



AICHE Orange County

NEWSLETTER OF THE ORANGE COUNTY SECTION, AMERICAN INSTITUTE OF CHEMICAL ENGINEERS

No. 107

<http://www.aiche-orangecounty.org>

February 2003

FEBRUARY DINNER MEETING

Groundwater Replenishment System
A solution to our future water needs.

Ron Wildermuth

Tuesday, February 25, 2003
5:30 PM

Future imported water supplies are being cut back. Unless water agencies do something, we will have shortages in California and Orange County by 2020. The solution lies in all water agencies doing their part to create new water supplies and clean up existing water supplies.

Water reuse, conservation and other local and regional projects are important, both now and during drought times, to ensure future water reliability.

The Groundwater Replenishment System will play a key role in Southern California's water future by providing a new source of up to 72,000 acre-feet (one acre-foot equals 326,000 gallons) of water to protect Orange County's groundwater basin from seawater intrusion and to augment our future groundwater supplies.

The Groundwater Replenishment System will:

- provide a very high quality water that will actually reduce the mineral content of our groundwater
- cut down on the amount of wastewater going to the ocean
- help improve the County's future water reliability
- Help us work toward water independence

Through the Groundwater Replenishment System, Orange County could be a model for efficient,

environmentally friendly water management in arid, coastal regions throughout the nation and around the world.

Ron Wildermuth is the Communications Director of the Orange County Water District. From 1992 to 1997, he was the director of Corporate Relations for Parsons Corporation, one of the top international engineering and construction firms in the world, recently ranked the number 1 design firm by Engineering News-Record magazine. From 1989 to 1992, he was the Public Relations Advisor to General H. Norman Schwarzkopf before, during and after the Gulf War, and supervisor of the entire Gulf War in-theater public relations effort. Mr. Wildermuth is a retired Navy Captain.

Meeting Schedule:

5:30 p.m.	Social Hour
6:30 p.m.	Dinner
7:20 p.m.	Break
7:30 p.m.	After-Dinner Program

Place: Wyndham Garden Hotel, Costa Mesa

Directions: From Interstate 405, go north on Bristol Ave., right on Anton, left on Avenue of the Arts. The Wyndham is on the right at 3350 Avenue of the Arts, Costa Mesa.

Reservations: Please make a reservation at (949) 261-2622 by voice by Friday, February 21, 2003. Or, you may email your reservation to janice.west@ps.ge.com. Please specify your preference for either the main menu or the vegetarian menu when making your reservation.

Cost: Members, \$20 with a reservation, \$25 at the door; Non-Members, \$25 with reservation, \$30 at the door; Students/Unemployed/Retired, \$15 with reservation, and \$20 at the door.

Southern California AICHE Meetings

The section for the LA area normally meets every 3rd Tuesday at the Quiet Cannon in Montebello. For reservations call (800) 274-3847. Visit their web site for the latest information www.geocities.com/aiche_sc



.....

CALL FOR PAPERS

Presenters wanted for dinner topics and poster sessions for a special technical series tentatively scheduled for this summer. Warm-up for a national meeting, or just present your Senior Project. Please contact the Program Chair with your topic.

KEEPUS By Bob Katin

.....

The following are excerpts from a report by Bob Katin, PE who is chairing AIChE's KeepUS lobby group:

If you read the 19-page Executive Summary to the long awaited independent consultant's evaluation of the State Engineer's Act (ISR Study Report), you will know that we won a significant battle. The executive summary is posted on the Internet

http://www.dca.ca.gov/engineering_title_act.htm. I encourage you to read it. However, the war is not over. Given the way of politics, it does not necessarily mean that the legislature will automatically agree with the independent consultant and will act in our favor. We still need to continue the fight and make sure the key Legislators are energized; legislation is drafted, submitted, passes hearings, and becomes law. At best, this will take until JAN 2005. We need fellow ChEs to know that we will continue to need help and support. ChE's have been donating money to support California AIChE's State Government Relations Committee (aka KeepUs) to support lobbying in favor of legislation to promote the standing of ChE's. Our goal is to collect \$20,000 to pay for a lobbyist to meet with the Legislature. If that is not successful, we will need to hire a lawyer to file a lawsuit. This fiscal year, we have raised \$6,202, and now have a total of \$18,950 toward our \$20,000 goal. If you can make a non-tax deductible donation (since it will be used for lobbying), please make your check payable to NorCal AIChE and mail it to my attention:

Bob Katin, P. O. Box 4727, Antioch, CA 94509

Background information is posted on the NorCal AIChE website <http://www.aiche-norcal.org/> and from the home page select the tab on the top left corner for ADVOCACY.

.....

