



SOUTHERN CALIFORNIA ALLIANCE OF PUBLICLY OWNED TREATMENT WORKS

Monthly Update

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July 2010

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Upcoming Meetings

Air Quality

Tuesday, July 27, 2010
10:00-12:00 noon @ LACSD.

Biosolids

Tuesday, July 20, 2010
Rancho Las Virgenes Composting Facility, Calabasas, CA

Collection Systems

Tuesday, August 24, 2010
9:00-1:00pm @ IEUA

Energy Management

Thursday, July 15, 2010
9:00-1:00pm @ OCSD

Water Issues

Thursday, August 26, 2010
9:00 - 12 noon @ IEUA

SCAP

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A Message from the Executive Director...

I hope everyone had a safe and pleasurable Fourth of July. As I celebrated our nation's birthday it caused me to reflect on how our country became so great. Without a doubt it has been our leaders that have contributed to the success we have achieved over the last 200 years. Individuals such as, George Washington, Abraham Lincoln, Theodore Roosevelt, John F. Kennedy and

Martin Luther King, to name a few. Men that had exceptional wisdom and foresight and were not afraid of challenges. And much in the same way with SCAP, it is certain individuals who have helped mold our organization into what it is today. From its inception back in 1992, SCAP has been blessed with outstanding individuals serving as president, beginning with Charles (Chuck) Carry (LACSD), Kamil Azoury, (Goleta Sanitary District), Blake Anderson (OCSD) and Jim Stahl (LACSD). All of these gentlemen are great leaders and well respected within our industry. They all shared a common goal in which the members of our organization could provide assistance to each other without regard to size or locality. And as I have mentioned in the past, none of this would have taken place without the dedicated efforts of my distinguished predecessor and Executive Director Emeritus, Ray Miller, who continues to expound, "it's a people world". And in the case of our SCAP organization, he couldn't be more correct! SCAP is made up of individuals, who unselfishly give of themselves for the good of the membership. Beginning with our board members and including our committee chairs, co-chairs and members, it is the individuals who make up our SCAP family. With the start of a new fiscal year comes new leadership at the top, as SCAP's President, Richard Atwater, steps down from his post and hands the reigns over to the newly appointed President, Enrique Zaldivar, of the City of Los Angeles' Bureau of Sanitation.

Before I tell you all about our new President, I wish to personally thank Rich for his 9 years serving on the SCAP Board, the last 3 of which were as president. Rich's accomplishments, both at SCAP and in the public and private sectors are far too numerous to recount in detail, however, I thought it important to list some of the following highlights of his illustrious career that has spanned over 35 years. Believe it or not, Rich wasn't always IEUA's General Manager/CEO. Having earned a BS degree in Geology and Environmental Science at Stanford University, he went on to receive his Masters degree in Urban and Regional Planning from the University of Southern California, even going so far as to win the prestigious Gordon Whitnall Award for Outstanding Student of his class.

After college, he had a cup of coffee with the CA Coastal Commission, working on the Energy Element of the Coastal Plan and then moved on to the City of Lakewood as a staff planner working on the General Plan update and

code enforcement issues. He spent a couple of years working with Parsons Engineering-Science on various water resource projects in California, Nevada and Utah. He even worked for a couple years as Manager of a seven county Council of Governments, that included Las Vegas, developing community infrastructure plans in response to the proposed MX Missile Project planned for the Great Basin. As time went on, however, he began gravitating towards positions that would allow him to influence water policy decisions.

For the next 4 years, he worked for the Department of Interior's Bureau of Reclamation eventually being assigned to the position of Special Assistant to the Commissioner, which brought with it responsibility for managing the Washington D.C office with its 200 plus staff. Much of his time, however, was spent filling in as "Acting Commissioner" overseeing the Bureau's seven regional offices and 6,700 employees. Deciding that he had braved enough of the cold winters and humid summers, Rich moved back to Southern California, where he became the Manager of the Resources Division of the Metropolitan Water District. His accomplishments included working on the All American Canal legislation effort, negotiating the \$300 million East Branch Enlargement Contract and winning MWD Board approval of the Seasonal Storage Service water rates. He also became intimately involved in the SWRCB Bay-Delta water rights hearings while working on a myriad of water and power contracts, including the Hoover, Parker-Davis federal contracts.

For the decade prior to accepting his position at IEUA, Rich found time to serve as General Manager of the West Basin Municipal Water District and Central Basin Municipal Water District, where he was instrumental in growing the two districts' staff and implementing numerous contracts with the public and private sector, followed by a few years on the private side with the nationally recognized water resources management consulting firm of Brookman-Edmonston, where he was quickly promoted from senior vice president to president. All of this finally led to his appointment as General Manager/CEO of the Inland Empire Utilities Agency, where he managed a staff of 325 employees that provided wholesale water and wastewater services with an annual operating budget of nearly \$100 million and a capital improvement budget of \$500 million. Under Rich's leadership, IEUA successfully completed numerous water recycling, recharge and storage projects and was awarded state and federal grants totaling hundreds of millions of dollars. One of his proudest achievements was the construction of IEUA's new administration building, which won the prestigious Governor's Environmental and Economic Achievement Award for being the first LEED "Platinum" public building in California.

I could go on and on about his accomplishments, but suffice to say, Rich is very much deserving of the honors given to him over the years and I think I speak for everyone as we wish him the best of luck in all of his future endeavors. With all of that said, I now wish to welcome in another outstanding individual who exemplifies the tradition of leadership in office as SCAP President, Enrique Zaldivar, the Director of the Bureau of Sanitation for the City of Los Angeles.

Enrique is a registered Professional Engineer in the State of California with a graduate degree and post graduate work in Civil Engineering from Cal Poly Pomona. Enrique started his career with the City of Los Angeles in 1985, in the Bureau of Engineering where he worked as a design engineer on wastewater treatment plants and major sewer projects, including projects at the Terminal Island and Los Angeles-Glendale Water Reclamation plants and the \$200M North Outfall Relief Sewer (NORS).

