San Diego
Regional Water Quality
Control Board

Executive Officer's
Report

October 11, 2006
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**PART B – SIGNIFICANT REGIONAL WATER QUALITY ISSUES**

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**PART C – STATEWIDE ISSUES OF IMPORTANCE TO THE SAN DIEGO REGION**

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*Attachments* for B-1, B-2, B-6, C-1 and C-5 are included at the end of the report. Also included as an attachment are the Significant NPDES Permits, WDRs and RB Actions.
SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

EXECUTIVE OFFICER’S REPORT

October 11, 2006

PART A
SAN DIEGO REGION STAFF ACTIVITIES (Staff Contact)

1. World Monitoring Day (David Gibson)

World Monitoring Day Activities
Students, teachers, and citizens throughout San Diego County will conduct water quality analyses on Friday, October 12, 2006 as part of World Water Monitoring Day. The World Water Monitoring Day, which is held annually between September 18th and October 18th, is an effort to monitor and assess the health of local rivers, lakes, estuaries and other water bodies. Since its inception, more than 80,000 people have participated in 50 countries. This regional event is coordinated by the San Diego Citizen Watershed Monitoring Consortium (Consortium) and is part of a worldwide effort to improve water quality.

The Water Monitoring Day media event in San Diego County will be held at Old Poway Park, located at 14134 Midland Road, Poway. Water Quality testing will begin after the 8:00 AM news conference. Tijuana events will take place October 5th and 6th at Parque Morelos as part of Expo Ambiente. Tribal World Water Monitoring Day is scheduled for September 17th at the La Jolla Reservation.

During the event, volunteer groups and students will monitor water temperature, pH, dissolved oxygen, and turbidity using water quality kits in sites throughout San Diego County and along the Baja California coast. Their results will be shared with other students monitoring in several countries around the globe, including China, Mexico, Poland, Uzbekistan, Vietnam and Malaysia.

For the second year, Dr. Badri Badrihia of San Diego State University, Rob Roy of the San Diego Stream Team, and Karen Franz of San Diego Coastkeeper will participate in the World Monitoring Day as part of the San Diego Citizen Monitoring Project funded through a Proposition 13 grant of $497,798. This grant is one of only a few in California dedicated solely to advancing citizen monitoring as an approach to collect high quality, quantitative water quality data on the chemical, physical and biological conditions of water bodies in the San Diego region. This group has made significant progress working with the Consortium to coordinate citizen monitoring.

Teachers and interested members of the community can participate by visiting the Consortium website: www.sdwmc.org. Participants may select their own water sampling sites. Guidelines for water sampling are provided on the website.
Water quality monitoring kits are available following registration on this website. Following this event, all participants will post their results on the Consortium website so this information can be shared by the participants, the public, and decision-makers.

Regional Board Participation in World Monitoring Day
Victor Vasquez, Melissa Valdivinos, and Lilian Busse are participating in the World Monitoring Day on behalf of the Regional Board. Previously, Victor Vasquez and Lilian Busse have performed sampling for World Water Monitoring Day at local creeks on behalf of the Regional Board and San Diego Stream Team, respectively. During the October 13th event, Ms. Busse will represent the Regional Board as the bioassessment component of the World Monitoring Day. In addition, Mr. Vasquez and Ms. Valdivinos have included a community outreach element effort to educate and involve students from the Barrio Logan College Institute (BLCI) to the event. BLCI is an organization that prepares first-generation, college-bound students for higher education. They made a presentation to a group of 27 middle school and high school students on Thursday, September 28 at 6:00 p.m. The interactive presentation lasted an hour and a half and covered sources of local water supply; descriptions of the water cycle and watersheds; recognition of beneficial uses, water quality parameters, sources of pollution, and pollution prevention techniques; and a water sampling and analysis discussion. The students are now prepared to collect and analyze water samples with Victor and Melissa at Chollas Creek and Sweetwater River for World Water Monitoring Day. Twelve students helped perform sampling and analyses on Thursday, October 5 at 4:30 p.m.

2. *California and the World’s Ocean Conference* (Christina Arias and Lilian Busse)

Conference Overview
On September 17-20, 2006, the California Resources Agency and Cal/EPA hosted the international conference *California and the World Ocean’ 06* (CWO ‘06). The conference was held in Long Beach and focused on improving ocean and coastal management in California and throughout the world and implementing a Five-Year-Strategic Plan recently adopted by the Ocean Protection Council. Over 1000 people attended the conference from 23 states and 6 countries. Ms. Christina Arias and Dr. Lilian Busse represented the Regional Board at CWO’06.

CWO’06 featured hundreds of speakers and panelists in more than 80 different sessions on a variety of issues ranging from the health of the ocean to the economic benefits the ocean plays in California’s economy. Sessions included such topics as international and regional governance, water quality, ecosystem and watershed-based management, and economic uses of the ocean.

CWO’06 also included multiple sessions focused on public education about the ocean. The sessions included topics on ocean literacy, the access of ocean
education by diverse audiences, the Education and the Environment Initiative, and the creation of the "Thank You Ocean" campaign. This new statewide campaign, organized by NOAA National Marine Sanctuary Program; and the California Resources Agency, can be accessed at www.thankyouocean.org. This campaign was designed to instill in Californians a sense of personal connection with and responsibility for the ocean and coast.

At the opening sessions of CWO '06, the Governors of California, Oregon, and Washington announced a historic partnership and action plan for ocean and coastal resource protection along the Pacific Coast. The regional agreement forges a long-term partnership to tap world-class experts in each state and to tackle challenges facing the ocean and coast including:

- Ensuing clean coastal waters and beaches for citizens of the region;
- Protecting and restoring healthy ocean and coastal habitats;
- Promoting effective ecosystem-based management of ocean and coastal resources;
- Reducing adverse impacts from offshore development;
- Expanding ocean and coastal scientific information, research, and monitoring;
- Increasing ocean awareness and literacy among tri-state residents; and
- Fostering sustainable economic development in coastal communities.

The governors have directed their respective agencies and staffs to work with representatives of business, environmental, governmental, educational, and academic communities to develop recommendations for this historic regional partnership.

Regional Board Participation

Lilian Busse gave a presentation on the monitoring program for harmful algal blooms in Southern California. Ms. Busse and her colleagues at UCSD Scripps Institution of Oceanography developed the monitoring program in 2005 with funding from Southern California Coastal Ocean Observing System (SCCOOS). Harmful algal blooms (toxic and non-toxic) are increasingly found in local waters. Toxic and potentially harmful algal blooms species (diatoms and dinoflagellates), chlorophyll, and environmental parameters are monitored twice a week off the Scripps Pier in La Jolla, California. Results from this monitoring program will result in a better understanding of the harmful algal bloom key parameters (physical, chemical, and biological) and facilitate the development of an early warning system for harmful algal blooms. This program stresses the importance of collecting time series data of harmful algal blooms and should be considered an integral component of coastal ocean observing systems. Data collected from this program are relevant for protecting the health of humans, marine mammals and fish in local waters.
3. Project POWER (Dave Gibson)
The goal of the San Diego Project POWER education program is to foster local stewardship to protect inland and coastal wetlands in San Diego. The San Diego Project POWER Team is developing a wetlands public education program that will be held at the San Diego Wild Animal Park in November or early December 2006. The previously scheduled October 7, 2006 workshop was postponed due to scheduling conflicts and limited enrollment. The workshop invitation list is being significantly expanded to include representatives of homeowners associations, realtor and building industry organizations, and civic and sporting groups. The emphasis of the workshops will be on the values and importance of wetlands and the regulatory and community tools to protect them. The workshop will include a discussion of impacts of recent Supreme Court decisions regarding wetlands on the permitting and enforcement approach and the role of the public in protecting these resources.

