

ASSOCIATION OF

ENGINEERING GEOLOGISTS

Southern California Section

"Serving Professionals in Engineering, Environmental, and Groundwater Geology Since 1957"

NEWSLETTER - DECEMBER 1998

December Dinner Meeting**

Tuesday December 8 1998

**and Vendor and Corporate Members Night

Location: Stevens Steak House, 5332 Stevens Place, City of Commerce, CA

Time: 5:30-Social Hour 7:00-Dinner 7:45-Announce

7:45-Announcements 8:00-Program

Reservations: Call (949) 253-5924 ext. 564

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Cost: \$20.00 per person (students \$10.00 w/ valid i.d.). Please make reservations by Monday

December 7, 1998. "No-shows" will be billed.

Speaker: ELDON GATH and JOAN BALDWIN, Ph.D.

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Topic: A TREK INTO SOUTH AFRICA

Join us for a fascinating glimpse of a country on the other side of the world. A place so different, and yet so similar, so old and yet so new, so crowded and yet so empty. A place of million-dollar hillside homes immediately adjacent to a maximum security prison. A place where 500,000 year-old hand axes are used in developing soil stratigraphic sequences. See some of the oldest and most unique rocks in the world, walk on the same surface that T-Rex walked on, visit the area where Australopithecus africanus roamed, see sinkholes, Permian glacial pavements, the Vredefort impact structure, Kimberley, and Capetown's Table Mountain. Lions, zebras, monkeys, and giraffes, too, oh my. This travel-oriented talk is meant to introduce you to the country, the people, and the geology of an extraordinary part of the earth, only 22 air-hours away. It will speak to you, as it did to us. Much of the talk is based on Joan's circumnavigation of most of South Africa while on Dottie Stout's latest field excursion. Eldon's contributions are from his and Roy Shlemon's visit last year as participants in a two-city AEG workshop on the incorporation of engineering geology issues into city planning. The South African Section is one of AEG's oldest sections, with a history dating back to the 1960's. South Africa has a rich history in engineering geology, providing us with an Honorary Member and two awards. They've many of the same engineering geologic problems as S. CA, minus active tectonics and lawyers.

Joan Baldwin received a B.A. from UC Berkeley; a M.A. from the Univ. So Calif.; and a Ph.D. from the Univ. Arizona with an emphasis on sedimentation and stratigraphy. Joan taught geology and oceanography courses at El Camino Community College for over 35 years. Prior to teaching, she worked for Shell Oil Co. for 5 years. Although "officially" retired, she teaches part-time at Irvine Valley College and consults on a part-time basis in the geotechnical field. Joan is a Past President of the South Coast Geological Society and co-edited several field trip guidebooks.

Eldon Gath is a Past President of the South Coast Geological Society, Past Section Chair of the SC Section of AEG, and Past President of AEG. He worked 5 years with Pacific Soils Engineering, 14 years with Leighton and Associates, and since 1997 is President of Earth Consultants International.

CHAIRMAN'S COLUMN

Another year is rapidly drawing to a close. 1998 has seen the passage of SB 1984 into law, changing the way the exams for state registration are administered. Registration will now be obtained through passing a national examination and a supplemental examination on California geology. Next year, geologists in California face a rehashing of the issue of sunsetting of registration in the state. Although with the passage of SB 1984, our chances of surviving the sunset review process are greatly improved, we will still be facing a battle to retain registration for our profession. Look for more information on this issue in the coming year and be prepared to show your support of our profession to the legislators in Sacramento.

Locally, 1999 looks like an exciting year for the Southern California Section. Kim Bishop is organizing a weekend field trip to the desert in the spring; more information will be provided in next month's newsletter. Dave Seymour, our Vice Chair, is doing a great job lining up speakers for our monthly meetings, and we are actively investigating alternative venues to hold our meetings in response to comments provided by our members in the recent survey. If you haven't replied to the membership survey in the November newsletter, I strongly encourage you to do so -- it's your opportunity to influence the way the section is run. If you need a copy of the survey form, please contact one of the Section officers and we will gladly send you a copy.

I'm looking forward to seeing a good turnout at our last meeting of the year to support the AEG Corporate members and vendors who will be exhibiting. We will also be holding a raffle, so hunt around your home and office for a suitable item to donate.

-- Wendy Schell

SPRING FIELD TRIP

Section member and Cal-State Los Angeles Geology Professor Dr. Kim Bishop is organizing a 2-day, overnight field trip to the Blackhawk Landslide and other geological features of interest in the Mojave Desert. The trip is tentatively planned for April-May 1999. Stay tuned for details on this "don't-miss" offering from the S. California Section!

MEMBER NEWS

Section member Roy Shlemon was awarded the Distinguished Practice Award by the Engineering Geology Division of the Geological Society of America at its Annual Meeting in Toronto. His plaque read "Early in his career Dr. Shlemon recognized the importance to engineering geology of applied soil stratigraphic and geomorphic techniques. He helped pioneer the acceptance and use of these techniques, which are now common in practice. Roy has bridged the gap between academia and applied geology by mature scientific leadership, the training of many young geologists, personal funding of his visions of

Our profession and over 30 years of dedicated professional practice. He has gained international stature through his work on major projects throughout the world and through his extensive lecturing. His career exemplifies that of the scholar geologist who still knows how to get the job done."

