION. **ANY OBJECTIONS TO THE HEARING PROCEDURE MUST BE RECEIVED BY CATHERINE HAGAN, SENIOR STAFF COUNSEL, NO LATER THAN JULY 30, 2009, OR THEY WILL BE WAIVED.** FAILURE TO COMPLY WITH THE DEADLINES AND REQUIREMENTS CONTAINED HEREIN MAY RESULT IN THE EXCLUSION OF DOCUMENTS AND/OR TESTIMONY.

Hearing Participation

Participants in this proceeding are designated as either "parties" or "interested persons." Designated <u>parties</u> to the hearing may present evidence and cross-examine witnesses and are subject to cross-examination. <u>Interested persons</u> may present non-evidentiary policy statements, but may not cross-examine witnesses and are not subject to cross-examination. Interested persons generally may not present evidence (e.g., photographs, eye-witness testimony, monitoring data). Both designated parties and interested persons may be asked to respond to clarifying questions from the Regional Water Board, staff or others, at the discretion of the Regional Water Board.

The following participants are hereby designated as parties in this proceeding:

- (1) San Diego Regional Water Board Prosecution Staff
- (2) City of San Diego Staff

Requesting Designated Party Status

Persons who wish to participate in the hearing as a designated party, and not already be listed above, shall request party status by submitting a request in writing (with copies to the existing designated parties) no later than 5 p.m. on **August 10, 2009**, to Catherine Hagan, Senior Staff Counsel, at the address set forth above. The request shall include an explanation of the basis for status as a designated party (e.g., how the issues to be addressed in the hearing and the potential actions by the Regional Water Board affect the person), the information required of designated parties as provided below, and a statement explaining why the party or parties designated above do not adequately represent the person's interest. Any opposition to the request must be submitted by 5 p.m. on **August 19, 2009**. The parties will be notified by 5 p.m. on **August 31, 2009**, as to whether the request has been granted or denied.

Contacts

Advisory Staff:

Catherine Hagan (George), Esq. Senior Staff Counsel Regional Water Quality Control Board, San Diego Region 9174 Sky Park Court, Suite 100 San Diego, CA 92123-4353 CHagan@Waterboards.ca.gov

John Robertus Executive Officer Regional Water Quality Control Board, San Diego Region 9174 Sky Park Court, Suite 100 San Diego, CA 92123-4353

Prosecution Staff:

Danielle Teeters Senior Staff Counsel State Water Resources Control Board Office of Enforcement P.O. Box 100 Sacramento, CA 95812

Michael McCann Assistant Executive Officer Regional Water Quality Control Board, San Diego Region 9174 Sky Park Court, Suite 100 San Diego, CA 92123-4353 Jeremy Haas Senior Environmental Scientist of the Compliance Assurance Unit Regional Water Quality Control Board, San Diego Region 9174 Sky Park Court, Suite 100 San Diego, CA 92123-4353

Joann Cofrancesco Water Resource Control Engineer Regional Water Quality Control Board, San Diego Region 9174 Sky Park Court, Suite 100 San Diego, CA 92123-4353

Frank Melbourn Water Resource Control Engineer Regional Water Quality Control Board, San Diego Region 9174 Sky Park Court, Suite 100 San Diego, CA 92123-4353

Leo Sarmiento Water Resource Control Engineer State Water Resources Control Board Office of Enforcement P.O. Box 100 Sacramento, CA 95812

Discharger:

Mr. Timothy Bertch, Director Metropolitan Wastewater Department City of San Diego 9192 Topaz Way San Diego, CA 92123

Separation of Functions

To help ensure the fairness and impartiality of this proceeding, the functions of those who will act in a prosecutorial role by presenting evidence for consideration by the Regional Water Board (Prosecution Staff) have been separated from those who will provide advice to the Regional Water Board (Advisory Staff). Members of the Advisory Staff are: Catherine Hagan, Senior Staff Counsel, and John Robertus, Executive Officer. Members of the Prosecution Staff are: Danielle Teeters, Senior Staff Counsel, Michael McCann, Assistant Executive Officer, Jeremy Haas, Senior Environmental Scientist of the Compliance Assurance Unit, Joann Cofrancesco, Water Resource

Control Engineer, Frank Melbourn, Water Resource Control Engineer and Leo Sarmiento, Water Resources Control Engineer. Unless the Discharger objects to and/or comments on this notice to Advisory Staff member CATHERINE HAGEN by July 30, 2009, or unless the Advisory Staff issues an alternative Notice of Hearing Procedure, the procedures set forth herein will govern the October 14, 2009 ACLC hearing.

Ex Parte Communications

The designated parties and interested persons are forbidden from engaging in *ex parte* communications regarding this matter with members of the Advisory Staff or members of the Regional Water Board. An *ex parte* contact is any written or verbal communication pertaining to the investigation, preparation, or prosecution of the ACL Complaint between a member of a designated party or interested party on the one hand, and a Regional Water Board member or an Advisory Staff member on the other hand, unless the communication is copied to all other designated and interested parties (if written) or made at a proceeding open to all other parties and interested persons (if verbal). Communications regarding non-controversial procedural matters are not *ex parte* contacts and are not restricted. Communications among the designated and interested parties themselves are not ex parte contacts.

Hearing Time limits

To ensure that all participants have an opportunity to participate in the hearing, the following time limits shall apply: each designated party shall have a combined 20 minutes to present evidence, cross-examine witnesses (if warranted), and provide a closing statement; and each interested person shall have 3 minutes to present a non-evidentiary policy statement. Participants with similar interests or comments are requested to make joint presentations, and participants are requested to avoid redundant comments. Participants who would like additional time must submit their request to the Advisory Team so that it is received no later than ten days after all of the evidence has been received (September 28, 2009). Additional time may be provided at the discretion of the Advisory Team (prior to the hearing) or the Regional Board Chair (at the hearing) upon a showing that additional time is necessary.

