



**ASSOCIATION
OF
ENGINEERING GEOLOGISTS**
Southern California Section

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

NEWSLETTER – MARCH 2000

Monthly Dinner Meeting

Date: Tuesday, March 14, 2000
Location: Stevens Steak House, 5332 Stevens Place, Commerce, CA
Time: 5:30 p.m. - Social Hour; 7:00 p.m. - Dinner and Presentation
Reservations: Call (949) 253-5924, ext. 564 by 5:00 p.m., Friday, March 10, 2000
Cost: \$25.00 per person with advance reservations, \$30.00 at the door, and \$12.00 for students w/ valid i.d. "No-shows" will be billed \$10.00.

Speaker: William R. Lettis and Keith I. Kelson, William Lettis & Associates, Inc.

Subject: FAULT-RELATED DEFORMATION RESULTING FROM THE KOCAELI (TURKEY) AND CHI-CHI (TAIWAN) EARTHQUAKES: DIFFERENT STROKES FOR DIFFERENT FOLKS

The Turkey and Taiwan earthquakes of 1999 are extremely significant to understanding the style and pattern of surface deformation produced by strike-slip and reverse earthquakes, and to assessing the response of engineered structures to substantial surface displacements. Both of these large earthquakes produced surface faulting through urban and industrial areas, and resulted in severe damage to the built environment. These earthquakes also provide the opportunity to evaluate the mechanisms by which ruptures terminate at, or extend through, potential rupture barriers.

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CHAIR'S COLUMN

Thank you to everyone who attended last month's joint dinner meeting with the South Coast Geologic Society. We had an attendance of over 100 to hear Lisa Grant present her findings on the San Joaquin Hills Blind Thrust Fault. We are looking forward to another well attended meeting this month with the annual joint meeting with the ASCE Geotechnical Group.

Next month we will be having two dinner meetings of the Southern California Section. The first meeting will be on Monday April 10, 2000 at San Diego State University. This meeting will be hosted by SDSU students who are trying to form a Student Chapter of AEG. The second meeting for the month will be at Luminaria's Restaurant in Monrovia on Tuesday April 11. The speaker for both these meetings will be the AEG/GSA Richard H. Jahn's Distinguished Lecturer for 2000, Dr. Allen Hatheway.

The awards committee for AEG is currently seeking nominations for the 2000 AEG Awards. Past winners from the Southern California Section include Kerry Cato, Bob Hollingsworth and Roy Shlemon. A complete listing of the AEG awards can be found in the AEG Directory. I encourage you to consider colleagues you would like to see recognized for their contributions to our profession.

Cheers, Wendy Schell

INSIDE THE ANNUAL MEETING – 2 **A Guide to AEG 2000**

By Robert E. Tepel, General Chair AEG 2000

Editor's note: In this and future issues Bob Tepel, the General Chair of AEG's 2000 Annual Meeting, will provide advance notice of some of the happenings planned for San Jose in 2000. Background information is also provided so you can better understand the inner business and management workings of AEG Annual Meetings: why they are run in the way they are.

First, Just for Geological Fun...

Have you seen advertisements or product labels that relate to geology? The AEG 2000 Committee invites your participation in a poster session paper on the theme of "Examples of the Use of Geology in Print Advertising and Product Labels." Corrine Stewart, a graduate student at San Jose State University, will collect your annotated contributions of geologically related advertisements and product labels. Your contributions will be displayed in her poster session booth.

It's easy to contribute to this fun poster session. Just be on the lookout for uses of geology in commercial print media, whether intended or unintended, well executed or poorly executed, or absolute bloopers. Labels on bottled water and wine, and SUV ads, are obvious sources, but others are out there for the finding. Cut out or copy the ad, or remove the label, and mount it on a piece of paper (8 ½ x 11 preferred; bigger if necessary). Then, on that same piece of paper provide comment about how the copy is related to geology, and, if you can, what is geologically right or wrong, or almost right or wrong, or just plain funny. Corrine will accept pasted-up contributions with hand-printed commentary. Sign your work legibly, please.