Robert A. Larson was elected Chair-Elect of the Engineering Geology Division of the Geological Society of America at its Annual Meeting in Toronto. Robert just made us aware of a recently published, award-winning engineering geology treatise entitled Geology in the Lower Mississippi Valley" by Saucier, et al. (Editors). Publication flyers will be available at the meeting on December 8th if you're interested in ordering a copy.

NEW MEMBER INCENTIVE

Spread the good word! New AEG members will be entitled to free admission to one Section dinner meeting. Please note that proof of application is required and that membership renewals are not eligible for this "free-meal-deal."

[Editor's Note: Although the following article was written from an engineering vantage point, it nevertheless has important implications for geologists, engineering geologists, and hydrogeologists engaged in environmental cleanup/restoration.]

REMEDIATION THE EXCLUSIVE DOMAIN OF CIVIL ENGINEERS?

By Diane Spencer, PE, CHMM and Robert A. Katin, PE

The Geotechnical and Civil Engineering Technical Advisory Committee (TAC) has been considering a resolution to the Board of Registered Professional Engineers and Land Surveyors (Board) that defines remediation as civil engineering. By statue in California, any practice that that is defined as civil engineering can only be practiced by or under the direction of a professional civil engineer. Scientists and engineers involved in the remedial investigation, risk assessments, and characterization of the site are not affected by this proposal.

This resolution quotes existing statute (Business and Professions Code Sections 6700-6799 Chapter 7. Professional Engineers). A copy of the proposal can be found at http:\\www.aiche-norcal.simplenet.com. Using this reasoning almost all engineering falls under the domain of civil engineers and if TAC's recommendation to the Board passed, this mindset will affect more than those engineers involved in remediation. The resolution makes 3 points to justify their position:

- 1. "Therefore since the development of remediation plans, recommendations, and reports result in a fixed work (a cleaned site or sites) free of contaminated soil or water using designs, specifications, or reports including the coordination of professional or technical consultants, then the practice is civil engineering and must be performed by a civil engineer." This point takes excerpts from the statute and pieces them together to give new meaning to the term fixed work. Soil and groundwater remediation should not be considered part of "fixed works" or permanent operations.
- 2. "The preparation or submission of designs, plans, and specifications and engineering reports" in fact comes directly from statute defining civil engineering. If this argument is enforced, any person who submits a report is conducting Civil Engineering (CE), and needs to have a CE PE to conduct this work.
- 3. "Coordination of the work of professional, technical, or special consultants" is also under the definition of civil engineering. Again, if this argument is enforced, any person who manages people is conducting Civil Engineering (CE), and needs to have a CE PE to conduct this work. We have all been practicing civil engineering if we follow this line of reasoning. We do not see how an engineer or scientist can function and not be involved in tasks described in these last two bullets.

The six California sections of the American Institute of Chemical Engineers (AIChE) have opposed this resolution and have advocated a multi-disciplinary approach. Qualified engineering practitioners in the environmental field include chemical engineers, mechanical engineers, petroleum engineers, and civil engineers. Other professionals frequently involved in certain aspects of remediation include geologists, hydrogeologists and toxicologists. Civil engineers may not have the background and training required for cleaning up many sites without impacting the health and safety of neighboring communities. The emphasis of civil engineering education is in statics, dynamics, strength of materials, traffic, and fluid flow. Chemistry courses are minimal. The professional examination is focused on seismic and surveying, neither of which provides the necessary training for site remediation. TAC's concerns and the public interest are not best served by requiring that remediation design, specification and construction be performed only by registered civil engineers.

There is overlap in the training and practice among the engineering (and science) disciplines. For example, chemical, mechanical, and civil engineers all study fluid flow. The existing statute does not recognize that overlap exists in areas practiced by civil engineers. Generic registration, such as that practiced in 39 states would accommodate areas of common practice. SB 2069 was designed to create generic registration in California to allow engineers to practice in their area of competence, eliminate the turf battles, and promote competition in California. The language in the bill was unanimously adopted by the member organizations of California Legislative Council of Professional Engineers (CLCPE) which included civil engineers. The bill had broad support from industry groups, environmental groups, and engineering organizations throughout the State. The bill was opposed by Contracting Engineers and Land Surveyors of California (CELSOC) because they believed the bill would allow anyone to practice civil engineering. They believe only civil engineers can perform environmental remediation, manage contractors, write reports, and work on fixed works (equipment which does not leave a facility, like wastewater treatment plants, chemical plants, refineries, food industry, biotech facilities, electronic chip manufacturing sites, etc). Senate Bill 2069 (SB 2069) was voted down in the Senate Business and Professions (B&P) Committee in May 1998. Although the bill is dead, the Chair of B&P requested that the concept of generic engineering registration be reconsidered. CLCPE may promote a 2-year bill by February 1999 for the next legislative session. For further information contact Diane Spencer, PE by e-mail at baspence@silcon.com or Bob Katin, PE at katin@ecis.com.

