TIME IS RUNNING OUT!

Have your business card printed in the AIPG 1993 Annual Membership Directory for ONLY $50.00. Advertising rates for larger size advertising is also available at low rates. Don't miss out! Call today! Deadlines for reserving space is February 26th and机械icals must be in by March 5, 1993.

To reserve your space in the directory, that is used throughout the year by thousands of member geologists and businesses, call Wendy Davidson at (303) 431-0831.

GREAT GIFT IDEA!

Buy a subscription to The Professional Geologist for someone else and AIPG Headquarters will send a gift letter to them. AIPG Members and Affiliates receive a discounted price of only $15.00 for a one year subscription (12 issues) of TPG.

LOST MEMBERS

The members listed below have recently moved and mail is being returned to the AIPG Headquarters Office. If you have moved recently or if you know the current address of these "lost" individuals, please call, fax or send an update of address change to:

AIPG, 7828 Vance Drive, Suite 103
Arvada, CO 80003-2125
(303) 431-0831 • FAX (303) 431-1332.

Mail has been returned from the following members:

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- 6700 Lyrewood Lane
- Oklahoma City, OK 73132
The Professional GEOLOGIST

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COVER - Glacial striations on Paleozoic sediments in Montana alpine terrain.
Photo credit: Mark A. Koestel, CPG-8307

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IN MEMORIAM

February, 1993
Volume 30, Number 2

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POSTMASTER: Send address changes to:
AIGP, 7828 Vance Drive, Suite 103, Arvada, Colorado 80003-2125.
INVITATION TO EXHIBITORS

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The Northeast Section of AIPG is offering exhibition booth space at the 1993 Annual Meeting of AIPG at the Sheraton Monarch Place Hotel in Springfield, Massachusetts, on October 12, 13, 14, and 15, 1993.

Attendance will consist of several hundred Certified Professional Geologists from all over the United States, with a strong contingent from the northeast region.

Booths are 8-foot by 10-foot, piped and draped, and come with a table and two chairs.

Set up time is Tuesday afternoon, October 12. First exhibit opportunity is cocktail hour starting at 5:00 p.m. Booths will be accessible during coffee breaks and poster sessions during each day, and again at cocktail hours on Wednesday, Thursday, and Friday. Breakdown is Friday evening.

Booth rental fee is $500 plus $45 service fee (plus tax).

For details contact:

Russ Slayback, General Chairman
Leggette, Brashears & Graham, Inc.
72 Danbury Road
Wilton, CT 06897
(203) 762-1207

Exhibitors receive a 10% discount on advertising space in The Professional Geologist magazine.
"Professional Correctness"  
In The New Age

M. O. Turner, CPG-1046

Much is new in the earth sciences these days. A flood of bright thinking and daring application of advanced technology has created surpluses filling our nations pipelines, tank farms, stockpiles and ore carriers. While these great volumes of resources and products speak well of our technical abilities, a disturbing new practice has developed among some active in the public sector which threatens the ethics and high standards of professionalism. It is a new strain of an old virus: the unashamed pursuit of greed.

Formerly most consulting earth scientists applied their professional skills and talents primarily in the private sector where competence, reputation, and the adversarial tests of the open market place both served to monitor and maintain a high level of professional ethics and conduct. Now, however, with energy and minerals, indeed many domestic companies broke and struggling to survive, some earth scientists and engineers have sought economic relief by directing their services principally toward public projects. Why services for public projects? As the famous bank robber Willy Sutton replied in revealing why he robbed banks, "because that's where the money is". Thus, the skilled promotion of public projects is now pursued by some as an opportunity for private gain under the guise of meeting a public need. While this has generally been the grand American way to build many of the nation's dams, reservoirs, drainage systems, waste facilities, etc., times are now different. Today's tighter money and relaxed ethics have brought guile and craftiness into clearer focus so that a wary public and its professional institutions must now challenge everything. It is submitted that the traditional adversarial tests of the open market place, dealing in the sunshine at arms length, are now largely ignored or completely missing in the public process.

The checks and balances that monitor and perfect equity, value and ethics within the private sector are simply not now being equally applied in the public sector. The rigid "bottom lines" of the private sector often become opportunities to renegotiate and rebid in the public sector. Rare indeed is the taxing authority who will hire genuine antagonists to challenge or audit the technical merit or comparative costs of a public project. So, who is there to protect and defend the public interest?