Dave Gibson (d gibson@waterboards.ca.gov) and Cindy Wallace, the Associate Education Director of the San Diego Wild Animal Park (CWallace@sandiegozoo.org) are the primary contacts for information regarding the 2006 Project POWER Workshop.

4. County of San Diego SAM Forum (Jody Ebsen and John Odermatt)
On September 20, 2006, the Regional Board staff attended the County of San Diego Department of Environmental Health (DEH) Site Assessment and Mitigation (SAM) Forum. The SAM Forum is convened on a semi-annual basis and includes participants from State and local regulatory agencies, UST owners/operators, development firms, environmental consultants and contractors, civilian and military dischargers. The agenda included presentations by both the State (Ms. Judy Reid) and Regional Board (Ms. Jody Ebsen) staffs. There were a wide range of topics on the agenda, including: Agency updates (Ms. Jody Ebsen - RWQCB), Methamphetamine Lab cleanup – Case study (Mr. Ewan Moffat), Fractured rock case study (Messrs. Kevin Heaton and Tony Sawyer), Confirming Natural Attenuation of a Large MTBE and TBA Plume (Messrs. Dave Hull and Rick Atlers, Levine Flick), Financial Assistance Programs (Ms. Judy Reid – SWRCB), and Environmental Insurance (Mr. Gary Lutz – Willis Insurance Services). The presentations and program for the SAM Forum are available on-line at: http://www.co.san-diego.ca.us/deh/lwo/sam/. Additional information on specific leaking Underground Storage Tank (LUST) cases may be found in the GEOTRACKER database available on-line at: https://www.geotracker.waterboards.ca.gov/.

5. Groundwater Resources Association Conference (John Odermatt)
On September 21 and 22, 2006, the Regional Board staff (Jody Ebsen, Sue Pease, Kelly Dorsey, Brian McDaniel, and John Odermatt) attended the 15th Annual Groundwater Resources Association (GRA) Conference “Assessment, Use, and Management of Groundwater in Areas of Limited Supply.” The topics discussed during the conference included: Groundwater in Small Coastal Basins,

- **Water District representatives** – (Mr. Dennis Bostad – Sweetwater Authority, Mr. Mike McGrath – City of Oceanside, and Ms. Surraya Raelid, City of San Diego), who spoke about future reliance of treated brackish groundwater as a future source of potable water supplies in the San Diego Region.

- **County Water Authority** – Mr. Dan Diehr, who spoke about the continuing development of groundwater resources by the City of Oceanside in the Mission Basin of the Lower San Luis Rey River watershed.

- **County of San Diego** - Messrs. Jim Bennett and Kevin Heaton, who spoke about the development of groundwater resources within San Diego County and the reliance of County residents, located in the central and eastern parts of San Diego County, upon domestic and municipal water wells for all their potable water supplies. Mr. Bennett discussed ongoing groundwater depletion problems in Borrego Valley, and groundwater resource requirements that are necessary to support proposed development projects located in San Diego County. Mr. Heaton provided a graphic indicating that approximately 23,000 water wells have been permitted (since 1974) by the County of San Diego Department of Environmental Health.

- **Campo Indian Landfill** – Dr. Jay Jones and several other presenters spoke about results from recent groundwater investigations, to be included in a revised Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA), associated with the proposed municipal solid waste landfill at the Campo Indian Reservation. Since the proposed landfill is located on tribal lands, the Regional Board does not have any jurisdiction over the proposed facility. In 1990, the San Diego Regional Board directed the Regional Board staff not to participate in the regulatory processes concerning the Campo Landfill. Subsequently, the Campo Environmental Protection Agency (CEPA) reached an agreement with the State to include the State Water Resources Control Board staff in their technical evaluation of the proposed project.

The conference program also included a presentation by Dr. Margaret Eggers entitled "Overview of the Development and Maturation of a Large MTBE Plume – Lessons to Learn" concerning groundwater pollution from the Mission Valley Terminal in San Diego. Additional information about the GRA and their annual conference is available on-line at [http://www.grac.org/annualmeeting05.asp](http://www.grac.org/annualmeeting05.asp).
6. **Quarterly Agency Coordination Meeting (John Odermatt)**

   On September 28, 2006; the Regional Board staff attended a quarterly coordination meeting with the County of San Diego Department of Public Works – Landfill Management Unit (see County DPW at [http://www.co.san-diego.ca.us/dwp/management/fitness.html](http://www.co.san-diego.ca.us/dwp/management/fitness.html)), Solid Waste Local Enforcement Agencies (San Diego City LEA at [http://www.sandiego.gov/development-services/lea.shtml](http://www.sandiego.gov/development-services/lea.shtml) and San Diego County LEA at [http://www.co.sandiego.ca.us/deh/landfills.html](http://www.co.sandiego.ca.us/deh/landfills.html)), and Air Pollution Control District (http://www.sdpod.org) staffs to discuss monitoring, maintenance and compliance issues for closed and inactive landfills owned by the County of San Diego. These quarterly meetings provide a regular forum for discussion of various regulatory and technical issues with the County DPW and other local regulatory staff. The meetings allow the staffs to try to resolve compliance issues before they become violations of the applicable requirements.

7. **Agency Coordination with San Diego County (John Odermatt)**

   On September 8, 2006; members of the Regional Board staff (Messrs. David Barker, John Anderson, John Odermatt, and Ms. Jody Ebsen) attended a management coordination meeting with the County of San Diego Department of Environmental Health – Land and Water Quality Division staff (Messrs. George McCandless, Kevin Heaton, Mike Vernetti and Tony Sawyer) (also see County DEH web site at [http://www.co.sandiego.ca.us/deh/wnq/san/index.html](http://www.co.sandiego.ca.us/deh/wnq/san/index.html)). The purpose of this meeting was to establish a forum to discuss coordination regulatory efforts to guide cleanup and abatement of pollution from contaminated sites. Additional information on this topic may be found in the Executive Officer Report dated August 15, 2006 (at [http://www.waterboards.ca.gov/sandiego/eo_report/eoreport.html](http://www.waterboards.ca.gov/sandiego/eo_report/eoreport.html)). The agenda included discussions of the following topics: SAM Forum Agency Updates, Property Access letter for use by DEH staff, Low Priority and/or Potentially Problematic US; Cases for transfer from DEH to Regional Board, DEH Property Owner agreement form for monitoring wells, Changes to Regional Board Low Risk Guidance (1998), Developing Statewide Remediation Guidance from CalEPA, Development of General Order (waste discharge requirements) for Groundwater Remediation in the San Diego Region, Latest ECOTRACKER uploads by DEH, and a discussion of separate document imaging projects being conducted at the Regional Board and DEH.

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**PART B**

**SIGNIFICANT REGIONAL WATER QUALITY ISSUES**

1. **Sanitary Sewer Overflows (SSO) – September 2006 (Eric Banker, Charles Cheng, Joann Coffrancesco, Michelle Math, Olufisayo Gbikobo, Melissa Valdivia)** (Attachment B-1)

   From September 1 to September 30, 2006, there were 21 sanitary sewer overflows, which included 8 spills greater than 1,000 gallons, reported to the Regional Board office pursuant to the requirements of Order 96-04 (SSOs) from
publicly-owned collection systems. Ten of the 21 spills reached surface waters or storm drains, with one spill resulting in closure of recreational waters. The combined total volume of reported sewage spilled from all publicly-owned collection systems for the month of September, 2006 was 38,863 gallons.

There were also 14 sewage overflows from private property reported in September 2006. Five of these spills reached surface waters or storm drains, none of which resulted in closure of recreational waters. None of the reported sewage spills from private property were greater than 1,000 gallons.