Submission of Evidence and Policy Statements

The following information must be submitted in advance of the hearing:

- All evidence (other than witness testimony to be presented orally at the hearing) that the Designated Party would like the Regional Board to consider. Evidence and exhibits already in the public files of the Regional Board may be submitted by reference as long as the exhibits and their location are clearly identified in accordance with Title 23, CCR, Section 648.3.
- 2. All legal and technical arguments or analysis.

- 3. The name of each witness, if any, whom the designated parties intend to call at the hearing, the subject of each witness' proposed testimony, and the estimated time required by each witness to present direct testimony.
- 4. The qualifications of each expert witness, if any.
- 5. (Discharger only) If the Discharger intends to argue an inability to pay the civil liability proposed in the Complaint (or an increased or decreased amount as may be imposed by the Regional Board), the Discharger should submit supporting evidence as set forth in the "ACL Fact Sheet" under "Factors that must be considered by the Board."
- 6. (Discharger only) If the Discharger would like to propose a Supplemental Environmental Project (SEP) or Compliance Project (CP) in lieu of paying some or all of the civil liability in accordance with the State Water Board's Water Quality Enforcement Policy, the Discharger shall submit a detailed SEP OR CP proposal including a specific implementation timetable. [If the Discharger would like to propose a SEP that is on the Regional Board's preapproved SEP list, the Discharger shall identify the specific SEP.]

The Prosecution Team shall submit two hard copies of the information to Catherine Hagan, Senior Staff Counsel, and to the other designated parties so that it is received no later than 5 p.m. on August 31, 2009.

The remaining designated parties shall submit 20 hard copies and one electronic copy of the information to Catherine Hagan, Senior Staff Counsel, and to the other designated parties so that they are received no later than 5 p.m. on September 18, 2009.

Interested persons who would like to submit written non-evidentiary policy statements are encouraged to submit them to Catherine Hagan, Senior Staff Counsel, as early as possible, but they must be received by September 30, 2009 prior to the hearing. Interested persons do not need to submit written comments in order to speak at the hearing.

In accordance with Title 23, California Code of Regulations, Section 648.4, the Regional Board endeavors to avoid surprise testimony or evidence. Absent a showing of good cause and lack of prejudice to the parties, the Regional Board may exclude evidence and testimony that is not submitted in accordance with this hearing procedure. Excluded evidence and testimony will not be considered by the Regional Board and will not be included in the administrative record for this proceeding. Power Point and other visual presentations may be used at the hearing, but their content may not exceed the scope of other submitted written material. A copy of such material intended to be presented at the hearing must be submitted to the Advisory Team before the hearing for inclusion in the administrative record. Additionally, any witness who has submitted written testimony for the hearing shall appear at the hearing and affirm that the written testimony is true and correct, and shall be available for cross-examination.

Request for Pre-hearing Conference

A designated party may request that a pre-hearing conference be held before the hearing in accordance with Water Code Section 13228.15. A pre-hearing conference may address any of the matters described in subdivision (b) of Government Code Section 11511.5. Requests must contain a description of the issues proposed to be discussed during that conference, and must be submitted to the Advisory Team, with a copy to all other designated parties, no later than 5 p.m. on September 18, 2009.

Evidentiary Objections

Any designated party objecting to written evidence or exhibits submitted by another designated party must submit a written objection so that it is received by 5 p.m. on September 28, 2009 to the Advisory Team with a copy to all other designated parties. The Advisory Team will notify the parties about further action to be taken on such objections and when that action will be taken.

Evidentiary Documents and File

The Complaint and related evidentiary documents are on file and may be inspected or copied at the Regional Board office at 9174 Sky Park Court, Suite 100, San Diego, CA 92123. This file shall be considered part of the official administrative record for this hearing. Other submittals received for this proceeding will be added to this file and will become a part of the administrative record absent a contrary ruling by the Regional Board Chair. Many of these documents are also posted on-line at www.waterboards.ca.gov/sandiego. Although the web page is updated regularly, to assure access to the latest information, you may contact Catherine Hagan, Senior Staff Counsel.

Questions

Questions concerning this proceeding may be addressed to Catherine Hagan, Senior Staff Counsel.

IMPORTANT DEADLINES

- July 22, 2009 Prosecution Team issues ACL Complaint to Discharger and Advisory Team, sends proposed Hearing Procedure to Discharger and Advisory Team, and publishes Public Notice
- July 30, 2009 Objections due on proposed Hearing Procedure
- August 4, 2009Advisory Team issues Hearing Procedure
- August 10, 2009 Deadline for submission of request for designated party status.
- August 19, 2009 Deadline for opposition to request for designated party status.
- August 19, 2009 Discharger's deadline for waiving right to hearing.
- August 31, 2009 Prosecution Team's deadline for submission of all information required under "Evidence and Policy Statements," above.
- August 31, 2009 Advisory Team issues decision on requests for designated party status, if any.
- September 18, 2009 Remaining Designated Parties' Deadline for submission of all information required under "Evidence and Policy Statements," above.
- September 18, 2009 All Designated Parties' deadline for submission of request for pre-hearing conference.
- September 28, 2009 All Designated Parties' deadline for submission of rebuttal evidence (if any) and evidentiary objections.

October 14, 2009 Hearing

MICHAEL McCANN Assistant Executive Officer

DATE