In 1990 he was promoted to the Bureau of Sanitation's City Recycling Program, which at the time was in its formative stage. In time, Enrique and his project team made the City's curbside recycling program one of the most successful in the nation. In 1997, Enrique was promoted to the operations side of the solid waste business, as Assistant Division Manager of the Collection Division. It was here where his passion grew for resource recovery and world-class service delivery in the solid resources environment by successfully meeting the challenge of serving more than 750,000 customers every week, and by managing close to 2 million annual tons of Solid Resources commodities through recycling, processing, composting, mulching, energy recovery or disposal.

In August of 2002, Enrique was appointed Assistant Director in charge of the Solid Resources Program; a program with an annual value of over \$300 million. In this capacity, Enrique oversaw the work of over 1,100 employees in solid resources collection, landfill maintenance, facility construction and design, curbside and citywide recycling, private sector recycling coordination, program development and numerous other activities.

In August of 2006, Enrique was appointed to the position of Executive Officer, whose role was much like that of a Chief Operating Officer, with oversight across the Bureau, including the Clean Water, Watershed Protection and Solid Resources programs.

Mayor Antonio R. Villaraigosa appointed Enrique as Director of the Bureau of Sanitation in October 2007 and by a unanimous vote, the City Council confirmed his appointment. The Bureau of Sanitation has become one of the largest departments in the City, with nearly 3,000 employees and an annual value exceeding \$1 billion.

Enrique is active in several professional and trade organizations; has coached little league baseball and other sports as well. He and his wife Brenda have two sons, Enrique and Alonzo, and a daughter, Carina Gabriella.

One of the greatest perks associated with my job is being able to work with outstanding individuals such as Enrique and I must say, he was one of the brightest and most professional gentleman I have ever had the pleasure of meeting and I am very much looking forward to working with him in the coming years.

Individually Yours,

John Pastore, Executive Director

Committee Reports



Air Quality

Chair Kris Flaig
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Air Quality Update by Kris Flaig, City of LA

Sometimes, when you look back it seems that things have moved along at warp speed. Sometimes it's like grass growing. Occasionally, it's a little of both.

Take Greenhouse gas (GHG) issues. When the Air Resources Board (ARB) approved the AB 32 Scoping Plan in December 2008, it looked like a steady-moving locomotive coming at us. Fast forward to this year, and workshops have been scheduled so often for the past several months that they sometimes overlap! You might think that the regulators at the ARB, California Energy Commission, California Public Utilities Commission, California Department of Public Health, and other agencies are a little busy. And, you'd be right. And, if they're busy, then you know that the regulated community is doing whatever it can to keep up. Thankfully, the relationship has been mostly cordial, regulators finding time to listen, regulated

entities pleading our cases, and regulators often being receptive.

Right now, however, this is the quiet before the storm. Any day we could witness ARB's release of the long awaited Draft Cap & Trade Program (exact title to be determined). ARB and others have been holding multiple workshops on every major aspect, including GHG allowances and allocations, offsets and credits of all shapes and requirements, reporting requirements and exceptions, and more.

Your California Wastewater Climate Change Group (CWCCG) representatives have been kept busy working with members, comparing notes at our monthly meetings, strategizing our approaches to regulatory proposals, reading the mounds of regulatory proposals, attending the many workshops, and submitting the occasional letter. This month's highest priorities have been discussions with ARB staff on offsets, submitting comments to the San Joaquin Valley APCD on its proposal for Best Performance Standards for GHG emissions, attending ARB workshops on offset structure and pricing, and contending with the proposed definition for "renewable biomass" in US Senate Bill 3381.

Although "renewable biomass" seems like an issue exclusive to the Energy or Biosolids Committees, it has a profound effect on GHG issues, like Cap & Trade. For instance, federal and State mandatory reporting requirements, continually changing, may exclude wastewater facilities from the requirement, or may

require full counting of GHG emissions in terms of carbon dioxide equivalents (CO₂e). Sometimes regulations would require that biogenic sources of GHGs be counted, sometimes not. Then, if we're going to count biogenic sources, like methane from anaerobic digesters, we need to define these.

At the same time, our wastewater agencies are putting biogenic emissions, like exceptionally high-quality biosolids and methane from our anaerobic digesters, to good use, providing exceptionally good quality soil amendment, generating steam and electricity, and replacing other fuels on a permanent basis. In many of these applications, biogenic sources might be defined as biosolids, biomass, biogas, or renewable biomass (and its residuals), federal and State aid may be available – If it fits the appropriate definition!

At about the time that we want to count our biogenic emissions as credits for doing the right thing (and get some funding, like everyone else, to defray the significant expense), some regulatory proposal or piece of legislation suggests that it's maybe not appropriate to include our biosolids or biogas in the definition of "renewable biomass." Could the culprit be a pencil pusher or peanut counter that accepts data from the 1970's or makes a qualitative comparison to a form of coal coke, for which they have no data? Or, could it be a well meaning Senator from Montana who means well, and would gladly accept a friendly amendment from a soon-to-be co-sponsor?

When you get down to the brass tacks and look at the financials (cash flow, balance sheet, and income statement), biogas, for example, possesses sufficient heat value that treatment plants often use it to generate electricity and/or process steam. In this day and age, if you're offsetting your energy costs by any means, THAT renewable biomass holds significant energy (or heating) value AND monetary value!

At this level of frustration, one might suggest that a peanut counter take a favorite magazine, like my brother does, to a private room. Maybe think about the many good articles he/she has read regularly (the SCAP Monthly Update?). Maybe think about how glad he/she is that modern conveniences (i.e., plumbing) take yucky stuff out of sight, allowing him/her to think about the kid's playing and studying, the spouse's birthday, or the dog chasing the cat.

If the peanut counter reads this article, he/she would have to acknowledge that his/her habit to seek a private room for reflection is just the kind of thing that puts "renewable" into "biomass."