Zero rainfall was recorded for September 2006 at San Diego’s Lindbergh Field. For comparison, in August 2006, 0.01 inches of rainfall was recorded at Lindbergh Field, and 18 public SSOS were reported. Also for comparison, in September 2005, 0.10 inches of rainfall was recorded at Lindbergh Field, and 14 public SSOS were reported.

Attached is a table titled "Sanitary Sewer Overflow Statistics," updated through September 30, 2006, which contains a summary of all SSOS by fiscal year (FY) from each agency since FY 2002-2003.

It should be noted that the data for spill volume per volume conveyed (GAL/MG) could be easily misinterpreted. For a collection agency that has a relatively small system, a spill of a few hundred gallons or more could result in a high value for spill volume per volume conveyed. On the other hand, a high volume spill event for a large collection system may still result in a low value for this statistic. Hence, these numbers by themselves are not sufficiently representative of the measures being taken by a sewer agency to prevent SSOS, nor can the numbers be compared directly between collection agencies. The data does represent a different way to review and analyze SSO volume data as it relates to system size.

Additional information about the Regional Board’s SSO regulatory program is available at the Regional Board’s website at http://www.waterboards.ca.gov/sandiego/programs/sso.html.

Issuance of Notices of Violation (NOV)

Three Notices of Violation (NOV) were issued during September 2006 for recent significant SSOS. The NOVs were issued to the collection agencies for the SSO events described below:

City of San Diego

- An NOV was sent to the City of San Diego on September 27, 2006 in response to a 1,750-gallon SSO, of which 1,645 gallons were recovered. The SSO occurred on July 19, 2006 near 811 W. Nutmeg Street. Sewage reportedly flowed into a storm drain leading to San Diego Bay. The cause
of the SSO was reported as breaks in the gravity main and a private lateral.

**Rainbow Municipal Water District**
- An NOV was sent to Rainbow Municipal Water District (District) in response to a 3,000-gallon SSO that occurred on September 2, 2006 at 4850 Dunil Road Space # 225 in Fallbrook. The District reported the cause of the overflow as a sewage lift station failure due to a faulty air compressor. The District reported that the overflow entered an open field near Rancho Monserate Country Club and soaked into the ground.

**City of Vista**
- An NOV was sent to the City of Vista (City) in response to a 6,000-gallon sanitary SSO that occurred on September 3, 2006 from the City’s Buena Creek pump station located at South Melrose Bridge at Green Oak Ranch Road in Vista. The City reported the overflow occurred as a result of a shut down of the Buena Creek pump station which was done to connect an old force main to a new force main, and led to the 6,000-gallon discharge of sewage from a crack in a sewer main. The City also reported that the overflow entered Agua Hedionda Creek tributary to Agua Hedionda Lagoon.

2. Clean Water Act Section 401 Water Quality Certification Actions Taken in September 2006 (Chiera Clemente) (Attachment B-2)

Section 401 of the Clean Water Act requires that any person applying for a federal permit which may result in a discharge of pollutants into Waters of the United States must obtain a water quality certification that the discharge complies with all applicable state water quality standards, limitations, requirements, and restrictions. The most common federal permit that requires a 401 Certification is a CWA Section 404 permit, issued by the Army Corps of Engineers, for the placing of fill (sediment, rip rap, concrete, pipes, etc.) in Waters of the U.S. (i.e., ocean, bays, lagoons, rivers and streams).

Upon receipt of a complete 401 certification application, the Regional Board may either certify the project or deny certification, with or without prejudice. In cases where there are impacts to Waters of the U.S., the Regional Board may issue a conditional certification. The certification can be either in the form of a conditional certification document approved by the Regional Board Executive Office, or Waste Discharges Requirements (WDRs), adopted by the Regional Board. And, in the case where a federal permit is not required because impacts have been determined to be only to Waters of the State, the Regional Board may adopt WDRs. Table B-2 (attached) contains a list of actions taken during the month of September. Public notification of pending 401 Water Quality Certification applications can be found on our website at: [http://www.waterboards.ca.gov/saniego/programs/401cert.html](http://www.waterboards.ca.gov/saniego/programs/401cert.html).
3. Grants Update (David Gibson)

Proposition 40 and Proposition 50 Consolidated Grants Program

Statewide 209 applicants were invited to submit full proposals for the Consolidated Grants programs. Full Proposal applications for the non-ocean protection projects were due to the State Water Resources Control Board (SWRCB) by June 9, 2006. A total of 190 applications were received by SWRCB. In the San Diego region, 27 applicants were selected to submit full proposals out of the 57 initial concept proposals that were submitted. The invitation lists and other information for all programs are available at: http://www.waterboards.ca.gov/funding/ps_full_proposals.html.

The review teams have completed the reviews and scoring of the full proposals submitted statewide, and the SWRCB is compiling recommended funding lists for each program. The SWRCB has approved most of the recommended funding lists for the Consolidated Grants programs. The Coastal Non Point Source and Agricultural Water Quality funding lists will be considered by the SWRCB on October 11th and October 25th, respectively. Applicants for funds from the Proposition 50 Coastal Non Point Source Grants Program will be notified by mid-October. To date, the following nine projects in the San Diego region are included in the funding recommendations to date:

Prop. 40 Non Point Source Pollution Control Program
- PIN 8967 Porous Pavement & Model Municipal Operations Center-Phase II $1,500,000
- PIN 5401 Los Peñasquitos Sediment Basin $1,107,000
- PIN 9028 Tijuana River Valley Invasive Plant Control Program - Phase 3 $719,300

Prop. 40 Urban Storm Water Grants Program
- PIN 9364 Smarttimer/Edgescape Evaluation Program (SEEP) $992,000
- PIN 8966 San Pasqual Academy Water Quality, Stormwater Mgmt., Flood Control & Porous Pavement Project $750,000
- PIN 9140 San Diego County Flinn Springs Regional Park LID Porous Pavement Parks Installation $798,500

Prop. 40 Integrated Watershed Management Planning
- PIN 9188 Agua Hedionda Watershed Management Project $500,000

Prop. 40 Integrated Watershed Management Implementation
- PIN 9235 Freshwater Runoff Treatment Ponds $550,017

Prop. 40 & 50 Agricultural Water Quality Grant Program
- PIN 9208 Nutrient Reduction and Monitoring in Santa Margarita Watershed $500,000
The approved funding lists for the Consolidated Grants are also posted on the web at: http://www.waterboards.ca.gov/funding/consolidgrants0506.html

Statewide Proposition 50 Integrated Regional Water Management (IRWM) Grant Program

The IRWM Step 2 Implementation proposal deadline was June 29, 2006. All 16 applicants statewide who were called back to Step 2 submitted applications on time. The South Orange County IRWM group was among the IRWM groups invited to submit a proposal. The 16 proposals represent a total of approximately 175 individual projects. Approximately $382 million in grant funding was requested for proposals totaling over $2 billion. The Department of Water Resources and SWRCB have approximately $150 million available for this cycle of grant funding. The actual funding and cost match amounts are as follows:

Grant Funds Requested $382,156,434
Cost Match Funds $1,678,771,945
Total Project Funds $2,137,397,261

The Step 2 technical reviews and consensus reviews were due September 8, 2006. Selection panel reviews will be conducted through October 2006.

On August 28, 2006, Regional Board staff attended one of three public meetings being held by the San Diego IRWM group to gather public feedback on issues to be addressed in the new San Diego IRWM Plan. The San Diego IRWM group is drafting an IRWM plan based on feedback from the review of their Step 1 proposal and refined member agency goals for the IRWM program. The draft IRWM Plan is expected to be released for public review and comment in October 2006 with approval expected by mid-year in 2007. The IRWM Plan must be complete by January 31, 2007 and adopted before the San Diego IRWM group can apply for the next round of Prop. 50 Chapter 8 IRWM grants. The second round of IRWM grants will make $220 million dollars available to IRWM groups statewide in late 2007 or early 2008.

