April 29 is “Training and Safety Day” aboard the USS Hornet!

Hands-on training from 1—7 PM. Topics include boiler safety, process safety, chemical handling, welding, and other OSHA mandated programs. See demonstrations of pump and compressor tear downs, back flow devices and more! Jointly sponsored by your local Bay Area Chapters of RETA, ASHRAE and AFE. ADMISSION and PARKING are FREE! LUNCH PROVIDED!

Contact Virginia Gibson at vASFca@aol.com for more info on topics, speakers and times
The San Jose/Santa Clara Water Pollution Plant is currently offering the Water Efficient Technology (WET) Rebate Program for commercial and industrial clients in the district that implement water conservation technologies to reduce water use and wastewater discharge. The WET program offers a rebate of up to $50,000 or 50% of the total project cost based on the annual water reduction achieved with the new technology. The rebate rate is $4.00/hcf of wastewater discharged or water use reduced in a year. Of course this is in addition to the savings on your water and sewer bills.

To qualify for the program, your company must complete an application and after receiving initial approval, the district will take a preliminary meter reading to gather current water use. After the project is completed, the district will take a post meter reading to determine the exact rebate value for the project.

Some examples of projects that may apply to your facility include:
- Process rinse water re-use systems
- Air cooled chiller systems
- Closed loop cooling systems
- Cooling tower upgrades

My company is looking at two possible projects, the installation of conductivity controllers for the cooling tower system, and installation of a wastewater recycling system. The average retail cost of a conductivity controller system is $4,000. Based on our current discharge rate of 6,800 gallons per day, the controller could reduce the blow down to qualify for about $2,000 of incentive rebate. The other project, which would involve the installation of a membrane separation system that would recycle the RO permeate back into the polish loop, could result in an 80% wastewater recovery, but would cost a significant outlay of funds, even for a pilot.

Another, less costly program is the Irrigation Technical Assistance Program (ITAP), sponsored by the Santa Clara Valley Water District, in which a qualified technician will come out to your site and perform a free evaluation of your landscaped areas (must be 1 acre or greater to qualify). They will calculate the sprinkler distribution rate and analyze for even water application, suggest the use of the right plants and spray patterns and provide other recommendations that can save your company up to 800 cubic feet of water per acre, a potential savings of $1,200 to $1,000 per acre a year.

If you want to sign up for an ITAP evaluation call the Santa Clara Valley Water District at 408-265-2607, ext. 2254. If you want more information about the WET program, call 408-945-3700, or visit their website for a WET application at www.slowtheflow.com.

Jeff House
Chapter 39 Newsletter Editor
If you are like me, it seems like we have to spend more and more of our time advocating for the resources we need to support our facility operations. We're not talking about luxuries; I am talking about the bare essentials - people, and the resources to train them.

Budgets are squeezed so tight, it sometimes seems like every manager in America has adopted a "squeeze until it hurts, and then squeeze some more" approach to managing his or her organization.

I don't know about you, but when my management squeezes me, I go ahead and squeeze them right back (being a former manager myself, I know they can take it). And just last week AFE provided me key information I needed, when I needed it - and when I least expected it!

I had registered for a free one-hour AFE online training "webinar" (web-based seminar) given by an expert who studies maintenance organizations and systems. AFE Professional Development Director Tim Wiley hosted the webinar from Ohio, the instructor was in Idaho, and we who attended were scattered across the United States watching the presentation on our computers. It was definitely a "no-cost" training opportunity for AFE members.

The presentation was great all by itself, but the follow-up question session was when I was able to pose a question that pertained directly to my immediate problem: had the expert ever seen companies successfully transition from a command-and-control organization to an empowered-team organization, and how did they accomplish it? The expert's answer provided the information I needed: only a few of the many companies he has studied have successfully completed the transition, and those companies were successful only because they had training programs and a training culture in place when they began the transition.

Immediately after the webinar ended, I submitted another request to my management for the training resources we have repeatedly been requesting for the past year. But this time I cited the expert's answer as an independent argument in favor of providing the training resources that will get us to our goal - an efficient and empowered facility workforce.

This is one more example of the value your AFE membership can bring to you, and the importance of you getting involved in AFE local and national activities. I had no idea when I started the webinar session how I would benefit from the hour I invested, but now I am glad I did!

Go to [http://www.afe.org/webinar.htm](http://www.afe.org/webinar.htm) to register for the next webinar session, and use what you learn to squeeze your management for resources. It's actually quite fun!