Examples: Corrine Stewart has a bottled water label that claims the water comes from granite aquifers. Not utterly impossible, but geologically improbable, and good for a chuckle. I have a prescription medicine insert for a medication I bought in Brazil that cures, well, um, diarrhea. It is called GABRO Complex. We can take that one a long way, folks. Speaking of bottled water, did you ever do an ion balance using the analysis on the label? Try it; the results can be interesting. The computer blending of images from disparate geologic terrains is sometimes evident in SUV advertisements. Or, you could describe the geologic significance of the terrain shown: interesting structure, classic locale, landslides, glacial features, emergent seacoast, incongruities between text and depicted geology, or whatever.

So, scan your world for ads and labels that feature geology or contain geologic bloopers. Do a cut and paste, write up your commentary, and mail it to Corrine Stewart, 2622 Gassmann Dr., San Jose CA 95121. Deadline June 1, 2000.

The AEG Annual Meeting as an Entrepreneurial Exercise

An AEG Annual Meeting is an entrepreneurial venture. It requires resources, a multi-talented team of self-starters, venture capital, a business plan, and Board-level policy guidance. As an enterprise with a limited life span, each Annual Meeting has a start, middle, and an end. It is a project, and project management concepts can be applied. Financial risks are present all along the way.

An Annual Meeting committee starts life when a Section, through its Chair, offers to host an Annual Meeting, and the AEG Board accepts the offer and approves of the proposed General Chair. Usually the meeting date is three to five years away. Each Annual Meeting Committee General Chair reports to the AEG President.

What makes an Annual Meeting a risky and entrepreneurial exercise? Without being exhaustive, here are the main contributing factors and leading potential strategic blunders, in my opinion:

- developing a program that is too ambitious (we can try to do too much for the available market to absorb, or too much for the available resources to support);
- assuming that surpluses from some events will cover losses in other events;
- attendance estimates, and therefore the commitments we make for services and products, must be made with long lead times and on the basis of unsure assumptions about market and technological conditions up to five years in the future;
- overestimating attendee interest in optional extra-cost events, such as field trips, short courses, and guest/family events;
- guaranteeing too many room-nights to the meeting hotel;
- signing vendor agreements with unfavorable deposit forfeiture clauses;
- over-optimism in estimating sales appeal and schedule in publishing special publications;
- vendors (including hotels) who want to back out of their commitments to us at no cost to them;
- even though lessons are learned and passed on from meeting to meeting, residual unknowns of both kind or degree do arise and can cost us money.

Here are some examples of how these factors impact the success of an Annual Meeting.

Hotel contracts are negotiated three to five years in advance of the meeting. However, business conditions just before the meeting greatly influence participation. Therefore, in negotiating with the hotel, your committee must have a good concept of what business conditions will be three to five years in the future. Does anybody really want this job?

A big set of contract negotiations starts about a year before the annual meeting. These are negotiations with caterers, transportation companies, printers, audio-visual service providers, and other suppliers of goods and services. We need firm costs from our vendors so we can devise break-even scenarios for ticketed meeting events and to set the basic registration fee. We use the break-even scenarios to determine a rational cost-based price for the ticketed event. Then we can ask, "is this a reasonable price?" and make adjustments, or even eliminate the event, as necessary. Here's the catch: in order to secure firm costs from

vendors, we must a) sign contracts and b) make advance deposits or even advance payment in full. That's the way business is done in the meetings industry. Here's the risk: as time marches on all or part of these advance payments become non-refundable (are forfeited) if we cancel or reduce our order. These costs are known as sunken costs.

