

A Message from the Executive Director...

July 2004

There's an old saying that life is just one dam... uh, problem after another. This is why problem solving is life's chief occupation, and why reasoning should be the essential ingredient in problem solving.

Reasoning is either cogent (good) or fallacious (bad). It's generally accepted that to reason cogently, we should start with an acceptable premise, include all relevant information and the reasoning should be valid.

A valid argument is either deductive or inductive. A deductive argument is one where if the premises are true, then the conclusion must be true also (example: Every mammal is a warm-blooded animal and humans are mammals; therefore humans are warm-blooded or $A+B=C$).

A valid inductive argument provides good, but not conclusive grounds for its conclusion (example: If the Angels win more than half of their games, they can win the World Series or $A+B$, then perhaps C).

In the interest of full disclosure, I'm telling you this because I am about to present what I hope will be a cogent argument in support of some issues on which, I believe, our members should consider taking an advocacy position.

Now, before someone fires off an email to me stating that SCAP is not an advocacy organization, that we don't lobby, etc., let me just say – you're right. SCAP was not formed to lobby legislators or legislation, and I'm not about to advocate in that manner.

I'm just going to stick my nose into a few collection system fats, oils and grease (FOG) issues and provide you all with some information, of which you may not be aware.

Here is the deductive premise and conclusion of my argument: the accumulation of FOG causes sewer overflows and every agency experiences sewer overflows; therefore, every agency has FOG. Here's my inductive argument: since agencies are addressing FOG, yet there are still sewer overflows, there is more that can be done to reduce FOG.

Hold on Ray, you say. I've got hot spot crews out there cleaning areas of my system every two weeks. I've got pretreatment inspectors looking at grease traps and interceptors. I've developed Best Management Practices, televised my system and replaced a lot of pipe. We're on top of this.

Yes, you are. But here are a few things that came out of a recent Water Environment Federation (WEF)/California Water Environment Association (CWEA) FOG training course, that I believe are excellent suggestions.

1. Implement a statewide manifest system for waste haulers. Right now, each agency that accepts hauled wastes, including FOG, maintains a separate manifesting system. Without getting into a lot of detail, a 3 or 4 part manifest system that included information on the generator, the hauler and the disposal site would provide a "generator to disposal site" tracking system that would provide the generator assurance that their

Upcoming Meetings

Air Quality Committee – Thursday, July 1, 10:00-Noon, LACSD.

Water Issues Committee – Tuesday, July 20 10:00-Noon, LACSD.

Biosolids Committee – To be announced.

wastes were disposed of properly, and minimize the "pump and dump" problem. This measure is supported by the California Restaurant Association.

2. Support mandatory FOG training for Food Service Establishment (restaurants, bakeries, etc.) managers and chefs. Currently, FSE managers and chefs must be certified by taking a mandatory (health department) training course. It has been proposed that a FOG element be added to that mandatory training and include such things as training in the proper operation and maintenance of grease traps and interceptors, separation of 'yellow' and 'brown' greases and proper FOG BMPs. This measure is supported by the California Restaurant Association.
3. Support inspection of sewer laterals upon sale of residential or commercial property. FOG and tree roots from sewer laterals cause many problems in agency mains. The inspection of these lines and correction of problems would reduce spills. This measure is opposed by California Realtors.
4. Change Appendix H of the Uniform Plumbing Code. Soon, engineers, manufacturers and regulators will meet to discuss the first changes to Appendix H of the UPC in decades. A critical change being proposed is clearer guidelines for sizing grease interceptors, which in many cases are sized too large and then don't work effectively. The UPC's current guidelines encourage conservative sizing, which is also a financial burden to the business owner.

If you believe SCAP should look into how we can support these issues from a regulatory standpoint, please drop me a line and let me know.

Finally, I know that some of you have sons and daughters, spouses, brothers, sisters or cousins that are serving in the armed forces of our country right now. I wanted to extend my thanks to you and to them for the sacrifice you are enduring, and to let you know - that we know - we are able to enjoy our Independence Day, and every day, because of the protections they afford us.

As Elmer Davis said, this nation will remain the land of the free, because it is the home of the brave.

FOGgily yours,
Ray Miller

Board of Director's Meeting

Board Approves Re-Appointment of Board Members for 3 Counties and Elects Officers

The SCAP Board met on June 24 and renewed the appointment of Board and Alternate Members for Santa Barbara, San Bernardino and Riverside County and approved one appointment for a vacancy in Los Angeles County; vacancies for Los Angeles (one position still open) and Ventura counties will be addressed at the next Board Meeting.