"The Test"

What happens then in a tight economy when the promise and power of the public purse quietly challenges a professional earth scientist or engineer to set aside adverse studies and cooperate with a powerful bureaucracy? This is the real touchstone because it is the skilled professional scientist society has entrusted as keeper of the keys to its buried treasures and public vaults - where the real money is. Breaching this trust is not unlike the conduct noted in the banking and finance professionals where the crooks and thieves worked inside the banks and S&L's they looted. Expecting institutional discipline to correct such conduct seems unrealistic since the courts had to intervene when the financial wizards

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**Short-Course Series**

**Principles and Applications of MODFLOW**

March 23-26, 1993

Instructors:
Peter F. Andersen and Robert M. Greenwald
(Env Trans, Inc.)

This course focuses on the use of the U.S.G.S. Three-Dimensional Finite-Difference Ground-water Flow Model MODFLOW and its accompanying programs. Lectures on the principles of ground-water flow modeling and the use of MODFLOW will be complemented by hands-on computer sessions during which participants will work through a series of real-world problems.

For more information contact the IGWMC.

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Institute for Ground-Water Research and Education
Colorado School of Mines
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Phone: (303) 273-3103  FAX: (303) 273-3278

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refused to police themselves. But some will say, in today's tight economy, what's so wrong with cutting a little corner professionally, by "going along to get along"?

**A Case History**

While these comments are not directed to any one personally, there is a shameful example of a few earth scientists and engineers who individually and collectively obliged political authority with their implicit support and endorsement of a costly public project which their own independent studies indicated to be wasteful and unneeded. In acknowledging this, one important professional readily admitted he "only went along with the deal because that's the way the politicians want it". And though the studies, findings, and opinions expressed by other professionals involved similarly affirmed their opposition, they too quietly joined the politicians and promoters with their support for this wasteful and unneeded project.

It is, for a fact, shocking to behold the conduct of some professionals at public hearings. Short of a public hanging, nothing can be more revolting than to observe a host of these "professionally correct" scientists and engineers in a full gatt stampede heading for the public trough. While spoonfed bureaucrats and retained academics slowly clang the dinner bell, a thundering herd of hungry professionals can trample ethical standards with greater disdain than they have shown for the public welfare. After all, one replied, which institutional canon, ethical standard or rule of conduct have we specifically violated?

**Professional Patch Test**

Because peer review and other potentially negative studies which might challenge the worthiness of a questionable public project are often rejected, many states now have a process available to the public to acquire copies of critical but concealed data. Filing a request for data under the Open Records or Freedom of Information Act, however, often reveals another new art of "professional correctness", that of "stonewalling". This acquired talent becomes useful when compliance with an official request is not consistent with protecting one's own best interests. These examples are not the projects of flawed science and engineering; it is science and engineering not applied - a professional's "noblesse oblige" if you please. Such conduct however, mocks science and shames professionalism.

The purpose of these comments therefore is to emphasize that as earth scientists increasingly direct more of their professional services from the private to the public sector, the highest standards of ethics and professional conduct are required. Paramount, and above all else therefore, is the obligation: "to uphold the public health, safety and welfare in the performance of professional services and avoid even the appearance of impropriety".

M. O. Turner, an independent geologist in San Antonio, is a former President of the American Institute of Professional Geologists in Arvada, CO and the American Geological Institute in Washington, D.C.

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**Your House Comes Out Of A Mine**

SME Foundation for Public Information and Education, Inc.

The majority of the raw material used in building your home was furnished by the mining industry.

- **The foundation** is probably concrete (limestone, clay, shale, gypsum, and aggregate mining.)
- **The exterior walls** may be made of brick (clay mining) or stone (dimension stone mining.)
- **The insulation** in the walls may be glass wool (silica, feldspar, and trona mining) or expanded vermiculite (vermiculite mining.)
- **The interior walls** are usually wall board (gypsum mining.)
- **The lumber** in the structure will be fastened with nails and screws (iron ore mining and zinc mining.)