Legal Corner

President Bush Outlines Key Environmental Initiatives In State Of The Union Address

Peter Hsiao and Siegmund Shyu, Morrison & Foerster
LLP

President George W. Bush, in his State of the Union Address on January 28, 2003, outlined his key environmental priorities for the upcoming year. First, he touted his Clear Skies legislation, which was submitted as proposed bills to Congress last July. The Clear Skies legislation would create an economic-based model to reduce power plant and other emissions of sulfur dioxide, nitrogen oxides, and mercury. The legislation would place a national cap on pollutants, and allow polluters to trade emission credits based on how successful they can cut emissions. The cap would be continuously lowered to reduce emissions. The President claimed that the program would cut power plant air pollution by 70% over the next 15 years. Second, President Bush introduced the Freedom CAR and Fuel Initiative. It will provide \$1.2 billion over five years in research funding to develop automobiles with hydrogen-powered fuel cells. The research will be done through partnerships with the private sector, and seeks to have available large numbers of practical and cost-effective fuel cell vehicles by 2020.

Ford Motor Company Reaches \$1.14 Million Settlement With The California Air Resources Board

On January 30, 2003, the California Air Resources Board ("ARB") announced a \$1.14 million settlement with the Ford Motor Company for Ford's illegal delivery of 374 non-complaint trucks into the California market. Ford delivered to its distributors 374 E-450 trucks with 7.3-liter diesel engines for model years 1998 and 1999; the vehicles were not certified for sale in California. Ford claims that this delivery was due to errors in its vehicle-order guide and electronic vehicle order system. Ford states that it has made corrections to its ordering process, and that the errors were self-reported to ARB. The \$1.14 million will be paid to the California Air Pollution Control Fund, which is used to educate the public to reduce the output of smog forming emissions. On the settlement, ARB, through its press release, commented, "Auto manufacturers must be certain



they ship to California only vehicles that meet our stringent emission standards.”

Something Completely Different

The Rolling Stones held a free concert February 6, 2003, at the Staples Center in Los Angeles, in an event organized by the environmental group Natural Resources Defense Council (“NRDC”). According to the *L.A. Times* and the Environmental News Network, the concert was dedicated to raising awareness about global warming. It was funded by Hollywood producer Steven Bing, a major fundraiser for NRDC and most famous for his high-profile paternity case with actress-model Elizabeth Hurley. Most tickets were distributed through Internet drawings and radio station giveaways. Politicians and celebrities turned out as well, including former President Bill Clinton, Governor Gray Davis, Leonardo DiCaprio, Cameron Diaz, and Pierce Brosnan. NRDC intended to make the event “climate neutral,” by offsetting the pollution caused by the concert’s electricity or fuel usage with donations to build electricity-generating windmill farms. It also provided hybrid cars to shuttle concertgoers. Also, the organization distributed postcards to urge automakers to support clean air laws and build more fuel-efficient vehicles. This is the first free Rolling Stones concert since their infamous Altamont concert in 1969 in Livermore, California, which was marred by fighting, drug overdoses, and several deaths.

Legal Corner reports on recent news, and is not intended to be legal advice. The reader should consult an attorney about the specific facts before acting upon this information.

Safety Issue

Static electricity caused this.....

The Petroleum Equipment Institute is working on a campaign to try and make people aware of fires as a result of "static" (that is, static electricity) at gas pumps. They have researched 150 cases of these fires. The results were very surprising:

- 1) Out of 150 cases, almost all of them were women.
- 2) Almost all cases involved the person getting back in their vehicle while the nozzle was still pumping gas. When finished, they went back to pull the nozzle out. The fire started then as a result of static discharge.
- 3) Most men never get back in their vehicle until completely finished. This is why they are seldom involved in these types of fires.
- 4) Most had on rubber-soled shoes.
- 5) Don't ever use cell phones when pumping gas. (The RF energy from a cell phone (a radio

transmitter) can cause a sparking on bare metal, much like aluminum foil in a microwave oven.)

- 6) It is the vapors that come out of the gas that cause the fire, when connected with static discharges.
- 7) In 29 fires, the vehicle had been reentered and the nozzle was touched during refueling. This occurred in a variety of makes and models. Some resulting in extensive damage to the vehicle, to the station, and to the customer.
- 8) Seventeen fires occurred before, during or immediately after the gas cap was removed and before fueling began.

NEVER get back into your vehicle while filling it with gas. If you absolutely HAVE to get in your vehicle while the gas is pumping, make sure you get out, close the door TOUCHING THE METAL, before you touch the nozzle. This way the static from your body will be discharged before you ever remove the nozzle.

As mentioned earlier, The Petroleum Equipment Institute, along with several other companies now, are really trying to make the public aware of this danger. You can find out more information by going to <http://www.pei.org>. Once here, click in the center of the screen where it says "Stop Static".

Do We Have Your E-Mail Address?

Newsletter delivery by e-mail has proven to be more reliable and expedient than the postal version. If you would like to receive the e-mail version, especially if you only want the e-mail version, please contact the editor at Kris_lp@edwards.com. Postage presently consumes a significant portion of our budget and volunteer time.

Newsletter Contributors Wanted

The newsletter editor would like to hear from you if you have one or more brief articles to contribute, especially a review or brief discussion of a good website, technical book, etc.

Professional Engineering Employment Update

Job Seeking Members can receive a list of web sites of area companies that sometimes hire ChEs. Contact the Senior Member Everett Knell at EWKnell@aol.com to receive this list by e-mail.