Clean Beaches Initiative Grant Program

The SWRCB received six applications totaling $13.2 million for the remaining $6 million in Proposition 40 funds. The Clean Beaches Task Force met on August 30, 2006 to review applications and recommend projects for funding. Draft Guidelines for the Proposition 50 CBI Program were posted on the SWRCB website on August 9, 2006. The SWRCB held three public workshops on the draft Guidelines and are revising the draft Guidelines in response to comments. The SWRCB may consider adoption of the draft Guidelines on October 25, 2006. Additional information on the Clean Beaches Initiative including the CBI can be found at: http://www.waterboards.ca.gov/cwphome/beaches/index.html
4. **City of San Diego Water Reuse Meeting** (Melissa Valdivieso)
The Committee on Natural Resources and Culture of the San Diego City Council held a special workshop on Wednesday, September 27 from 6:00 p.m. to 9:00 p.m. to discuss water reuse (treated wastewater ultimately available as potable water through blending with potable water sources) within the City of San Diego. The audience of approximately 40 people included individuals representing local environmental groups, regulatory agencies (including Melissa Valdivieso from the Regional Board), consulting engineers and scientists, and the general public.

Technical presentations were provided by the City of San Diego Water Reuse Study team, the San Diego County Water Authority, the California Department of Health Services, the Water Replenishment District of Southern California, and the National Water Research Institute. The meeting also had a debate between parties for and against water reuse. Public comments were accepted following the debate. City council members acknowledged that negative public perception and lack of technical knowledge are the biggest obstacles to moving forward with water reuse. They agreed to improve public education efforts and to continue to discuss this important topic at future City Council meetings.

5. **Assembly Bill No. 371 – Statewide Water Recycling** (Melissa Valdivieso)
Assembly Bill No. 371 was introduced to help the State meet its goal of recycling 1,000,000 acre-feet of water per year by 2010. The amended bill, approved by Governor Schwarzenegger on September 28, enacts the Water Recycling Act of 2006 to encourage the production and use of recycled water. For additional information regarding this bill, visit [http://www.leginfo.ca.gov/billinfo.html](http://www.leginfo.ca.gov/billinfo.html) and search for AB371.

6. **Significant Enforcement Actions for September 2006** (Mark Aperot)
(Attachment 8-6)
Attached is a listing of the most significant enforcement actions undertaken by the Regional Board during the month of September 2006. During the period the Regional Board initiated 22 enforcement actions (4 Staff Enforcement Letters, 14 Notice of Violations, 1 Investigative Order, and 3 Cleanup and Abatement Orders). Enforcement actions on sewage spill overflows are discussed in a separate report titled “Sanitary Sewer Overflows (SSO) – September 2006”.

7. **Proposed Gregory Canyon Landfill** (Carol Tamaki and John Odermatt)
This item is provided to update the Regional Board on recent events relating to the proposed Gregory Canyon Landfill:

**CEQA Process and Status of Revised EIR:** The San Diego County Department of Environmental Health (DEH) web page at [http://www.co.san-diego.ca.us/deh/chd/gchome.html](http://www.co.san-diego.ca.us/deh/chd/gchome.html) contains information on the CEQA process for the proposed project. The Regional Board submitted written comments (dated August 23, 2006), concerning various water quality related topics associated with the proposed project, for consideration by the County DEH. At this time, the
Regional Board staff has not been informed of any specific action taken by the Director of DEH (Mr. Gary Erbeck) regarding the Revised Partial Draft EIR.

**Public Participation Requirements in CCR Title 27:** The Regional Board staff is reviewing State Water Resources Control Board public participation guidance documents to comply with public participation requirements in Title 27, California Code of Regulations, section 21730.

**Scheduling an Agenda Item for Consideration by the Regional Board:** The subscribers were informed that the Regional Board Executive Officer informed the Regional Board members that he preferred not to schedule a public hearing on the proposed Gregory Canyon Landfill project until after the County of San Diego completes its CEQA process. In the interim, the Regional Board staff continues to move forward with the development of a tentative Order and supporting technical information, for a future agenda item regarding the proposed project. However, in view of the status of the CEQA document and the uncertainties with the completion date of the CEQA process, the staff cannot be certain when the future agenda item will be scheduled for consideration by the Regional Board.

8. **Poway Landfill Status/Update (Kelly Dorsey)**

The Regional Board staff has provided previous Executive Office Report items (i.e., dated April 12, 2006; May 10, 2006, and September 13, 2006) on the Poway Landfill. This information is available online at [http://www.waterboards.ca.gov/sandiego/eg_report/freport.html](http://www.waterboards.ca.gov/sandiego/eg_report/freport.html).

On September 12, 2006, the County of San Diego Department of Public Works (DPW) submitted a *Work Plan for Additional Hydrogeologic Characterization* to the Regional Board for review. Based on data from newly installed groundwater monitoring wells, the County of San Diego Department of Public Works (DPW) has proposed to install additional groundwater monitoring wells in off-site areas. The Regional Board staff is currently reviewing the work plan and will work with DPW staff to ensure that the extent of the off-site groundwater pollution is defined.

The most recent soil vapor and groundwater reports are currently available online on the Poway Landfill website at: [http://www.co.san-diego.ca.us/deh/caltx/poway.html](http://www.co.san-diego.ca.us/deh/caltx/poway.html) and on the Geotracker website at: [www.geotracker.waterboards.ca.gov](http://www.geotracker.waterboards.ca.gov).

9. **Closure of San Marcos Landfill (Carol Tamaki and John Odermatt)**

On September 21, 2006, the Regional Board received a notification that the County of San Diego Local Enforcement Agency (LEA) has certified the closure of the San Marcos Landfill. The Regional Board adopted closure and post-closure maintenance and monitoring requirements for the San Marcos Landfill in December 2003 (Order R9-2003-0053) available online at.
http://www.waterboards.ca.gov/sandiego/orders/orders-03.html). The San Marcos Landfill ceased accepting wastes in 1997 and contains approximately 7,627,500 tons of municipal solid wastes. Since May 1997, the monitoring, and maintenance of the interim landfill cover has been regulated under requirements of Cease and Desist Order (CDO) 98-39 (available on-line at http://www.waterboards.ca.gov/sandiego/orders/98%20orders.html).

The Joint Technical Document (JTD as revised in May 2002) anticipated that the closure project included construction of an engineered landfill cover system using approximately 420,000 cubic yards of soil. Construction activities began in September 2004 and ended in January 2006, with re-vegetation planting taking place between November 2005 and February 2006. Construction of the landfill cover system included construction of a biaxial geogrid (in northerly and southeasterly slope areas) to mitigate the development of potential settlement induced cracks in the evapotranspiration (ET) landfill cover system (at 3 to 6 feet thick). The Regional Board staff is completing review of the “Final Closure Certification and Construction Quality Assurance Report San Marcos Landfill Closure Project.” If the final construction of the landfill cover is deemed acceptable; then Order R9-2003-003 will serve to regulate the post-closure maintenance and monitoring of the San Marcos Landfill, replacing earlier requirements issued to the County of San Diego as CDO 98-39 and Order 95-112 (corrective action monitoring requirements). During the week of September 25, 2006, the Regional Board conducted a compliance inspection for the San Marcos Landfill. The Regional Board staff anticipates preparing a future agenda item for the Regional Board to consider modifying or suspending CDO 98-39.