If the peanut counter can see this, the winds will be fair, and the skies, clear.

Oh, and our industry might get a few of those hard-earned federal grants, or at least a little credit for doing our share to reduce GHGs and our dependence on foreign oil – for as long as people want to enjoy living here.

Imperial County APCD

www.co.imperial.ca.us

The Imperial County APCD has a new website in operation.

Imperial County APCD has announced that a copy of both the Final 2009 Imperial County State Implementation Plan for PM₁₀ (2009 PM₁₀ SIP) and the Final Negative Declaration for the 2009 PM₁₀ SIP are now available on the District's website.

The Imperial County APCD will conduct a public hearing to consider the adoption of the 2009 8-hour Ozone Modified Air Quality Management Plan and the 2009 Reasonably Available Control Technology State Implementation Plan and associated Negative Declarations on July 13, 2010 at 9:45 a.m.

There are currently no new public workshops or meetings posted on the ICAPCD website for the month of July 2010.

Mojave Desert AQMD

www.mdaqmd.ca.gov

For those interested in solar power, the MDAQMD website includes a real time display of daily and yearly solar power information from within the district, as well as the amount of carbon dioxide saved.

MDAQMD has also introduced ENVIROFLASH on its website, which provides air quality forecasts directly to your computer's inbox.

MDAQMD has announced that the 2010 California Desert Air Working Group (CDAWG) Conference will be held at the Aquarius Casino Resort in Laughlin, Nevada on November 17 and 18. This year's speakers will include: Senator George Runner, CARB Chair, Mary Nichols and Kerry Drake, Associate Director/Air Division USEPA Region 9. See website for Agenda information.

The next meeting of the MDAQMD Board is scheduled for July 26, 2010. There are no new workshops or

public hearings shown on the MDAQMD website for the month of July 2010.

San Diego APCD

www.sdapcd.org

San Diego APCD reports it has completed and submitted its Ambient Air Monitoring Network Plan (AMNP) for 2007 and a copy can be obtained from their website. SDAPCD will be required to submit an Air Quality Plan to EPA in 2013 outlining the emission control regulations necessary to bring the entire region into attainment.

SDAPCD has added a custom Google search engine exclusively for their website and also offers an interactive air pollution simulator program called **Smog City 2**. This program will allow the user to make decisions that affect the air quality and can then view the resulting changes that occur.

The CAPCOA Climate Change Forum in partnership with SDAPCD is scheduled for August 30-31, 2010 in San Francisco. The 2-day conference will focus on the integration and harmonization of California's climate policy with federal programs to allow development of effective and productive strategies in the fight against climate change.

The SDAPCD is currently in the process of applying with CARB to become a Greenhouse Verification Body. If approved the verification services will be offered by contract.

A Special District Meetings has been scheduled for July 12, 2010 but as yet there is no Agenda available. An Advisory Committee meeting is tentatively scheduled for July 14th. A Workshop has been scheduled for August 9 from 9 a.m. – 11 a.m. to discuss the 2009 Air Toxics "Hot Spots" Program Report. There are no new public hearings scheduled on the District's website at this time.

Santa Barbara APCD

www.sbapcd.org

The Santa Barbara APCD reports that they have a new fee schedule in effect as of 7/01/10, which can be viewed on their website. SBAPCD also reports that they are working with CAPCOA planning managers to develop GHG emission thresholds for CEQA reviews of new projects.

The next APCD Board meeting is scheduled for September 16, 2010. There are no workshops

scheduled for July at this time. There is a community Advisory Council meeting scheduled for July 14th to hear Amended Rule 321, which includes additional as well as new control techniques for solvent cleaning machines and also includes revisions to Rules 102 and 202.

The SBAPCD, as Lead Agency under CEQA, will prepare a Draft EIR for the 2010 Clean Air Plan (2010 Plan for Santa Barbara County).

Ventura County APCD

www.vcapcd.org

VCAPCD currently has application forms available for the Carl Moyer Program. The program will provide approximately \$2 million of grant funds for projects within Ventura County. The grant funds are available to qualifying owners of heavy-duty diesel powered equipment that want to reduce air pollution by upgrading or replacing their present equipment.

The VCAPCD reports that the Draft 2009 Reasonably Available Control Measures State Implementation Plan (2009 RACT SIP) is now available for public review. The VCAPCD reminds everyone that Tier 0 Portable Diesel Engines may not be operated in California after December 31, 2009.

There is a VCAPCD Board meeting scheduled for July 13, 2010. There are no new Advisory Committee meetings or public workshops scheduled for the month of July.

South Coast AQMD

www.aqmd.gov

Priority Reserve Lawsuits by Greg Adams, LACSD

Judge Chalfant dismissed the plaintiffs motion against the validity S 827 and AB 1318 (Sentinel Power Plant) in full. The plaintiffs have one opportunity to show cause why the dismissal is not valid at a hearing scheduled for July 19, 2010.

The SCAQMD has scheduled a public hearing to adopt a source-specific revision to the SIP to implement the offset requirements of the Sentinel Power Plant on July 9, 2010.

There is still no definitive date for the release of the CEQA documents for Rule 1315.

At the federal Court of Appeals in San Francisco, plaintiffs briefs against Judge George Wu's decision were filed on June 22, 2010 and the defendants have 30 days in which to respond.

SCAQMD Proposed Rule 317 Clean Air Act Non-attainment Fees by Greg Adams, LACSD

Still no word from the D.C. Appeals Court on the challenge to Section 185 Guidance released by OAQPS on January 5, 2010.

Staff has begun to implement their plan of action discussed at the May SCAQMD meeting and have begun to meet with legislators and Congressional representatives on both the vehicle license fee alternative and change to Section 185 of the Clean Air Act. The PR 317 Board committee has yet to meet.