Job Opportunities

ENGINEERING DIRECTOR

(Reply to sales@exergycorp.com for details)

Duties:

- Provides technical management of projects and assignment, including, administrative, fiscal, technical and staffing details, and conducts quality control review.
- Supervises staff in project and non-project assignments as necessary. Plans schedules, and manages staff project assignments.
- Develops implements technical project quality assurance procedures and follows through on QA/QC. Evaluates technical information and infrastructure requirements for recommendation to the President.

Qualification:

- Minimum of Bachelors degree in science or engineering.
- At least two years of technical staff supervision or management.
- At least eight years of experience in one or more of the following fields:
 - Manufacturing or progress engineering;
 - Environmental regulatory compliance;
 - Environmental assessment; and
 - Air qualify, water, waste water, or solid waste engineering; and/or closely related field.

ENGINEERING STAFF

(Reply to sales@ppint.com for details)

Duties:

- Interacts with clients, prime-contractors, and sub-contractors on project-specific issues.
- Evaluates technical information and infrastructure requirements, and develop and implement technical project quality assurance procedures and follows through on QA/QC.
- Provides technical and engineering field support on assigned projects. This includes sampling, field sketching and drawing, on-site project work and other activities associated with the project
- Other duties as assigned.

Qualification:

- Minimum of Bachelors degree in science or engineering.
- At least three years of experience in one or more of the following fields:
 - Manufacturing or progress engineering;
 - Environmental regulatory compliance;
 - Environmental assessment; and
 - Air qualify, water, waste water, or solid waste engineering; and/or
 - Closely related fields
- Ability to understand technical issues in applicable subjects, basic skills in technical subject areas associated with the above identified subject areas.
- Outstanding credentials in related education or experience may be substituted on a year-for-year basis, with exception of staff supervision or management requirement.

MANAGER, PRODUCT COMPLIANCE AND SAFETY

If intereted, please contact : Michael Borska, *Account Executive*

Strategic Staffing Partners
535 Broad Hollow Road, Suite A-5
Melville, NY 11747
(631) 752-6800x104
Cell (631) 836-9910

- **QUALIFICATION REQUIREMENTS:** To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- **EDUCATION and/or EXPERIENCE:** Bachelor degree in Engineering from an accredited institution in either Mechanical, Industrial, Electrical, or Chemical Engineering or equivalent experience; knowledge of the boiler, water heater, electronic, pumping and filtration product categories, including ANSI, ASME, DOE, CSA (including former AGA and CGA), NSF, UL, CEC (California Energy Commission), SCAQMD (South Coast Air Quality Management District) and CE standards and code requirements; fluency with Microsoft Excel, Word, Access, Power Point, and Project computer software; knowledge of automated Data Acquisition System software and associated programming; knowledge of design of experiments (DOE) and Failure Modes Effect & Analysis (FMEA).
- **LANGUAGE SKILLS:** Ability to read, analyze and interpret scientific and technical journals, regulatory standards and codes, financial reports and legal documents. Ability to correspond with regulatory agencies, customers and members of the trade. Ability to communicate effectively with senior management and members of the legal profession. Ability to provide depositions and testimony within a court of law.

① If you have an employment opportunity in Southern California for a chemical engineer, the newsletter will advertise it for free.

2002 Orange County AIChE Officers

President	Erik Pearson – England Geosystem (949) 453-8085, Fax: [949] 453-0733 e-mail: eperson@englandgeosystem.com
President-Elect	(Position Vacant)
Treasurer	Janice West – GE Energy and Environmental Research (949) 859-8851, Fax [949] 859-3194 e-mail: janice.west@ps.ge.com
Program Chair	Dominic Meo III, P.E. – Meo & Associates (714) 377-8887, Fax [714] 377-8957 e-mail: dmeo@socal.rr.com
Secretary	Parag P.Kulkarni – GE Energy and Environmental Research (949) 859-8851 x146, Fax [949] 859-3194 e-mail: parag3.kulkarni@ps.ge.com
Newsletter Editor	Kris Ip – Edwards Lifesciences phone (949) 250-3807 e-mail: Kris_ip@edwards.com
Senior Member	Everett Knell – AFLAC (562) 596-0215, Fax [562] 596-0215 e-mail: ewknell@aol.com
College Relations	(Position Vacant)
Webmaster	Cheryl Zheng – GE Energy and Environmental Research (949) 859-8851, Fax [949] 859-3194 e-mail: cheryl.zheng@ps.ge.com



Advertisements

ENGLAND GEOSYSTEM

ENVIRONMENTAL ENGINEERING

- Comprehensive, cost-effective environmental services
- Extensive, demonstrated experience
- Ability to meet condensed schedules
 - Assessments, investigations, and remediation
 - Data management/computer modeling/geographic information systems
 - Air, soil, and water

15375 Barranca Parkway • Suite F-106 • Irvine, California 92618-2207
(949) 453-8085 • FAX (949) 453-0733 • www.EnglandGeosystem.com

American Institute of Chemical Engineers
ORANGE COUNTY SECTION
P.O. Box 19362
Irvine, CA 92623

DATED MATERIAL

ADDRESS SERVICE REQUESTED