The sunken cost risk exists because many vendor agreement cut-off dates for forfeiture of deposits occur before the meeting "early registration" deadline, or just after it. We typically make deposits with our vendors three to ten months before the meeting. Sometimes the latest forfeiture dates we can negotiate are in the range of 25 to 60 days before the meeting. This is a problem because we usually don't know if an event will have enough participation to break even until just after the early registration deadline, and that is about 30 days before the meeting. Sunken cost risk is one side of a two-edged sword. We can lose money via the forfeiture route if we cancel an event before it occurs but after the forfeiture date in the vendor agreement. The other edge of the sword: we can lose money by not achieving breakeven attendance if we hold on in the hopes of late registrations for it. Being between a rock and a hard place is what I call it. More insights will be offered in the next article.

Annual Meeting financial risks can be managed but not eliminated. Actions AEG has taken in recent years to manage the risks of financial loss at Annual Meetings are:

- hire a professional on-staff Meetings Manager who has taken a series of formal courses in meeting management;
- establish Board policy guidance;
- prepare an Annual Meeting Planning Guide to assist annual meeting committees;
- set financial goals for Annual Meetings;

Some risk management steps that will soon be implemented are:

- revision of the Annual Meeting Planning Guide;
- transfer of stewardship accounting, bookkeeping, and money-handling responsibilities to AEG Headquarters (away from the Annual Meeting Committee and the Meetings Manager);
- development of a custom accounting format for use by the Annual Meeting Committee (day to day accounting for day to day strategic decision-making)

As we move into the future, Annual Meeting Committees and staff will have better planning and decision-making tools to meet their entrepreneurial challenges and to assess operational risks.

LETTERS IN SUPPORT OF OUR BOARD NEEDED!!

Letters in support of our board of registration are needed and we implore each member to send letters to Senator Liz Figueroa, and copies of the same letter to your respective state senator and assemblymen. The enclosed letter, drafted by Buzz Spellman, can be used as a guide for drafting your own letter. The Department of Consumer Affairs reviews the status and future of our board with the Joint Legislative Sunset Review Committee on March 20, so your letters need to be sent in ASAP. Please take a few moments to put your feelings down on paper, and try to emphasize how our services benefit the consumers of California. Don't take this request lightly, your future may depend upon it. And don't forget to fill out the enclosed questionnaire as well.

David Seymour
Vice Chair

AWARDS NOMINATIONS REQUESTED

Nominations are currently being accepted for 2000 awards candidates. The Awards Committee considers nominations for the following awards (for more complete information, please consult your Directory):

1. Douglas R. Piteau Outstanding Young Member Award
This award is presented to a Member or Associate Member who is age 35 or under, and has excelled in one or more of the following 3 areas: technical accomplishment, service to the Association, and service to the engineering geology profession.
2. Claire P. Holdredge Award - This award is presented for a publication by a Member(s) within the past 5 years that is judged to be an outstanding contribution to the engineering geology profession. Last year's award went to Jim McCalpin for his book entitled Paleoseismology.
3. Floyd T. Johnson Service Award - This award is presented to a Member for outstanding active and faithful service to the Association over a minimum of 9 years. Contemporary Board members are not eligible until 1 year after leaving office. Nominations must be validated via endorsement by 3 Members having different Section affiliations. This award is not necessarily conferred annually.

The deadline for nominations to be considered for awards in 2000 is March 30, 2000. Please send nominations to Bill Cole, AEG Awards Committee Manager, c/o Cotton, Shires and Associates, Inc., 330 Village Lane, Los Gatos, CA 95030 (or to bcole@cottonshires.com).

CALIFORNIA COUNCIL OF GEOSCIENCE ORGANIZATIONS WELCOMES NEW INTERIM EXECUTIVE DIRECTOR

Rachel Fischer accepted the position of Interim Executive Director for the California Council of Geoscience Organizations today, at the conclusion of the February director's meeting. "CCGO is at an exciting stage in its development," she says. "I look forward to providing member services, tracking upcoming legislation and regulations, and developing better communication between the state's geoscience organizations."

Over the past few months, Rachel has been actively involved with defining CCGO's approach to public outreach. "I want to publicize the good things that geologists do in California," she says. "There are so many wonderful things that CCGO's members do that should receive media attention. I want everyone to know about our contributions to public education."