SCAQMD Rule 1110.2 Biogas Limits by David Rothbart, LACSD

The February 1, 2008 amendment of SCAQMD Rule 1110.2 substantially reduced emission limits for engines fueled by landfill or digester gas. The compliance date for these new limits was set at July 1, 2012. However, the rule and the adopting resolution called for a technology assessment by July 2010 to verify the feasibility of available control technologies. Due to delays caused by the permit moratorium, biogas engine demonstration projects needed to assess the feasibility of the proposed limits have yet to be completed. As a result, SCAQMD staff will provide an Interim Technology Assessment for Biogas Engines to the Governing Board on July 9, 2010. In addition, SCAQMD staff has proposed to reopen Rule 1110.2 later this year to extend the compliance date.



Biosolids

Chair Mike Sullivan
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July Biosolids Committee Meeting by John Pastore, SCAP

We are pleased to announce that the next meeting of the Biosolids Committee will be hosted by one of our outstanding members, the Las Virgenes Municipal

Water District (LVMWD). LVMWD is a full service special district providing water, wastewater, recycled water and biosolids composting to its 65,000 customers in Agoura Hills, Calabasas, Hidden Hills, Westlake Village and unincorporated portions of western Los Angeles County. The meeting is scheduled for 9:00 am Tuesday, July 20th at the Rancho Las Virgenes Composting Facility in Calabasas, CA. The meeting will include a unique opportunity to tour the Rancho Las Virgenes Composting Facility, which processes wastewater biosolids from the Tapia Water Reclamation Facility and produces a Class A Exceptional Quality composting product. LVMWD's 2008/09 annual compost production was 13,656 cubic yards.

The compost facility is owned and operated by the Las Virgenes Municipal Water District in conjunction with the Triunfo Sanitation District under the Las Virgenes-Triunfo Joint Powers Authority. If you plan on attending, RSVPs are requested by July 14th.

Kern County Measure E Update by Mike Sullivan, LACSD and Matt Bao, LACSD

After the 9th Circuit Court of Appeals ruled that the City of Los Angeles and other petitioners did not have standing to challenge Measure E using the interstate commerce clause, and also remanded the California Integrated Waste Management Act (CIWMA) and police powers judgments back to the District Court, the petitioners asked the U.S. Supreme Court in March to hear the Measure E Case. In early June, the U.S. Supreme Court refused to hear the case and declined to comment. The Measure E case will now shift back to the District Court (Judge Feess) for determination of the appropriate venue for the CIWMA and police powers causes of action.

City of Los Angeles 2009 Biosolids Program Performance Report by Matt Bao, LACSD

The City of Los Angeles has prepared the [2009 Biosolids Program Performance Report](#), which provides information on regulatory compliance, accomplishments, goals and objectives, management practices, and public participation and communication efforts for our Biosolids Environmental Management System (EMS) program developed through and certified by the National Biosolids Partnership. To find out more about the City of Los Angeles' biosolids program visit their website at [BIOSOLIDS: Environmental Management System](#). The City of Los Angeles is preparing for its annual program audit and setting goals and objectives for the upcoming fiscal year. The audit is tentatively scheduled for August 2010.

EPA Proposed Solid Waste Rule by Matt Bao, LACSD

On June 4th, EPA published a proposed definition of solid waste that includes "sewage sludge", and is currently holding a comment period through August 3rd. Below is a concise summary of EPA's publication and the effect on biosolids incineration projects provided by Greg Kester on CASA's email listserver.

1. Defines "sewage sludge" as non-hazardous solid waste. This means that combustion units (ie. incinerators) which combust sewage sludge will be regulated under Section 129 of the Clean Air Act rather than Section 112. Sewage sludge incinerators (SSI) have historically been regulated under Section 112 through Part 503. (NOTE: Section 129 requires EPA to define Maximum Achievable Control Technology (MACT) standards for SSI's. This will come under a separate proposal expected sometime this summer and finalized by December 2010. As of now, we believe that EPA will develop separate MACT standards for Fluidized Bed and Multiple Hearth Incinerators. However EPA is limited to only 9 facilities from which it can request information. They did so and have received data from 5 Fluidized Bed and 4 Multiple Hearth incinerators. This is a minute subset on which to base MACT standards. They are accepting further information being provided by NACWA from some of the other 225 SSI's operating in the nation. They are forced to develop the MACT standards based on the 12% highest performing units.)
2. The conclusion on whether to classify a material as a non-hazardous solid waste is based on whether the material fails to meet any one of three sets of "Legitimacy Criteria" as follow:
 - a. Managed as a Valuable Commodity;
 - b. Have meaningful heating value and be used as a fuel in a combustion unit that recovers energy;
 - c. Contain contaminants at levels comparable to those in traditional fuels which the combustion unit is designed to burn.

In EPA's proposal they opine that sewage sludge fails each of the three legitimacy criteria for the following reasons:

- a. EPA believes sewage sludge burned without energy recovery (see b.) in an incinerator is discarded and not handled as a valuable commodity.
- b. EPA believes that energy is recovered in the form of usable heat from SSI's via waste heat boilers. However, they do not consider waste heat boilers legitimate

energy recovery devices because they receive their energy input from the combustion of off-gases via a separate combustion chamber, even though they acknowledge waste heat boilers are useful in providing energy in the form of steam. To be a legitimate energy recovery device they argue the combustion unit and primary energy recovery system must be of integral design and thus a combustion chamber which is connected by a duct to a waste heat boiler or heat exchanger does not qualify as a legitimate energy recovery unit. They further argue that even if heat and/or energy is recovered, the primary purpose of the incinerator is to burn waste for disposal purposes.

- c. EPA compares contaminant levels in sewage sludge to coal and concludes that contaminant levels are higher in sewage sludge. It should be noted that they use the 1982 40 City Study and the 1988 National Sewage Sludge Survey as the basis for the contaminant levels in sewage sludge. It is inexplicable why they did not use the 2006-2007 Targeted National Sewage Sludge Survey for this purpose. Further they do not provide a reference for the coal contaminant levels to which they make the comparison.
3. They do explicitly state that this definition applies only to sewage sludge that is combusted and they are making no determinations that cover other management practices such as land application. Thus I do not believe there will be any impact to other biosolids management practices. Comments will still be made to verify this assumption.
4. They do not define gasification units as incinerators and thus this definition does not apply to them.