10. Forster Canyon Landfill, Orange County (Amy Grove and John Odermatt)
Additional background information on this topic may be found on the Regional Board web site in previous Executive Officer Reports for (August and September 2006 at http://www.waterboards.ca.gov/sandiego/eo_report/eoreport.html). On September 29, 2006; the Regional Board provided the Discharger with written comments on their report entitled, “Final Closure Plan Amendment; Final Post-Closure Maintenance Plan Amendment; Long Term Dewatering Project: Forster Canyon Landfill, San Juan Capistrano, CA.” The written comments prepared by the Regional Board staff, with input from Mr. Rich Boylan of the SWRCB, include a range of remaining concerns, including, geotechnical aspects of the proposed design and long-term stability of the project, regulatory compliance with applicable sections of CCR Title 27, permitting issues, and issues related to CEQA compliance. The Regional Board staff anticipates that the Discharger will want to discuss those written concerns in the future.

11. Mission Bay Landfill Technical Advisory Committee (Brian McDoniel and John Odermatt)
SCS Engineers has prepared written responses to comments received on the Draft Site Investigation Report for the Mission Bay Landfill. The responses from SCS Engineers are posted on the City of San Diego’s web site (at
STATEWIDE ISSUES OF IMPORTANCE TO THE SAN DIEGO REGION

1. USEPA Presentations on Pharmaceuticals in the Environment (Lillian Bussel)
   (Attachment C-1)

USEPA is presenting a four part webcast series on pharmaceuticals in the environment. The first session on Sept. 22, 2006 consisted of two presentations. In the first presentation, Christian Daughton, USEPA, gave a general overview on pharmaceuticals in the environment. The second session from Jan Baxter, USEPA, focused on the current status of pharmaceuticals in the environment throughout all EPA regions. The next sessions (Oct. 10th, Oct. 24th, and Nov. 3rd) will focus on different topics regarding pharmaceuticals in the environment.

Pharmaceuticals and Personal Care Products (PPCPs) are a diverse group of chemicals consisting of all human and veterinary drugs, diagnostic agents, and other consumer chemicals (e.g. sunscreen and fragrances). The origin of PPCPs as "trace" environmental pollutants results largely from the worldwide, continuous use by humans as a result of ingestion/excretion, as well as the direct disposal of expired or unwanted PPCPs to landfill or sewage (with no or incomplete removal during the sewage treatment process). The risks posed to aquatic organisms (by continual life-long exposure) and to humans (by long-term consumption of minute quantities in drinking water) are essentially unknown. While the major concerns to date have been the promotion of pathogen resistance to antibiotics and disruption of endocrine systems by natural and synthetic sex steroids, many other PPCPs have unknown consequences.

Based on a newspaper article from the San Diego Tribune (09/26/06, article attached), a recent study for San Diego showed that pharmaceuticals were found in treated wastewater in San Diego (North City Water Reclamation Plant) as well as in the city's source water (which comes from the Colorado River and Northern California). At this point it is not known how this affects aquatic life in local waters. Studies on flatfish which were caught close to ocean sewage outfalls of the Sanitary Districts in Los Angeles showed that these fish had abnormal hormone levels, and some had both male and female sexual tissue. The Regional Board staff will follow up on the datasets for pharmaceuticals in local waters as well as for the impacts on aquatic life in southern California.

2. Appeals of NRG Cabrillo Power I LLC and Poseidon Resources NPDES Permit Adoptiosn (Robert Morris)

The Regional Board has received copies of petitions by Surfrider Foundation and Orange County Coastkeeper to the State Water Resources Control Board (SWRCB) of two recent Regional Board actions. Surfrider Foundation, represented by the Stanford Legal Clinic, appealed the adoption of Order No.
R9-2006-0043, a reissued NPOES permit to NRG Cabrillo Power for the discharge to the Pacific Ocean from the Encina Power Station. In addition, Surfrider Foundation and the Orange County Coastkeeper, represented by Lawyers for Clean Water, appealed the adoption of Order No. R9-2006-0065, which established requirements for the Poseidon Resources Corporation to discharge desalination brine to the Pacific Ocean from its proposed Carlsbad Desalination Project.

The petitions are currently being reviewed by the SWRCB for completeness with California Code of Regulations Section 2050. If determined to be complete, the SWRCB will provide written notice to the petitioners, the dischargers, the Regional Board and other interested persons that they have 20 days from the date of mailing of the notification to file a response.

3. Desalination Workshop at UC Santa Cruz (Michael McCann)
The first of three workshops on desalination projects in California was convened by the Dept. of Environmental Studies at UC Santa Cruz. These workshops are part of an effort supported by the Prop. 50 grant funds to develop a tool to guide state and local desalination project planning. The first workshop, Sept. 25 and 26, held in Santa Cruz addressed the environmental impacts of desalination projects in the state. A follow-up workshop scheduled for November 9 in Sacramento will address public policy issues.

4. California Stormwater Quality Association (CASQA) Conference—Sacramento (Michael McCann)
On Sept. 25-27 CASQA convened a timely and informative conference offering training workshops, presentations, and exhibits for storm water agency staff, consultants, vendors, and regulators. The first day of the conference featured 3 workshops—Municipal Stormwater Program Effectiveness, Engineering of BMPs, and Planning for Improvements in Water Quality. The last two days of the conference offered excellent presentations covering themes of storm water treatment, operations, research, and program management.

5. Disney Environmental Challenge (Michael McCann) (Attachment C-5)
The Disney Company, the California Water Boards, and other government offices with environmental education programs each fall encourage elementary-grade teachers statewide to take the Jiminy Cricket’s Environmental Challenge by developing service-oriented environmental education projects with their students. A simple environmental pledge is open to grades 3, 4 and 5. The class project competition is open to grades 5 only. Class pledges and project entry forms are due by December 15. Information and forms are available at the Regional Board office by contacting Mike McCann at (858) 467-2908 and email mmccann@waterboards.ca.gov. See Attachment

The official website for the challenge is www.jckids.org

15
You don't need to have a child in a local school. Simply select a local elementary school in your neighborhood, and help distribute a few packets and pledge forms to that school's front office. Indicate that they are for the school's third, fourth and fifth grade teachers.

It makes a world of difference for the children, who through the years have created outstanding community efforts promoting water education, achieving higher test scores, and developing junior water stewards.
SIGNIFICANT NPDES PERMITS, WDRs, AND REGIONAL BOARD ACTIONS

October 11, 2006

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</table>

6 includes available preliminary data for July 1, 2006 through September 30, 2006, and may not include all spills less than 1,000 gallons that did not enter surface waters or storm drains during this period.

4 As of June 2003.

1 Volume of spills for the period in gallons divided by the amount conveyed for the period in million gallons.

2 Includes with Eastern Municipal Water District.

5 Private property spills are not the responsibility of the seawering agencies. The private spills are listed here to show locations of those spills from private property systems. Also, it is not a requirement of Order No. 96-04 for Public Sewer Agencies to report private property spills.

3 The average is the sum of all values divided by the number of values.

2 In a normally distributed set of values, 68% of the values are within one standard deviation either above or below the average value.