Paul Mitchell
President
We had another successful event on March 31st. I judge it most by the look of appreciation I saw in the eyes of the students participating and the enthusiasm in the voices of our generous sponsors and hosts.

For over 40 years, Chapter #39 has held this honorable event. It provides students interested in facility engineering careers the opportunity to experience the real workplace and tap into a group of mentors. Beyond supporting our youth, I know the day was energizing for the hosts. I know they, like me, felt refreshed for days.

Brian Lee of Solectron was one of our hosts. He participated in the program several years ago as a student from Cal-Poly of San Luis Obispo, and was excited to come back as a host.

Philips Semiconductor provided a great venue for the lunch and dinner programs. We are grateful to Brian Long and Frank Martins for that.

This year we had students from both San Jose State and the California Maritime Academy. The students we exposed to a broad range of facility environments. Our hosts represented high tech manufacturing, biotech, health care, academic, and contracting companies.

When we returned to Philips, we had a panel discussion. We were so fortunate; the panel included Steve Papier of Stanford University, Ken Shea of Xenoport, and Dan Hoffman of Network Appliance. These gentlemen spoke from their hearts as they described their career paths and working relationships.

We all came away from the day with a greater sense of the variety and importance of facilities engineering and management. How lucky we are to have work we love.
Day With a Facility Professional

Thanks to everyone who participated!

Bob Dills introduces students to their Facility Sponsors at the lunch meeting

Students learning from sponsors and sponsors learning from students!

SJSU senior Daniel Wong on a tour of a Barry Swensen Builder construction site
Chapter 39 has two open positions on the Board of Directors. We need a PROGRAMS CHAIR to help set up our meetings and a MEMBERSHIP CHAIR to help recruit new members. Contact the chapter President, Paul Mitchell, at pmitchell@dow.com for more information.
May 19, 2004
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BREWERY

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Technical Article

Martin Kurtovich, PE

Energy Management in Cleanrooms: From The Lab to the Marketplace

By: Evan Mills, Lawrence Berkeley National Laboratory

Figure 2. Unintended cooling tower cycling.

Figure 3. Chiller efficiency variation.

Figure 4. Fan filter unit efficiency variation.

See B&W insert for entire Article
Hello Everyone,

I can say it without any dispute that the Day With a Facilities Professional (DWFP) event was a grand success. Every student whom I spoke with after the event gave me this impression. I am glad for all of them for being a part of this success story.

One of the reasons for the students feeling confident and excited about their participation was our guest speaker, Mr. Saul Villanueva. His session—just a fortnight ago—not only gave the students a deeper look at the facilities profession, but also prepared them for the DWFP event in that they were able to interact with their hosts, in both a professional and social manner. I sincerely thank Mr. Villanueva for his guidance and time.

Also this month, AFE S18, in association with ASME student club, proudly sponsored the refreshments for the EIT review session organized by the MAE department. Certainly, we will have more of these, and guest speaker sessions to follow. Keep a tab on the clubroom notice board and keep networking… the AFE way.

Vamsidhar Valluru
President San Jose State Student Chapter 18

Future Program Calendar

Wednesday, January 21, 2004 Lunch Time
Tour of Owens-Corning Fiberglass Manufacturing Plant
960 Central Expressway, Santa Clara, CA

Wednesday, February 18, 2004
“Re-commissioning a Fab” Discussion and Tour of new MMC Technology Corp. Plant in Fremont

Wednesday, March 31, 2004 11am - 7:30pm
Day with a Facility Professional
Evening Panel Discussion on Careers in Facilities
Philips Silicon Valley Center, Sunnyvale

Thursday, April 29, 2004 1-7pm
Training and Safety Day
USS Hornet Aircraft Carrier, Alameda

Wednesday, May 19, Lunchtime 2004
Tour of Gordon Birsch Brewery, San Jose

Wednesday, June 16, 2004
Energy Project Management: “How to evaluate, design and present an energy saving project to management.”
EXAR Corp, Fremont

July 21, 2004
Tour of Echelon Building, San Jose
2003 winner of the US Green Council award

August 18, 2004
Presentation on new CA Building Code, What it means to you as a Facilities Manager

September 22-23, 2004
NCPE Conference at the Santa Clara Convention Center

October 18, 2004
Bus trip to Moss Landing for lunch and tour of Duke Power’s Electrical Generating Pant

November, 2004
“An Evening with Industry”
hosted by SJSU Student Chapter

December, 2004
End of Year Holiday Party
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