Rachel graduated from the University of California, Los Angeles, with a B.S. in geology. She is a California Registered Geologist, Certified Hydrogeologist, and Registered Environmental Assessor I. She is a member of the Geological Society of America, Association of Engineering Geologists, and Association for Women Geoscientists.

For more information visit our web site, <http://www.ccco.org>, or contact Rachel Fischer at CCGOExec@aol.com, or contact CCGO President Betsy Mathieson at (650)688-6755 or emathieson@exponent.com.

POSITION AVAILABLE
Part-time Executive Director

CCGO is looking for an Executive Director to work with the Board of Directors to assist in implementing CCGO's Strategic Plan and its goals in the areas of Legislation, Regulatory Review, Governmental Relations, Professional Practice, Public Outreach, and Member and Contributor Services. Interested persons should send resume and a statement of qualifications by April 15, 2000, to:

CCGO
Attn: Executive Director Search Committee
1275 W. 14th Street
San Pedro, CA 90731

For more information, please contact Betsy Mathieson at (650)688-6755 or emathieson@exponent.com

Howard A. "Buzz" Spellman

Engineering Geology

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1236 Oak Glen Avenue, Arcadia, CA 91006 Phone/FAX (626) 357-7972

February 7, 2000

1ST DRAFT--SAMPLE LETTER

Senator Liz Figueroa, Chair
 Joint Legislative Sunset Review Committee
 State Capitol-Room 2057
 Sacramento, CA 95814

Subject: SUPPORT- Retaining the Geologists & Geophysicists Registration Board

Honorable Senator Figueroa:

We understand the JLSRC is considering abolishing the Geology Board at their March 2000 meeting. For the following reasons (there are undoubtedly many others) we believe the Consumer would be better served by retaining the Board "as is" and not relegating it to a Bureau or putting it under another agency.

- (1) Currently 88% of geologic services in our county/city are requested by individual consumers; not from large corporations, a common misconception. In fact, for the period 1997-98 or 1998-99, our records show there were ___ geologic reports prepared for individual consumers, compared to only ___ for large corporations. The consumer is well served by the Geology Board.
- (2) State licensing began in 1970. In days before this, each county and city had to develop a myriad of standards and create "Qualifying Boards" for geologists so they could control the poor quality of reports and weed out the "Charlatans" who were signing all types of reports for a fee. We prefer State licensing as the most economical and efficient method to obtain uniform control and enforcement.
- (3) A partial list of Statutes requiring the signature of a licensed geologist, engineering geologist, hydrogeologist or geophysicists is attached (Environmental laws, requiring signatures by a Registered Geologist, need to be added to this list). These laws, protecting the individual consumer, could be unenforceable if the Geology Board is abolished, or, the Board's regulatory responsibilities are transferred to a Bureau under the Department of Consumer Affairs (DCA).

In closing, we believe abolishing the Board, or designating it a Bureau under DCA, minimizes public accountability provided by open meeting laws and reduces geologic and geophysical expertise provided by Board members.

Retaining the Geology Board in its current form will continue to help protect the consumer.

Sincerely,

Supervisor/Building Official/Geologist/Consumer

attach: Statutes Requiring Registered Geologists Signatures

cc: YOUR LOCAL LEGISLATOR

cc: Senator Richard Mountjoy, 29th Senate District
 Assemblyman Bob Margett, 59th Assembly District



STATUTORY REQUIREMENTS FOR GEOLOGY INVESTIGATIONS IN CALIFORNIA

Updates 12/23/99

When SB 86, the bill to abolish the board, was introduced in December 1986, board staff researched California Codes to determine how and to what extent registration by this board contributes to the health and safety of the public.

A listing of the codes, sections and an explanation of what the codes mean were included as a argument in the board's letter of opposition to the bill. The table is included in the newsletter to inform licensees and others that there are specific laws which require a registered geologist to investigate hazardous conditions and to sign geologic reports.