BOARD OF REGISTRATION FOR GEOLOGISTS AND GEOPHYSICISTS PROPOSES ADOPTION OF RULES OF PROFESSIONAL STANDARDS

The California Board of Registration for Geologists and Geophysicists has proposed the adoption of regulations governing professional standards (under Title 16, California Code of Regulations, Section 3065) for registered geologists and geophysicists. According to the Board's recent *Initial Statement of Reasons*, the primary objective of the proposed regulations is the "protection of the public and not the advancement of the private interests of professional geologists or geophysicists." The proposed regulations are intended to "set professional standards with regard to competency, misrepresentation (of services offered, professional qualifications, and representation of data), conflict of interest, use and protection of a client's confidential information, and required notifications."

During a "typical" career in the applied earth sciences, it is a near certainty that you will, at times, be confronted with difficult decisions concerning the latter three issues. The proposed regulations have serious implications for the way we conduct our work. Furthermore, the adoption of professional standards as regulations may increase liability and/or exposure to legal claims as discussed during November's Section meeting. For these reasons, I encourage you to familiarize yourselves with the proposed regulations and, if so inclined, voice your opinions to the Board and to your elected representatives. I have included some excerpts from the Board's *Initial Statement of Reasons* below; additional information may be found on their web site at http://www.dca.ca.gov/geology/.

Competence

"The Board's existing regulations do not specify standards of competence. However, it is clear that the public expects that incompetence will be disciplined and, where appropriate, will result in revocation of the license. The proposed regulation provides a "common law" standard which has been used by courts to determine the competency of professionals. The regulation permits the registrant to rely on the advice of such other professionals. While a registrant is licensed to undertake any project that falls within the definition of the practice of geology, as a professional, the registrant must understand and be limited by the limitations of his or her own capacity and knowledge. Where a registrant lacks experience, the regulation supposes that he or she will retain consultants who can appropriately supplement his or her own capacity."

Misrepresentation

"The proposed regulations require a registrant to accurately represent his or her professional qualifications and services which are within his or her field of competence. Because of the wide variety of geologic projects and specialization that exists in the profession, it is important that consumers are aware of the scope and limits of a registrants knowledge base. With complex projects it is important that proper credit be attributed to those who actually performed the work. Many important projects require a team of licensed professionals to do the work. There has been some conflict in recent years when individual members of that team have claimed greater credit for the project than was appropriate to their work done. A young registrant who develops his or her experience working under a more senior registrant has every right to claim credit for the work that he or she did. However, the public must be protected from believing that the younger registrant's role was greater than was the fact. Accurate representation of geologic data and its relative significance is essential to public health and safety."

Conflict of Interest

"When a client retains a registrant, there is an expectation by a client that his or her registrant will strive to achieve the client's best interest and provide the client with undivided loyalty to the extent that a registrant has a financial interest by way of a business association with or has received compensation from a third party related to the project. The Board believes that the registrant must apprise his or her client of this potential for a divided loyalty. Where a registrant solicits or accepts compensation from suppliers in return for specifying their materials, the registrant has demonstrated that he or she cannot provide the client with undivided loyalty and the client's best interests are compromised."

Confidential Information

"During the course of employment, a registrant often obtains "confidential information" by his or her employer simply by reason of his or her employment or professional capacity. Registrants are often puzzled or confused as to the boundaries and limitations of their client confidences. The proposal sets forth a definition of confidential information and a basic rule of nondisclosure of a client's confidential information with exception of disclosures required by law."

Required Notifications

"Because of a registrant's duty to maintain confidential information, a registrant is often not sure what to do in the event that the consequences of his or her work may have an impact on public health, safety, property and welfare. In addition to requiring a registrant to notify his client or employer of the consequences of his or her work, the proposal would require a registrant to notify appropriate authorities upon the discovery of an imminent geologic hazard which may threaten the health, safety and welfare of the public."

EMPLOYMENT OPPORTUNITIES

Associate Planner, East Bay Municipal Utility District (S.F.) - EBMUD has an opening for an Associate Planner in the Water Supply Improvements Division. The Associate Planner will prepare initial studies, draft EIRs, and other related documents, and will act as the District's Construction Inspector or Geologist by performing field inspections of well drilling, monitoring, and sampling, as well as trenching and other excavations. A four-year college degree in a relevant field, four years of professional planning and groundwater resources experience are necessary. Knowledge and experience with CEQA and NEPA are desirable. Salary range - \$4,392 to \$5,339 per month. For more information and to receive an application packet, please call EBMUD at (510) 287-0735. The final filing deadline is Friday, December 11, 1998.

Entry- or Staff- Level Engineering Geologist or Soils Engineer - Alpine Geotechnical in Ventura has an opening for an entry- or staff-level engineering geologist or soils engineer with 0 to 2 years experience in Ventura and western Los Angeles Counties. Looking for an ambitious, exemplary person for office, field, and lab work. Please forward your resume to: Mike Leary, Alpine Geotechnical, P.O. Box 5417, Ventura, CA 93005.

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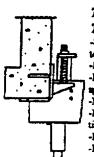
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