In addition to the obvious impacts to the two SSI's in California, this proposal also could have negative ramifications on the many biosolids to energy projects either ongoing or planned. Such impacts would primarily be perceptual in nature since this proposal goes to great length to distinguish "legitimate" alternative fuels from "sham recycling". Since sewage sludge is deemed not to be a legitimate fuel, it falls under the category of sham recycling which negates the energy recovery potential we know exists in biosolids.

The following is a recent article of interest that was provided by Diane Gilbert Jones.

A simple solution to world health issues by Mitchell Koss, Executive Producer of Current TV

While keeping in mind that this is a family newspaper, let's talk about poop.

When you flush your toilet in Los Angeles, the waste is likely to end up at the Hyperion Treatment Plant in El Segundo, which every day receives enough raw sewage to fill the Rose Bowl several times over. At Hyperion, the sewage is processed via a series of pipes and giant tanks until the solid waste is sufficiently pathogen free to be trucked off as fertilizer. There isn't even any odor, for that too is captured in pipes and processed.

Barring a serious home plumbing catastrophe, or the presence of infants or toddlers, most of us don't come in contact with human fecal matter that isn't our own. We are extremely lucky. According to the World Health Organization and Unicef, 40% of the world - 2.6 billion people - engages in open defecation. This lack of toilets is the cause of an estimated 2 million preventable deaths a year, mostly in children killed by a variety of dysentery-like intestinal ailments that result from ingesting human fecal matter. When large numbers of people are defecating outdoors, it's extremely difficult to avoid ingesting human waste, either because it's entered the food or water supplies or because it has been spread by flies and dust.

Nonetheless, open defecation is a relatively low-profile public health issue. This is ironic because unlike other world health crises, such as malnutrition or malaria, the solution isn't necessarily expensive. It begins simply by discussing the problem. Yet we don't. Partly that's the taboo of discussing defecation, and partly that's because the practice is invisible ... sort of. Having worked in 68 countries, I can vouch that it's certainly not invisible if you're not used to seeing human fecal matter in the streets or fields. But you can quickly get used to it.

This March, I was in India with two colleagues shooting a documentary for Current TV on open defecation. The first morning, a local Delhi water activist took us on a boat ride along the Yamuna River, into which Delhi's raw sewage flows. The water is black and almost tar-like, bubbling with methane. The odor is intense.

When we made landfall on a bank that hundreds of people used as a toilet, correspondent Adam Yamaguchi promptly threw up. But a couple of days later, we were touring a Delhi slum where raw sewage

flows in shallow gutters, and Yamaguchi and the rest of us had stopped worrying about finding a clean spot to step. By the end of our visit, we were out in a farmer's field, with villagers who were showing us where they defecated, and it was easy to agree with the local schoolteacher who said that he could see why women and girls might have modesty issues, but that open defecation was good at least for the men and boys because it provided fresh air and exercise.

In a week and a half, we had gone through the entire cycle from revulsion to acceptance, thereby illustrating the crux of the problem. It had become invisible.

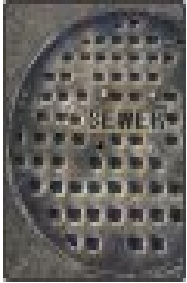
When people don't see the problem, they don't push for solutions. That means there's little incentive for governments to provide sewer systems and septic tanks to city dwellers, or for people in the country to dig and maintain outhouses. In India, it is said that more people have access to cell phones than to toilets. The World Bank has provided toilets in rural areas, only to find that people don't necessarily see why they should be used for defecation as opposed to storage sheds. Two hours north of New Delhi, we visited a two-story brick home where the owner had a washing machine, a stove and a television, yet in the predawn and again after sunset, she walked a mile with her teenage daughter to use a field as a toilet.

Health organizations worldwide are realizing they must create a demand for toilets before the problem can be solved. The goal is to link the lack of toilets to health problems. In a part of India's Haryana state, a campaign called "No toilet, no bride" sends the message that a man without a toilet should not be considered successful enough to marry your daughter.

A Singapore businessman, Jack Sim, founded the World Toilet Organization to break the taboo about discussing the issue. Now, he says, he's looking for "the Angelina Jolie of toilets" to be a spokesperson for the cause. Unlike many other world health issues, which require the developed world to cough up billions in aid, Sim believes that if there is demand, people without toilets will buy their own, even if they choose simple composting pit toilets. Sim estimates local cottage industries providing toilets could be a trillion-dollar business for locals, so it would be not only a health boom but an economic one as well.

But first, we have to be willing to talk about poop.

The World's Toilet Crisis premiered on Current TV on June 9, 2010.



Collection Systems

Chair Sam Espinoza
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EPA Proposed Rulemaking by Sam Espinoza, LACSD

On May 26, 2010, the Assistant Administrator for the Office of Water, Peter Silva, signed a Federal Register Notice announcing listening sessions to seek stakeholder input to help EPA determine whether and how to modify the National Pollutant Discharge Elimination System (NPDES) regulations as they apply to municipal sanitary sewer collection systems and sanitary sewer overflows (SSOs). The notice is currently available to the public at:

www.epa.gov/npdes/regulations/frn_sso.pdf

EPA plans to hold several informal listening sessions in June and July of this year to gather input from the public on actions that EPA is considering. The public listening sessions will include a brief background on SSOs and peak flows that will be followed by an opportunity for the public to provide input on possible paths forward. Input generated from what was learned at a public listening session will be compiled and made available.

In addition to the listening sessions held throughout the country, EPA will hold a “virtual” listening session via a webcast on July 14, 2010, from 9 a.m. to 1 p.m. PST. The same format will be followed as the in-person listening sessions. After a presentation from EPA, members of the public may call in and give brief (three-minute) statements. The webcast will be accessible nationally for members of the public that cannot attend the listening sessions. EPA has posted registration information for the SSO listening sessions on its website at: www.epa.gov/npdes/training.