3 The median is the middle value in a set; half the values are above the median, and half are below the median.
<table>
<thead>
<tr>
<th>DATE</th>
<th>APPLICANT AND LOCATION</th>
<th>PROJECT TITLE</th>
<th>PROJECT DESCRIPTION</th>
<th>WATERBODY</th>
<th>IMPACT (Acres)</th>
<th>Mitigation</th>
<th>CERTIFICATION ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/8/2006</td>
<td>D and D Landholdings, San Diego County</td>
<td>Loop Road CG 4530</td>
<td>Construction of Loop Road in east Otay Mesa with two crossings of an unnamed drainage</td>
<td>Unnamed tributary to Tijuana River</td>
<td>Streambed (P) 0.16 acre Wetland (P) 0.18 acre</td>
<td>Onsite creation of 0.35 acre and enhancement of 0.35 acre of southern willow scrub habitat and eradication of tamarisk from 1.1 acres of an adjacent County of San Diego conservation easement.</td>
<td>Conditional Certification</td>
</tr>
<tr>
<td>9/12/2006</td>
<td>Woodbridge Homes, Murrieta</td>
<td>Santa Margarita Estates Tentative Tract 32043</td>
<td>Subdivision of approximately 63 acres to construct 24 single-family residential lots with a minimum size of 2.5 acres per lot</td>
<td>One unnamed drainage to Murrieta Creek</td>
<td>Streambed (P) 0.16 acre</td>
<td>Creation of 1 acre and enhancement of 0.3 acre of streambed with a 0.66 acre riparian buffer.</td>
<td>Conditional Certification</td>
</tr>
<tr>
<td>9/12/2006</td>
<td>County of San Diego Parks and Recreation Department</td>
<td>Otay Valley Regional Park Trails Project</td>
<td>Development of a multi-use trail system, local staging areas and interpretive signage Project will modify 12 drainage crossings</td>
<td>Otay River</td>
<td>Streambed (P) 0.05 acre and (T) 0.02 Wetland (P) 0.36 acre and (T) 0.02 acre</td>
<td>Create 0.88 acre, restore 0.15 acre and enhance 1.06 acre of wetland habitat onsite.</td>
<td>Conditional Certification</td>
</tr>
<tr>
<td>9/12/2006</td>
<td>City of Murrieta</td>
<td>Los Alamos Road Widening Project</td>
<td>Widening of Los Alamos Road to accommodate the safety of the future approved and planned residential community</td>
<td>Unnamed tributary to Murrieta Creek</td>
<td>Wetland (P) 0.68 acre (1400 linear feet)</td>
<td>Creation of 0.08 acre of wetland and enhancement of 1.6 acre of riparian habitat</td>
<td>Conditional Certification</td>
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<tr>
<td>DATE</td>
<td>APPLICANT AND LOCATION</td>
<td>PROJECT TITLE</td>
<td>PROJECT DESCRIPTION</td>
<td>WATERBODY</td>
<td>IMPACT (Acres)</td>
<td>MITIGATION</td>
<td>CERTIFICATION ACTION</td>
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<tr>
<td>9/15/2006</td>
<td>El Toro Water District, Lake Forest</td>
<td>Aliso Creek Waterline Crossing Protection Project</td>
<td>Restore and repair existing 18-inch and 24-inch water transmission mains</td>
<td>Aliso Creek</td>
<td>Streambed (P) 0.14 acre</td>
<td>Onsite and offsite enhancement of 0.14 acre of streambed in the English Creek Ecosystem Restoration Project</td>
<td>Conditional Certification</td>
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<tr>
<td>9/10/2006</td>
<td>U.S. Marine Corps Base Camp Pendleton</td>
<td>Bank Stabilization at Del Mar Boat Basin</td>
<td>Provide bank stabilization and erosion control at an eroded section of the Del Mar Boat Basin</td>
<td>Pacific Ocean</td>
<td>Boat Basin Bank (P) 0.0003 (T) 0.0148</td>
<td>Improved post construction BMPs</td>
<td>Time Expired Certification</td>
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<tr>
<td>9/22/2006</td>
<td>Pandee Homes, San Diego</td>
<td>Shaw Lorenz Development</td>
<td>Construction of 139 single-family homes on 2.78 acres with 1.88 acres designated as MSCP Open Space</td>
<td>Tributaries to Los Penasquitos Creek &amp; Shae/Carmel Valleys</td>
<td>Wetland (P) 0.012 acre (255 linear feet)</td>
<td>Creation and restoration of 0.5 acre of habitat in the Pacific Highlands Ranch mitigation area and the onsite creation of 0.06 acre of vernal pools,</td>
<td>Conditional Certification</td>
</tr>
<tr>
<td>DATE</td>
<td>APPLICANT AND LOCATION</td>
<td>PROJECT TITLE</td>
<td>PROJECT DESCRIPTION</td>
<td>WATERBODY</td>
<td>IMPACT (Acres)¹</td>
<td>MITIGATION</td>
<td>CERTIFICATION ACTION²</td>
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<td>9/26/2006</td>
<td>Olivenhain Municipal Water District</td>
<td>Elfin Forest Recreation Reserve Footbridge Replacement Project</td>
<td>Replacement of an existing culverted concrete crossing of Escondido Creek with a concrete span bridge</td>
<td>Escondido Creek</td>
<td>Streambed (T) 234 square feet</td>
<td>The project is self mitigating as it will restore natural fluvial geomorphology to this reach of the stream</td>
<td>Low Impact Certification</td>
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<tr>
<td>9/27/2006</td>
<td>California Department of Transportation, City of San Juan Capistrano</td>
<td>1-5/San Juan Creek Bridge Scour Repair</td>
<td>The project proposes to repair scour with the placement of rip rap to protect the sides of piers 2 and 3 and to match the existing slope at abutment 1</td>
<td>San Juan Creek</td>
<td>Streambed (P) 0.2 acre Wetland (F) 0.01 acre</td>
<td>Enhancement of 0.21 acre of streambed</td>
<td>Conditional Certification</td>
</tr>
</tbody>
</table>

¹ Wetland refers to vegetated waters of the U.S. and streambed refers to unvegetated waters of the U.S. (P) = permanent impacts. (T) = temporary impacts.

² Low Impact Certification is issued to projects that have minimal potential to adversely impact water quality. Conditional Certification is issued to projects that have the potential to adversely impact water quality, but by complying with technical conditions, will have minimal impacts. Certifications are issued “in-the-project will adversely impact water quality and suitable mitigation measures are not proposed or possible. Time Expired Certification refers to projects that may proceed due to the lack of an action by the Regional Board within specified regulatory timelines.
A. Industrial Stormwater Program

Cleanup and Abatement Order No. R9-2006-0119

Date: September 21, 2006

Parties: Mr. RassouJ and Mr. Pejman Gharanadian
Facility: All Smash Auto Recycling
Description: Issued for multiple violations of the Industrial Storm Water Permit (07-09 DWQ). Requires All Smash to implement Best Management Practices based on a site specific Storm Water Pollution Prevention Plan, pay outstanding annual fees for FY 04 & 05, and to perform water quality monitoring during runoff events. These violations are subject to discretionary liability.

B. Municipal Stormwater Program

Notice of Violation No. R9-2006-0115

Date: September 11, 2006

Agency: City of San Diego
Facility: Municipally Separate Storm water Conveyance System (MS4)
Description: Issued for failure to provide an adequate response to a May 2006 Regional Board Order to investigate dry weather field screening and analytical monitoring results. The violations can be corrected by submittal of the information.

Notice of Violation No. R9-2006-0046

Date: September 15, 2006

Agency: City of San Diego
Facility: Municipally Separate Storm water Conveyance System (MS4)
Description: Issued for failure to conduct follow-up investigations of dry weather filed screening results and failure to prioritize industrial sites as part of its municipal storm water management program. A technical report is required to be submitted by November 15, 2006 to document steps that will be taken to ensure follow-up investigations will be conducted in a timely manner.

C. National Pollution Discharge Elimination System (NPDES) Program

Notice of Violation

Date: September 13, 2006

Agency: South Orange County Wastewater Authority
Facility: Discharge to Pacific via the San Juan Creek Ocean Outfall
Description: Issued for violations of 10 non-serious* effluent limitations for settleable solids (2 daily, 5 weekly (7-day) averages, and 3 monthly (30-day) averages) reported in the April through July 2006 monitoring reports. The 10 effluent violations are subject to mandatory minimum penalties in accordance with Water Code Section 13385 (h) or (l). There was also one (1) violation of acute toxicity that is subject to discretionary liability.