STATUTES WITH SECTIONS PERTAINING TO GEOLOGIC HAZARDS AND PUBLIC SAFETY

CODE	SECTION	EXPLANATION	Health & Safety	15081	Hospital Seismic Safety Act—Building Safety Board—advise the Director of Office of Statewide Health Planning and Development on issues of seismic safety for health facilities; membership shall include an engineering geologist and a seismologist.
Health & Safety	15024	Hospital Seismic Safety Act—definition of engineering geologist qualified to prepare and review geologic reports for hospital sites.	Health & Safety	25159.12(q)	Toxic Injection Well Control Act—defines qualified person as a registered geologist or a registered (petroleum) engineer.
Health & Safety	15043	Hospital Seismic Safety Act—geologic data shall be reviewed by an engineering geologist and structural data shall be reviewed by a structural engineer.	Health & Safety	25159.18	Toxic Injection Well Control Act—requires a hydrogeologic assessment report for toxic injection wells to be prepared and signed by a registered geologist or registered (petroleum) engineer.
Health & Safety	15044	Hospital Seismic Safety Act—assessment of nature of site and potential for earthquake damage, exemptions and waivers.	Health & Safety	81033.5	Geological and soil engineering studies for community college sites shall be made, within the boundaries of any special studies zone, for the construction and alteration of any school building; the Department of General Services may require similar geological and soil engineering studies for construction on a site located outside the boundaries of any special studies zone.
Health & Safety	15045	Hospital Seismic Safety Act—correlate engineering investigation with geologic evaluation of hospital sites.	Government	8892	Seismic Safety Commission Act—membership of the Commission required to include a seismologist and geologist. (Note: all governors have appointed individuals who were licensed geologists and geophysicists.)
Health & Safety	25208.2(i)	Toxic Pits Cleanup Act—requires investigation of surface impoundment of discharged liquid hazardous wastes in lined and unlined ponds; defines qualified person as either registered geologist or registered civil engineer.	Government	8893	Seismic Safety Commission Act—membership of the Commission required to include a seismologist and geologist. (Note: all governors have appointed individuals who were licensed geologists and geophysicists.)
Health & Safety	25208.8	Toxic Pits Cleanup Act—hydrogeologic assessment report must be signed by a registered geologist or a registered civil engineer.	Government	65302(d) & (g)	General Plan—Each city and county General Plan shall include the following elements: a conservation element dealing with minerals and water; a safety element regarding earthquakes and ground shaking, tsunamis, seiches, and dam failures, slope instability leading to landslides, and other geologic hazards.
Health & Safety	25234(a)(2)(B)	Hazardous Waste Disposal Land Use—requires sufficient evidence of the geology or other physical environmental characteristics of the land.	Public Resources	660	State Mining and Geology Board—statutorily requires a member to be a registered geologist with mining experience and a member to be a registered geologist, geophysicist, or civil or structural engineer with seismology experience.
Health & Safety	25280 et seq.	Provides regulation by water resources control board and Department of Health Services of underground storage of hazardous substances; regulation requires work to be performed by registered geologist.	Public Resources	661	Requires State Geologist to be a registered geologist.
Water Code	6200	Safety of Dams—approval of plans and specifications of new and enlarged dams and reservoirs; Department of Water Resources may require the following foundation conditions—investigation of and reports on geology of dam or reservoir site; investigation of and reports on subsurface conditions, drilling, coring, geophysical test.	Public Resources	662	Alquist-Priolo Special Studies Zones Act—determine location and extent of active faults and delineate them on maps to prevent developments from being built across the trace of an active fault. Administrative Code Title 14, Division 3, Chapter 8, Subchapter 1, Article 3, Section 3603(d) requires a registered geologist to prepare a report on surface faulting, and Section 3603(e) requires a registered geologist to evaluate the report.
Water Code	6203	Safety of Dams—approval of plans and specifications of new and enlarged dams and reservoirs; Department of Water Resources may require the following foundation conditions—investigation of and reports on geology of dam or reservoir site; investigation of and reports on subsurface conditions, drilling, coring, geophysical test.	Public Resources	2621.5	Timber—Nejedly Forest Practice Act—Timber harvest plans shall be based on such items as topography and geology.
Water Code	13263.5	Injection wells—issuance or revision of waste discharge requirements for injection wells into which hazardous waste is discharged must be based on information contained in hydrogeological assessment reports prepared pursuant to Section 25159.18 of the Health & Safety Code.	Public Resources	26507	Geologic Hazard Abatement Districts—geologic hazard is defined and includes landslides, land subsidence, and earthquakes.
Water Code	13273(b)	Solid waste disposal site report by registered geologist. Solid waste water quality assessment test report certified by a registered geologist.	Public Resources	26509	Geologic Hazards Abatement Districts—Plan of Control is report describing geologic hazards and such plan for control must be prepared by certified engineering geologist.
Education	39002	Investigation of prospective schools sites: inclusion of geological and engineering studies by competent personnel to assess the nature of sites and potential for earthquakes and other geologic hazards.	Public Resources	2695	Seismic Hazard Mapping Act requires a certified engineering geologist, along with other disciplines, to help develop recommendations for seismic hazard mitigation.
Education	39002.5	Geologic and soils engineering studies for school sites shall be made, within the boundaries of any special studies zone, for construction or alteration of school buildings; the Department of General Services may require similar geological and soil engineering studies outside the boundary of any special studies zone.	Public Resources	3724	Seismic hazard mapping for specific projects must be evaluated in a geotechnical report prepared by a certified engineering geologist or civil engineer having competence in the field of seismic hazard mitigation.
Education	81033	Investigation of prospective community college sites: inclusion of geological and soil engineering studies to assess the nature of site and potential for earthquakes and other geological hazard damage.	Health & Safety	1534A	Seismic evaluation of hospital, public schools and essential services facilities requires that the evaluator review an Engineering Geological Report on site geologic and seismic conditions.