As described in the Federal Register Notice, EPA is specifically seeking input on the following questions:

1. Should EPA clarify its standard permit conditions for SSO reporting, recordkeeping, and public notification?
2. Should EPA develop a standard permit condition with requirements for capacity, management, and operations & maintenance programs based on asset management principles?

3. Should EPA require permit coverage for municipal satellite collection systems?
4. What is the appropriate role of NPDES permits in addressing unauthorized SSOs that are caused by exceptional circumstances?
5. How should EPA address peak flows at POTWs?
6. What are the costs and benefits of CMOM and Asset Management Programs for sanitary sewers?

In California we already have a Statewide General Waste Discharge Requirement for Sanitary Sewer Systems. This program has been in place for several years now and includes many components of the CMOM program proposed by EPA. Rather than developing a national EPA administered NPDES program for SSOs maybe states should be encouraged to adopt a similar approach to California.

Written comments regarding the questions posed by the EPA are due August 2, 2010.

Is EPA considering reviving CMOM? by Bob Kreg, SCAP

As posted in the June 1, 2010 Federal Register the United States Environmental Protection Agency (EPA) stated its intension to possibly develop a broad-based regulatory framework for sanitary collection systems under the National Pollution Discharge Elimination System (NPDES) permit system (a copy of the Federal Register notice has been posted on the SCAP website in the Collection System’s reference library). The notice lists seven questions with several sub questions that outline EPA’s intent. The permit conditions EPA is considering would address the following areas: reporting, overflow right-to-know, notice of public health officials and recordkeeping requirements for SSOs, capacity assurance, management, operation and maintenance requirements for municipal sanitary sewer collection systems; and possible regulatory requirements or provisions for SSOs that are caused by exceptional circumstances. To assist with this process the EPA is conducting several informal public listening sessions during June and July. The public listening sessions are designed to disseminate information and solicit input from stakeholders and the general public. Three of the four in-person public listening sessions have already been conducted in Seattle Washington on June 24, Atlanta Georgia on June 30, and Kansas City Kansas on June 30. The last in-person public listening session is scheduled for July 13th in Washington DC. In addition to the in-person listening sessions, EPA will conduct a “virtual” listening session via a webcast on July 14, 2010. The same format will be followed with the public being

allowed to call-in and give a brief (three-minute) statement after EPA's opening presentation. Registration for the virtual webcast can be completed at www.epa.gov/npdes/training.

Aside from the potential for requiring collection system NPDES permits, EPA may also revive the Capacity, Management, Operations and Maintenance (CMOM) program. The concept of CMOM has a significant nexus with Asset Management approaches, which are becoming an industry standard for infrastructure management. The CMOM may present an appropriate framework or context for a possible permit condition. CMOM's roots extend back to 1996 and by 1999 were virtually ready to become the law of the land. In 2001, after the presidential election, CMOM was essentially shelved and funding for its implementation removed. The CMOM program was developed to provide a comprehensive maintenance and asset management program for the management, operation and maintenance of a sanitary collection system. The WDR/SSMP program currently required by publically owned collection systems within the State of California is essentially modeled after the CMOM program. California collection systems that are currently compliant with the state's WDR/SSMP requirements should have little difficulty complying with EPA's new CMOM program should it become law. A draft permit and SSO fact sheet from EPA have been placed in the Collection System's reference library.

CWEA SSO-WDR Task Force Training by Bob Kreg, SCAP

The SSO-WDR Task Force was formed to evaluate past CWEA WDR training and to develop new training to assist collection system agencies remain compliant with the statewide WDR. The Task Force is comprised of CWEA members and representatives from the Summit Partners of which SCAP is a participant. CWEA's past WDR training has primarily been a series of specialty workshops on electronic reporting and SSMP development presented at multiple locations throughout the state and at CWEA Conferences. To assist with determining what areas of training would best serve the needs of the collection system community, CWEA sent out a twenty question survey in the fall of 2009. The results of the survey were compiled and released in February 2010 (a copy of the survey results is available on the SCAP website in the Collection System's resource library). The Task Force used the data from prior workshops and the survey to develop the training program for 2010-2011. The Task Force concluded that CWEA would continue to offer the workshops on electronic reporting and the SSMP at its annual conference. Additional workshops could be available on a requested basis and possibly offered at

other Summit Partner's standing events. The Task Force further determined that the new WDR training would be offered through a series of webinars. The proposed topics would be (1) How to Estimate SSOs; (2) Enforcement and NGO Actions; (3) SSO-WDR Reporting and Order Changes. The webinars would be 1 ½ to 2 hours in length and allow the information to be disseminated while keeping the cost low.

Data Review Committee by Bob Kreg, SCAP

The Data Review Committee held two meetings in June and continued to discuss what performance index would best be used to evaluate the performance of collection systems. Currently, the state and USEPA use the annual number of spills per 100 miles of pipe as an index of how a collection system is performing. Although this is a straight forward calculation it is considered to be weighted against small systems. Over the last several months the Committee has evaluated, in detail, up to ten different performance indices that could be used to replace the current index. The indices included various parameters such as pipe diameter, population served, funds expended, number of spills per category, amount of wastewater conveyed, amount of wastewater spilled, etc. Committee members used their own agency's spill data or data provided by the state from the state's spill database to test each of the proposed indices. Several interesting conclusions were reached based upon the data researched. Smaller pipe sizes spill more frequently than larger pipes but have a lower potential to create a large spill. Smaller systems also tend to have higher spill frequencies than larger systems. It was also concluded that even after all of the research there is simply no single index that can be applied to all systems that will give an equally fair indication of the system's performance. The answer may be in a hybrid index or a series of indices based upon system size or population served. The committee's next meeting will be in July with the emphasis shifting to evaluating what questions are the most appropriate for the electronic spill reporting and questionnaire. The activities of the Data Review Committee may be monitored at <http://groups.google.com/group/sso-data-review-committee?lnk=srg&hl=en>.