The reappointed and appointed members include:

Santa Barbara County

- Kamil Azoury, Goleta Sanitary District, Board Member
- Dwayne Chisam, City of Santa Maria, Alternate (new appointment)

San Bernardino County

- Rich Atwater, Inland Empire Utilities Agency, Board Member
- Dan Gallagher, Victor Valley WRA, Alternate
- Kathy Whelan, Crestline Sanitary District, Alternate

Riverside County

- John Pastore, Fairbanks Ranch CSD, Board Member
- Rex Sharp, Valley Sanitary District, Alternate
- Anthony Pack, Eastern Municipal Water District, Alternate

Los Angeles County

- Joe Mundine, City of Los Angeles, Alternate (new appointment)

The Board also approved the following officers:

- President – John Pastore, Fairbanks Ranch CSD
- Vice-President – Blake Anderson, Orange County Sanitation District
- Secretary/Treasurer – Dave Caretto, South Orange County Wastewater Authority
- Assistant Secretary/Treasurer – Mike Hogan, Encina Wastewater Authority

FY 2004/2005 Budget Approved

The Finance Committee recommended, and the Board approved, a \$441,000 budget for FY 04/05. This is a \$2,000 increase from FY 03/04's budget of \$439,000.

Directors Ask for More Survey Data

While SCAP received a score of 4.3 out of a possible 5 points on the SCAP Evaluation Questionnaire that was sent out in the spring, only 12 of the 62 member agencies submitted responses; surveys were also emailed to all committee members (over 270 individuals total). The Board asked SCAP staff to send the questionnaire out again, and follow up with either a telephone call or personal visit if a response isn't received from an agency.

Biosolids

Biosolids Final Draft EIR – Not Issued, Workshop Still Scheduled for July 7

The final version of the Biosolids Program EIR was due to be released by the SWRCB by June 22, as of June 28, it hadn't been issued. A public workshop is scheduled for July 7 to review the PEIR and General Biosolids Order.

A Red Alert will be sent to member agencies as soon as the report is released and we have a chance to review the final document. Assuming the final document is relatively unchanged from the previous version, we will be asking all SCAP agencies to send in letters supporting the State Board's approval of the EIR and adoption of the General Order.

Biosolids Emerging Technology Workshop Planned for Fall

The Biosolids Committee is planning a workshop that will highlight new technologies for biosolids reuse. The Committee is actively seeking information from member agencies and/or vendors on viable technologies that have been implemented or are in an advanced planning stage in the United States. If you have information on such technologies, or know of someone who does, please contact Biosolids Co-Chair, Karen Vargas, LACSD at (562) 699-7411 x282.

The Committee will also be presenting the results of the Biosolids Survey that was conducted last winter.

Collection Systems

Collection Systems Steering Committee Drafting Formation and Strategic Plan

The Collection Systems Steering Committee has produced a first draft of a Formation and Strategic Plan that calls for the Committee to serve primarily as a resource group to help SCAP members achieve compliance with regulations.

The Committee plans to use workshops, committee-developed products, model programs, guidelines, training and outreach efforts to fulfill their mission. The Committee initially plans on meeting quarterly. The draft Plan is out for comment and will be finalized in upcoming months.

Region 2 SSO Reporting System Being Evaluated for Statewide Use

The San Francisco Regional Board has been using an electronic reporting system for sewer overflows and the SWRCB is considering modifying this system for use statewide.

As proposed, if an agency experiences a sewer overflow, agency personnel would sign on to a website using a password. Once a reporting form was filled out, notification would be sent to all appropriate regulatory agencies. As more information about the spill becomes available, the agency could log back in and amend or add to the form as needed.

The proposal is still in the planning stages, no implementation date has been set.

Sanitary Sewer Overflow Guidance Committee Established

The SWRCB's Office of Statewide Initiatives has established an SSO Guidance Committee chaired by staff member John Norton. The mission of the Committee is to collaborate with the state and regional water boards to help develop a plan of action and guide the implementation for a consistent statewide approach for controlling and reducing SSOs.

Air Quality

Air Quality Committee Gathers Biosolids Management Air Emissions Data

The Air Quality Committee assembled air emissions data for various biosolids management plans from eight SCAP agencies in a concentrated two-week effort. The data, which was assembled for 2004, 2010, and 2020, needed to be submitted to the SCAQMD in order to assist in issuing air permits for planned facilities. The SCAQMD

is reviewing the data to determine the amount of emissions credits that will be required under the Priority Reserve (a reserve that is maintained for essential public services such as wastewater). Our members may view the data from the Air reference section in the Members Only area on the www.scap1.org website.