Notice of Violation No. R9-2006-0108 Date: September 14, 2006
Agency: San Diego County Water Authority
Facility: San Vicente Pipeline Project – Ground Water Dewatering
Description: Issued for 32 serious and 3 non-serious* violations of effluent limitations for nitrogen and selenium that occurred during the Oct 05 thru March 06 monitoring periods. These violations are subject to mandatory minimum penalties in accordance with Water Code Section 13385 (h) or (l). There was also 1 violation of chronic toxicity that is subject to discretionary liability.

* Mandatory minimum penalties (MMP) apply to violations of effluent limitations contained in NPDES permits. A MMP of three thousand dollars ($3,000) shall be assessed for each “serious” violator, (as defined in CWC 13385.1(c)), as any waste discharge that violates effluent limitations contained in waste discharge requirements by 20 percent or more for Group I pollutant (Appendix A to Section 123.49 of Code of Federal Regulations Title 40). For non-serious violators (CWC 13385.1(b)) a $3,000 MMP shall be assessed for violations of certain effluent limitations that are not-serious, beginning with the 4th violation in a six-month period.

Notice of Violation No. R9-2006-0113 Date: September 27, 2006
Agency: Metropolitan Wastewater Division, City of San Diego
Facility: South Bay Water Reclamation Plant
Description: Issued for a 19,500-gallon odor control process water spill on August 2, 2006. A technical report is required to be submitted by Oct. 27, 2006 describing actions taken to correct the violation. These violations are subject to discretionary liability.

D. Pretreatment Program

Notice of Violation No. R9-2006-0136 Date: September 15, 2006
Agency: City of Oceanside
Facility: Pretreatment Program
Description: Issued for failure to implement technically feasible based local limits in violation of the pretreatment program that was identified in a pretreatment compliance audit on June 15, 2006. A technical report is required to be submitted by Dec. 15, 2006 to document
corrective actions have been taken or a time schedule to address deficiencies in the program. Violations are subject to discretionary liability.

E. Spills Leaks Investigations Cleanup (SLIC) Program / Unregulated sites

**Addendum to CAO R9-2004-0258**

**Date:** September 13, 2006

**Entity:** Allegheny Technologies Inc

**Facility:** Former TDY site 2701 Harbor Drive San Diego CA

**Description:** Establishes a March 32, 2007 deadline for the final Remedial Investigation Feasibility Study to comply with Directive no. 3 of the Cleanup Order.

**CAO R9-2006-0109**

**Date:** September 15, 2006

**Agency:** San Diego County Water Authority

**Facility:** Pipeline 3 Break, Mission Trails Regional Park

**Description:** Issued for the rupture of a 66-inch pipeline, which released 5.3 million gallons of untreated water and caused extensive erosion and deposition of sediments into the San Diego River. The CAO requires abatement activities to be achieved by March 15, 2007. These violations are subject to discretionary liability.

E. Underground Storage Tank (UST) Program

**Notice of Violation No. R9-2006-0119**

**Date:** September 28, 2006

**Entity:** Exxon Mobile Corp.

**Facility:** Mobile Service Station

**Description:** Issued for failure to submit electronic data as required by Investigative Order No. R9-2006-0030.

**Notice of Violation No. R9-2006-0120**

**Date:** September 28, 2006

**Parties:** Mr. and Mrs. Gonzales

**Facility:** Stan’s Service, Merrieta CA

**Description:** Issued for failure to submit electronic data as required by Investigative Order No. R9-2006-0030.
F. Waste Discharge to Land Program (CH15 WDR)

Addendum to Investigative Order No. RS-2006-0044
Date: September 28, 2006
Agency: City of San Marcos
Facility: Bradley Park/Old Linda Vista, San Marcos, CA
Description: Extends the due date for a workplan to implement an Evaluation Monitoring Program to Oct. 31, 2006. The extension was in response to the discharger request for additional time.

G. Waste Discharge to Land Program (Non15 WDR)

Notice of Violation
Agency: City of Carlsbad
Facility: Carlsbad water recycling facility, Carlsbad, CA
Description: Issued for 3 violations of effluent limitations for Chlorine contact time and Manganese as reported in discharger monthly monitoring reports for May, June and July 2006. These violations are subject to discretionary liability.

Notice of Violation
Agency: Rancho Santa Fe Community Services District
Facility: Rancho Santa Fe Pollution Control Facility
Description: Issued for one violation of effluent limitation for chloride daily maximum as reported in self-monitoring report on Nov. 1, 2005. These violations are subject to discretionary liability.

Notice of Violation
Entity: Orfila Vineyards
Facility: Orfila Vineyards wastewater system
Description: Issued for several reporting deficiencies in the 2006 Annual monitoring reports including certification, volume of monthly wastewater discharged, and documentation of solid waste disposal. A required technical report is required by Oct. 27, 2007 on steps taken to correct the violations. These violations are subject to discretionary liability.
Reycled tap water's 'unsettled question'

Waterborne drugs a growing concern

By Mike Lee
UNION-TRIBUNE STAFF WRITER

September 26, 2006

At homes across San Diego, thousands of residents take medications each day for everything from Alzheimer's disease to sexual dysfunction.

But their bodies don't absorb 100 percent of each drug. The unused portion is excreted and — literally — flushed down the toilet along with whatever outdated pills that people might dump into the bowl for disposal.

From there, the medicine mixes with cleaning agents, hormones, plasticizers and a plethora of other compounds in the city's wastewater.

Under a controversial proposal to be considered by a City Council committee tomorrow, some of the water treated at San Diego's North City Water Reclamation Plant would be purified enough to become drinking water. The effort is designed to reduce the region's reliance on imported water.

But what about drugs and other possibly dangerous substances that might remain in the recycled water?

Water providers don't routinely check for pharmaceuticals, personal-care products or numerous other substances that scientists call "emerging contaminants." Sewage plants aren't designed to remove them. Neither federal nor state agencies regulate them in water supplies. And California hasn't taken some of the most basic steps to keep them out of the state's waters.

Public health officials, water-quality experts and policymakers have been worried for years about the potential effects of these compounds, which show up widely in the nation's lakes and streams. The prospect of recycling wastewater into drinking water has amplified those fears.

The environmental and human health consequences of such pollutants are not well known. However, two common concerns are that even trace amounts may hasten the growth of more antibiotic-resistant bacteria and disrupt animals' endocrine systems, which regulate hormones.

"We know that many of these things can have biological effects at very low concentrations... but there is a paucity of data suggesting that there is any real adverse (human) health effect," said William Cooper, director of the Urban Water Research Center at the University of California Irvine. "It's an unsettled question."

Historically, the U.S. Environmental Protection Agency has focused on a relatively small suite of industrial pollutants such as chemicals from manufacturing plants. Now, the EPA is trying to standardize detection...
The uncertainty leaves the public and pollution watchdogs uneasy, particularly in the wake of numerous reports about waterborne drugs altering the sexual characteristics of fish in Europe and the United States.

"You don't want to see a mirror image of that showing up in human life 20, 30, 40 years down the line," said William L. Rukeyser, spokesman for California's State Water Resources Control Board.

**Widespread pollutants**

When San Diego first tried — and famously failed politically — to turn wastewater into drinking water seven years ago, skeptics expressed deep reservations about what unknown and untreated pollutants might still lurk in purified sewage.

Scientists have since detected a dizzying array of previously ignored chemicals in rivers and lakes worldwide, including waterways that are the source of drinking water for San Diego County.