URGENT QUESTIONNAIRE – GEOLOGIC WORK IN CALIFORNIA

The future of the California State Board of Registration for Geologists and Geophysicists (BRGG) will soon be decided by the Joint Legislative Sunset Review Committee (JLSRC), which will act on the forthcoming recommendations of the California Department of Consumer Affairs (DCA). Some of our State Senators and Assemblymembers who sit on the JLSRC, and some of the staff at DCA, consider the BRGG's oversight of Registered Geologists and Registered Geophysicists to have little to do with consumer protection. The JLSRC would like statistics on the geologic profession in California.

The California Council of Geoscience Organizations hopes you will assist us in compiling this information **BY MARCH 10**. We need your input even if you are submitting an individual letter to the JLSRC. Please forward this message to your geologist and geophysicist colleagues (registered or not) then complete the following questionnaire yourself and return it to me via e-mail by March 10. Please include the complete questionnaire in your reply. Just put an "x" in each appropriate box, fill in the requested percentages, then answer Questions 5 and 6, if you have time, in text form.

1. I am a: Registered Geologist []
Registered Geophysicist []
Certified Engineering Geologist []
Certified Hydrogeologist []
None of the above []

2. I work in: Consulting []
Industry []
Academia []
Other []

3. My work consists primarily of:
- Engineering geology/geotechnical []
Environmental geology []
Hydrogeology/water resources []
Economic geology/mineral resources []
Geophysics []
Other []

4. The estimated percentages of my company's geologic clients over the past two years, by NUMBERS of clients of various types, are:

Individual consumers _____%

Homeowners' insurance carriers _____%

- Small businesses _____%
Residential developers _____%
Public agencies _____%
Large corporations _____%
Other _____%

5. The following is a brief description of a project I have completed for an individual consumer:

6. The following is a brief description of a geologic problem that affected a consumer:

Thank you for your assistance in compiling this critical information for the JLSRC.

Betsy Mathieson
President, California Council of Geoscience Organizations

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