Phase I of New 8-hour Ozone Standards Promulgated

The EPA has released the first part of the final rule that deals with re-designation of most monitored air quality areas in the United States, revocation of the 1-hour standard, anti-backsliding provisions, attainment date for extensions and emissions reductions needed for attainment. Many, many new regulations will ensue from these standards over the upcoming years. The Air Quality Committee will follow this issue and periodically report on its impacts.

CARB Adopts Ban on Paradichlorobenzene

On June 24th, the California Air Resources Board adopted a ban on the use of paradichlorobenzene in toilet/urinal cleaners/deodorizers and in solid air fresheners. It will be phased in over the next couple years. As of December 31, 2005, these products cannot be manufactured for sale in California. As of December 31, 2006, they can no longer be sold for use in California.

The Air Resources Board also banned the use of perchloroethylene (also known as tetrachloroethylene or perc), methylene chloride, and trichloroethylene in adhesive removers, contact adhesives, general purpose degreasers, electrical cleaners, electronic cleaners, footwear/leather care products, and graffiti removers. For most of these product categories, the toxic chlorinated solvents cannot be used in products manufactured for sale in California as of December 31, 2005. (ARB is planning to give an extension to this deadline in several categories where substitutes aren't readily available, such as adhesive removers and graffiti removers.)

Congratulations to Ann Heil of LACSD who worked extensively on this issue. SCAP, along with other POTW organizations, supported this action through comment letters submitted to CARB.

Diesel Regulations Timeline Available

Thanks to Jackie Kepke of CH2M, a spreadsheet that lays out a timeline for implementation of the recently adopted and pending state diesel regulations is available for viewing/downloading from the website at www.scap1.org/reference. The timeline summarizes the adopted or proposed requirements of the stationary, portable and fleet regulations, and lays these out in a timeline format to show when they become effective.

Water Issues

Water Issues Committee Workshop to Review Electronic Reporting and Permit Standardization

On Tuesday, July 20, 2004, Jim Maughan, Senior Environmental Engineer for the Regulatory Section of the State Water Resources Control Board will present an overview of the status of the electronic self-monitoring reporting (e-SMR) projects and the permit standardization process that has been ongoing at the SWRCB. Additionally, as was directed in the Fee Adoption language, Resolution No. 2004-0032, the SWRCB will be working to develop "...cost effective monitoring requirements for permit compliance and assessing ambient water quality."

Strawman permits to review different options for suggested standardization in permits are in the process of development and may be available for review by the time of our July 20th meeting. To make this meeting as interactive and productive as possible, we encourage our members to draft suggested improvements that would result in cost-effective monitoring requirements.

Permit Inspection Checklist Available

An electronic copy of the permit inspection checklist that is currently being used by Tetra Tech for the annual, random and unannounced inspections they conduct on behalf of the EPA can be viewed at www.scap1.org/reference. Our thanks to Monica Oakley and the BACWA Permits Committee for this document.

Good Prospects: Electricity from Wastewater (courtesy International Water Association)

Researchers at Pennsylvania State University have reported further important advances in their work on microbial fuel cells. Their latest laboratory scale cell is said to use much cheaper materials than earlier designs, while producing over 5 times as much electrical power.

Previous work had shown that such cells are capable of producing electrical power in an anaerobic process with domestic wastewater as the substrate. A cell using graphite rods as the anode was able to produce a power output of 26 milliwatts per square meter (mW/m^2) of anode surface, while at the same time significantly reducing the chemical oxygen demand (COD) of settled sewage (primary tank effluent).

In the latest laboratory scale design, the electrodes form the opposite ends of a plastic chamber 40mm long and 30mm in diameter. The anode is made of carbon paper while the cathode is a flexible carbon-cloth containing $0.5 \text{ mg}/\text{cm}^2$ of platinum catalyst; use of expensive graphite electrodes has been abandoned. Additionally, in the most successful tests where power output reached $146 \text{ mW}/\text{m}^2$, a proton exchange membrane (PEM) was omitted. This is an important step forward both in cost cutting and in terms of design concept; a PEM is necessary in hydrogen fuel cells to conduct protons across the gas separating the electrodes but, in cells designed for electricity from wastewater, it has been realized that the water is an efficient transfer medium.

The removal of the PEM also boosted COD removal to 75%, compared to around 55% with the membrane in place. Research team leader Professor Bruce Logan believes a realistic goal for the technology is $1000 \text{ mW}/\text{m}^2$.

Non Sequitur

During the heat of the space race in the 1960s, NASA decided it needed a ballpoint pen to write in the zero gravity confines of its space capsules.

After considerable research and development, the Astronaut Pen was developed at a cost of \$1 million. The pen worked and also enjoyed some modest success as a novelty item back here on earth.

The Soviet Union, faced with the same problem, used a pencil.