Statewide Sanitary Sewer Overflow Reduction Program Annual Compliance Update by Bob Kreg, SCAP

On May 18, 2010 the State Water Resources Control Board (SWRCB) released its Statewide Sanitary Sewer Overflow Reduction Program Annual Compliance Update as part of the Executive Director's Report. The report is an update of the 2008 and 2009 reports and contains detailed information on the SSO Reduction

Program implementation efforts, compliance, and enforcement actions. The report includes detailed charts and graphs illustrating the level of WDR compliance, spill frequency and volume, and includes narrative descriptions of spill trends throughout the state and in individual regions. Also included are conclusions by staff based upon the data analysis. The reported percentage of total state population served by collection systems in each region indicates that the San Francisco Bay, Los Angeles, Central Valley (Sacramento), Santa Ana and San Diego Water Board regions account for most of the population served by collection systems in the state. The percentage of reported SSOs and PLSDs (private lateral sewage discharges) and spill volumes by Regional Water Board indicates that: (1) the San Francisco Bay and Central Valley (Sacramento) Water Boards account for 64% of reported spills in the state (San Francisco Bay = 34%, and Central Valley (Sacramento) = 30%); and (2) that 91% of the reported spills occur in San Francisco Bay, Los Angeles, Central Valley, Santa Ana and San Diego Water Board regions. This result is consistent with the population served by sanitary sewer systems in these regions. A copy of the Statewide Sanitary Sewer Overflow Reduction Program Annual Compliance Update is available on the SCAP website in the Collection System's resource library.

WDR Update by Bob Kreg, SCAP

If your organization serves a population of 2,500 or less, the Design and Performance Provisions, System Evaluation and Capacity Assurance Plan, Monitoring and Program Modifications, Program Audits and Communication Program elements and the final SSMP are due by August 2, 2010. After August 2, 2010 all publicly owned collection systems having more than one mile of pipeline, regardless of population served, must have developed and implemented a sewer system management plan to be compliant with the statewide WDR.

The next milestone for collection systems under the statewide program is to conduct an audit. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements, including identification of any deficiencies in the SSMP and steps to correct them. Audits are due every two years from the date that your agency's governing body approved its completed SSMP. If your agency serves a population of 100,000 or more the first audit is due by May 2011. For agencies serving a population between 10,000 and 99,999 the first audit is due by August 2011. Sample

audits are available on the SCAP website in the Collection System's reference library.



FOR IMMEDIATE RELEASE

June 15, 2010

ETWD Supervisor Honored by the California Water Environment Association

Ralph Palomares Receives the Richard D. Pomeroy Collection System Award

Lake Forest, CA – After working in the wastewater collection industry for 30 years, Ralph Palomares' resume includes an extensive list of achievements, accomplishments and involvement in professional associations and conferences. That impressive list of credentials is one of the reasons that Palomares was recently selected by the California Water Environment Association as the recipient of the Richard D. Pomeroy Collection System Award.

The Richard D. Pomeroy Collection System Award is presented for long standing contributions which expands the knowledge, improves methods and stipulates new techniques enhancing the professional development of wastewater collection systems personnel.

Palomares has shared his industry knowledge and commitment to excellence with the El Toro Water District Board of Directors, staff and customers since 1980. Today Palomares serves as the Sewer Collections Supervisor and Industrial Waste Inspector for the District's 142 mile collection system that spans across five communities.

"Ralph is a wonderful employee and a valuable asset to El Toro Water District," shares Bob Hill, General Manager of El Toro Water District. "I am very pleased that Ralph has been recognized for his achievements and dedication to the industry. This honor is well deserved."

The award is presented by the California Water Environment Association (CWEA), a not-for-profit

association of more than 9,000 wastewater industry professionals committed to keeping California's water clean. CWEA trains and certifies wastewater professionals, disseminates technical information, and promotes sound policies to benefit society through protection and enhancement of our water environment.

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The El Toro Water District is a full service water, wastewater and recycled water district, providing water service across portions of the cities of Aliso Viejo, Lake Forest, Laguna Hills and Mission Viejo and the entire city of Laguna Woods.



Energy Management

Chair Andre Schmidt
aschmidt@lacsdsd.org

Energy Management Committee Meeting by John Pastore, SCAP

Please join us for the next meeting of the Energy Management Committee which will be held on July 15, 2010 at the offices of the Orange County Sanitation District (OCS D). The focus of this meeting will be on renewable energy projects and internal combustion engine (ICE) control technology.

We will have presentations from a representative from NOxTech Technology to discuss ICE emission controls for methane gas fueled engines and various OCS D staff concerning their fuel cell and hydrogen filling station project, their experiences with engine emissions control, as well as their power monitoring and control systems. OCS D has graciously scheduled a tour of their facilities following the meeting. RSVPs are due by July 12th.

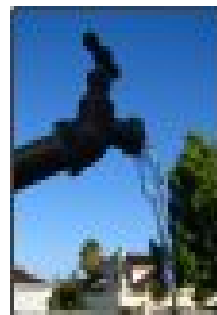
Renewable Energy Alternatives for POTWs by John Pastore, SCAP

The SCAP Board has tasked our energy management and air quality committees to jointly prepare a compendium of case studies of renewable energy projects developed by POTWs throughout California.

The case studies are intended to document a representative sample of different types of renewable

energy projects that have been developed by water/wastewater agencies. It is our belief that such a study will provide a useful reference to our members when planning future projects. While we are still in the preliminary planning stages, it is contemplated that the report will, at a minimum, include the successes and failures of these projects, pertinent energy production data, cost information and service life. One of the first items of business for the committees will be to develop a standard format for the presented information, which may present a challenge due to the diversity of energy projects in operation. As we progress, we may consider taking the study one step further and look at cutting edge technologies that possibly have merit but have not been readily implemented in our region or even in this country.