Common contaminants include detergents, fragrances, caffeine, estrogen and painkillers. Basically anything that people consume or laithe on their bodies eventually ends up in the water.

"Drugs that are flushed down the toilet or are thrown in our landfills are coming back to haunt us," said Virginia Herold, interim executive officer of the California Board of Pharmacy, which oversees the state's pharmacies.

"We are not sure what the effect is."

Four years ago, federal researchers found that 80 percent of U.S. streams contained traces of medications and other emerging contaminants. Since then, the number of pharmaceuticals has continued to rise. Nationwide, some 3.4 billion prescriptions were filled last year, an increase of 50 percent since 1995, according to the National Association of Chain Drug Stores Foundation.

A recent analysis done for San Diego found a handful of emerging contaminants in the city's source water, which mostly comes from the Colorado River and Northern California. The detected substances included minute amounts of ibuprofen, the bug repellent DEET and the anti-anxiety drug memobamate.

That study likely understated the water's average chemical content because samples were taken in the spring, when huge volumes of snowmelt dilute the effluent from 227 wastewater treatment plants that are allowed to discharge into the Colorado River.

A much larger group of emerging contaminants — about 20 — can be found at comparatively high levels in the treated wastewater that comes out of the North City Water Reclamation Plant, the same report showed. Some North City water is reused by irrigation and industrial customers.

**Technological catch-up**

San Diego's water-recycling options include super-purifying wastewater at the North City plant through a process known as advanced treatment, which uses ultraviolet light and peroxide disinfection. The resulting water would replenish the San Vicente Reservoir near Lakeside and be treated again on its way to filling drinking-water pipes.

San Diego has tested advanced treatment at a research-scale facility. Recent studies conducted there showed

that the process reduced all 29 emerging contaminants that were tested to undetectable levels.

"This data indicates that (advanced-treated) water is superior to San Diego's current raw water supply," said Ronld Coss, technical manager for the city's Water Reuse Study.

Most water industry scientists echo Coss' confidence in recycled water, but they are careful not to overstate their conclusions, given the unsettled nature of the research.

Part of the difficulty is that detection methods are outpacing scientists' efforts to determine the implications of what they are finding. Current tests commonly show results down to 1 part per trillion, which is comparable to one square inch for every 250 square miles.

Some of the biggest concerns about emerging contaminants center on how they affect aquatic life.

For example, fish caught near ocean sewage outfalls in Southern California were found to have abnormal hormone levels, and some had both male and female sexual tissue, according to a recent analysis by the Southern California Coastal Water Research Project.

The office, which does field research for public sewer agencies, is expanding its study to include fish caught off San Diego County's coast.

"We see some potential effects off Los Angeles, so the next question to answer is, 'Is it just here or is it more widespread?'" said Ken Schiff, deputy director for the research agency.

Little research

There are some 80,000 chemicals commercially available in the United States, most of which lack independent research about their environmental effects.

Based on the law of averages, "you could speculate that some (emerging contaminants) could end up being regulated, but ... we can't make that conclusion until we have the science to back it up," said Luisa Valiela at the EPA's San Francisco office.

California, which often has stricter standards than the federal government, requires monitoring for several emerging contaminants in recycled water that is used to replenish aquifers in Los Angeles and Orange counties. Otherwise, the Department of Health Services does not track or require reporting of any of these compounds in water supplies, an agency spokeswoman said.

Nonetheless, wastewater agencies are starting to take precautions against waterborne drugs. One main goal is to persuade people to stop flushing medications down the toilet. Doing so has been standard advice for years as a way to keep outdated or unused pills away from children.

"There is just this sense that when you flush your toilet, everything disappears. People haven't really thought about where those waste pharmaceuticals go," said Ann Heil, supervising engineer for the Sanitation Districts of Los Angeles County.

San Diego's Metropolitan Wastewater Department already works with local hospitals to keep drugs out of the drain and it is considering a flushing-prevention program for the public. However, previous efforts by agencies in the region to collect unused medicines have generated little public interest.

California also lacks a coordinated program for the disposal of drugs from residences, said Herold, of the pharmacy board.

"We don't have an answer right now," she said.

Emerging contaminants will remain a concern even if drug flushing wanes, said Alan Langworthy, deputy director of San Diego Metropolitan Wastewater. That's because the use of chemicals continues to grow and seemingly countless medications enter the water through excretion.

"The way I look at it, we're at the tip of the iceberg on this issue," Langworthy said.

Union-Tribune library researcher Denise Davidson contributed to this report.

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SAMPLE LESSON PLAN
FOR TAKING THE PLEDGE

PURPOSE:
To provide students with an awareness of the need for a healthy environment and encourage students to take responsibility by selecting three local actions as their pledge to the environment.

OUTCOMES:
Students will apply standards-based content knowledge and use their communication and decision making skills to discuss ways to incorporate Environmentality™ into their daily lives.

DAY 1
• Conduct a discussion about the need for a healthy environment and ways to help the environment, both at home and at school.
• Discuss the importance of a commitment or pledge.
• Distribute a Jimmy Cricket Environmentality™ Challenge Pledge form to each student and explain the homework assignment.

HOMEWORK ASSIGNMENT
• Ask students to share the pledge form with their families and discuss three ways they will commit to think and act responsibly with the environment. Ask them to record their actions on the pledge form and return the form to class the next day.

DAY 2
• Ask students to write their pledges on sentence strips (one pledge activity per strip).
• Ask students to post and share their pledge with the entire class.
• As a class discussion, decide how to categorize the sentence strips. Have students clump the strips based on the criteria. Tally the number of pledges in each category.
• Ask students to make a bar graph to represent the class’s pledges. Discuss what the graph indicates: what is the most common pledge? The least common? Are any pledges dependent on other pledges? What would be the impact of what the whole class has committed to do?
• Remind students to implement their pledges for one week and keep a journal/log of their implementation.

ONE WEEK LATER
• Ask students to review their individual pledge form. Which ones did they complete? What was the impact of their completion (e.g., how much waste was saved in recycling?) What do they plan to do to complete this part of their pledge?
• Have students share their completed pledges. What was the impact of the entire class of their completion?
• Reinforce the students’ progress and give each student who has kept his/her pledge the provided gift in recognition of his/her success in honoring a pledge commitment. REMIND STUDENTS THAT THEY SHOULD CONTINUE THE PLEDGE BEYOND THE ASSIGNMENT.

SHARE THE LEARNING
• Have students decide how best to share their learning. Examples: make a school bulletin board; write an article for the school newsletter; write a letter to a local government representative about what they did to help the environment; tell their family.
My class would like to participate in the Environmentality™ Pledge

Please enter all information:

Please print legibly: Mr. Mrs. Ms. Miss Other

Teacher's Name:  
School Name:  
School District:  
School Mailing Address:  
City:  
State:  
ZIP Code:  
County:  
School Telephone:  
School Fax:  
Email Address:  
Principal's Name:  
Number of Students Participating:  
(Maximum of 40 students - one class per form)

Traditional School Year:
Yes:
No:

Where did you learn about Jiminy Cricket's Environmentality™ Challenge? (Please specify)

School District:  
Newsletter:  
Conference:  
Other:  
JIMINY CRICKET'S ENVIRONMENTALITY™ CHALLENGE
P.O. Box 7516
Burbank, CA 91510-7516
Fax (818) 553-7270 or enter online at www.jceckids.org

By entering Jiminy Cricket's Environmentality™ Challenge, schools, students, teachers, principals, and staffagree to the use of their names and likenesses for marketing and advertising purposes without additional compensation. Only California third, fourth, and fifth grade classes or third, fourth, and fifth grade school clubs (up to 40 students) are eligible to participate.

For more information or questions, please visit our website @ www.jceckids.org or call (800) 250-0299.