For example, we are all familiar with the benefits derived from cogeneration, commonly referred to as combined heat and power (CHP), production. But what about the benefits of Trigenation, also known as combined cooling, heating and power (CCHP)? CCHP, which like cogeneration, produces electricity, through mechanical action, as well as heat, but goes one step further and produces cooling using absorption chillers. As we all know, the second law of thermodynamics prevents us from ever achieving perfect efficiency, however, for those facilities that can utilize this additional benefit, it has the effect of increasing the overall efficiency of the power source, which in our case is digester derived methane gas. Obviously, economics of scale dictate that this technology may only be practical to the largest POTWs, which have the ability to produce excess gas and also have the need for a seasonal cooling source. Who knows, given the current pace of our technological advances, it may be just a matter of time until every one of our fuel producing POTWs will be operationally self sustaining.



Water Issues

By Chair Valerie Housel
housel_va@sbcitywater.org

Final Report by SWRCB Science Advisory Panel on Chemicals of Emerging Concern by John Pastore, SCAP

The State Water Resources Control Board Science Advisory Panel on Chemicals of Emerging Concern in Recycled Water issued its Final Report on June 25, 2010, a copy of which can be found at:

ftp://ftp.sccwrp.org/pub/download/DOCUMENTS/CECPanel/CECMonitoringInCARecycledWater_FinalReport.pdf.

The Panel was convened in May 2009 for the purpose of addressing questions related to Chemicals of Emerging Concern in recycled water used for landscape irrigation and groundwater.

According to the Communications Fact Sheet issued by the SWRCB, dated June 30, 2010, the Panel's report includes the following summary of recommendations related to these four products:

“Product #1: A conceptual framework for determining which CECs to monitor. The Panel recommends particular chemicals be monitored based on the following criteria:

Health-based Indicators.

Since thousands of chemicals potentially are present in recycled water and information about these chemicals is rapidly evolving, the Panel developed a transparent framework to guide the prioritization of CECs for monitoring. The framework includes four steps for identifying health-based indicators:

1. Compiling occurrence data (a “measured environmental concentration” or MEC) in the source water used for a project.
2. Developing a “monitoring trigger level (MTL)” based on toxicological relevance.
3. Comparing occurrence with the trigger level (the ratio between MEC and MTL) - CECs with MEC/MTL greater than “1” are prioritized for monitoring).
4. Screening the priority CECs to ensure robust analytical methods are available.

This component of the framework is focused on CECs with occurrence data from recycled source water and toxicological information.

Performance-based Indicators are included to characterize performance of individual unit processes. An indicator compound is an individual CEC that represents certain physicochemical and biodegradable characteristics of a family of trace organic constituents. The indicator compounds are relevant to fate and transport of broader classes of chemicals and provide

a conservative assessment of removal during treatment.

Performance-based Surrogates. A surrogate parameter is a quantifiable change of a bulk parameter such as TOC or ammonia that can measure the performance of individual unit processes (often in real-time) or operations in removing trace organic compounds and/or assuring disinfection. Surrogates and indicators are intended to evaluate for removal of CECs that are known to exist but can't be quantified.

Bioanalytical Screening is recommended to characterize chemicals for which such information is presently unavailable (i.e., “unknown unknowns”). The Panel recommends further development of bioanalytical screening methods before screening can be reliably undertaken.

Product #2: Application of the framework to identify a list of chemicals that should be monitored presently. Table 1 (not shown here but can be viewed on the SCAP website in the water committee reference library) summarizes the Panel's recommended monitoring compounds for each type of reuse project covered by the Policy. Table 1 should be preliminary pending clarification of a few ambiguities in the report.

Product #3: A sampling design and approach for interpreting results from CEC monitoring programs. The Panel recommends a multi-phase approach for implementing recycled water CEC monitoring programs and interpreting the resulting data. These recommendations are also reflected in Table 1. The approach involves the use of multiple tiers to provide a flexible, adaptable response to increase or decrease monitoring based on the initial results, thereby providing a cost-effective means for incremental information gathering. Should compounds be consistently present at high levels, additional evaluations or actions may be warranted. The Panel also recommends strict sampling and laboratory measurement quality assurance guidelines.

Product #4: Priorities for future improvements in monitoring and interpreting of CEC data. The Panel considers science of CEC investigation to be in its early stages and recommends that the State undertake several activities that will greatly improve both monitoring and data interpretation for recycled water management. The Panel provides a number of such recommendations, including: 1) Develop and validate more and better analytical methods to measure CECs in recycled water; 2) Encourage development of bioanalytical screening techniques that allow better identification of the “unknown unknown” chemicals;

and 3) Develop a process to predict likely environmental concentrations of CECs based on production, use and environmental fate, as a means for prioritizing chemicals on which to focus method development and toxicological investigation. These investigations should be conducted with guidance and review by a Science Advisory Panel.

In addition to these research recommendations, the Panel recommends that the State develop a process to rapidly compile, summarize, and evaluate monitoring data as they become available. The Panel further recommends that the State establish an independent review panel that can provide periodic review of the proposed selection approach, reuse practices, and environmental concentrations of ongoing CEC monitoring programs recommended here become available.

Regulatory Affairs

Regulatory Help Desk

Having a regulatory problem and want to talk to someone confidentially about what your options are? Helping individual members is one of my charges and a rewarding part of this job. Please feel free to call me at (949) 493-8466, or email at mjfconsulting@cox.net

NEW SCAP MEMBERS

Welcome to our newest SCAP Members - - Bay City Electric Works and Rain for Rent, who have joined as SCAP Associate members for 2010/2011.

Non Sequitir:

It is my living sentiment, and by the blessing of God it shall be my dying sentiment – Independence now and Independence forever.

In Commemoration of Adams and Jefferson, Faneuil Hall, Boston - 1826

Some of our Supporting SCAP Associate Members

DUDEK



Kennedy/Jenks Consultants
Engineers & Scientists



NWRI

HDR