- If the roof is covered with asphalt shingles, the filler in the shingles is from a variety of colored silicate minerals from mining.
- Your fireplace is probably of brick or stone, lined with a steel box (iron ore mining.)
- Your sewer piping is made of clay or iron pipe (clay mining or iron ore mining.)
- Your electrical wiring is of copper or aluminum (copper mining or bauxite mining.)
- Your sanitary facilities are made of porcelain (clay mining.)
- Your plumbing fixtures are made of brass (copper and zinc mining), or stainless steel (nickel and chrome mining.)
- Your gutters of galvanized steel (iron ore mining and zinc mining.)
- The paint is manufactured with mineral fillers and pigments (from minerals obtained by mining.)
- Your windows are made of glass (trona, silica, sand, and feldspar mining.)
- Your door knobs, locks, and hinges are of brass or steel (copper, zinc, and iron ore mining.)

And finally your mortgage is written on paper made from wood or cloth fibers, but filled with clay (from clay mining.)
The Geologist In The Mirror

Bill Moore, CPG-8156

Ethics and standards of practice are defined as moral principles and models to follow or to be measured by, according to Webster. Principles, practices, rules, models--these are concepts which, with time, are subject to interpretation and redefinition. I am reminded of a cartoon strip that shows two gentlemen, in the 1950s, shaking hands. One says to the other, "It's a deal, your word is as good as gold". The next frame, dated in the 1960s, shows one gentleman saying, "Whatever feels right, do it!". A 1970s businessman exclaims, "If no one catches you, is it really wrong?". Finally, a well-dressed, "successful" businessman of the 80s says, "Lie, cheat, steal, whatever it takes". This cartoon displays some truth to the evolution of ethics in our society over the last few decades. The slippage of ethical behavior across America, although broad and widespread, has come upon us at such a deceptively slow pace that much of our questionable behavior may not even be noticed. It appears that, "whatever it takes" seems to be at least partially accepted and tolerated in today's business climate.

There are numerous examples of ethical failures which have occurred within the public eye in recent years. The institutions of politics, society, professionalism, religion, and education, among others, have not gone untouched. Even within our corner of the professional world, that of geology, we have failed to uphold the level of performance which we have set for ourselves.

Self examination of our professional behavior is in order. We need to take to heart the advice of Plato who said, "The life which is unexamined is not worth living." We need not look far for that to which we can judge our behavior. We should each look to the AIPG Code of Ethics.

Beyond simply reading, the Code warrants study and dissection. Review the hierarchy--first the Preamble, then the canons, standards, and rules. Make notes. Take a highlighter and mark those phrases that address integrity and professional conduct. Once that is done, it is easy to come up with a list of practical applications. For example, one could look at Standard 3.4 and ask the following question, "Is the employer/client getting their money's worth for the services I provide?" Application: simply ask if you'd be willing to pay the amount you receive for the services you offer. If the answer is no, take appropriate action. To go further with the Code one could use it and the practice of many companies which have established a corporate mission statement. We should consider developing our own written professional statement which clearly ties in ethical behavior and standards of practice.

Our profession, and we individually, should be challenged to take the attitude of the 1980's businessman and turn the table 180 degrees. Now, "whatever it takes" becomes the challenge to achieve the highest level of ethical behavior--even if it means the loss of business, income, professional associates, friends, or job. At all costs we are challenged to do "whatever it takes" to uphold the standards and behavior presented in the Code.

It is possible to claim high ethical standards (i.e., the Code) and yet practice a professional lifestyle which falls short of these standards. It is also possible to reshape our values and beliefs such that we can meet the standards which we claim. Those who teach behavior modification give us sound advice on how to change the way we "do business". First, accountability. We should each be accountable to an individual (other than your boss) such that we dialogue regularly concerning our professional conduct. This level of accountability serves to help direct our actions. Without accountability we leave room for behavior that does not require an explanation to anyone. Second, establish a role model, someone within or outside of the profession for which it is easy to ask, "what would they do in any given situation?" Third, is the challenge of identifying our own ethical weaknesses and doing "whatever it takes" to weed them out of our lives.

In the pursuit of professional goals and challenges we are all tempted to let our ethical standards slip, we are all pressured to compromise by outside factors. We must always realize that even in privacy we must apply standards which we would not be ashamed to publish on the front page of tomorrow's newspaper. It was Mark Twain that said, "If you tell the truth you don't have to remember anything." This principle goes well beyond speech--it covers behavior as well.

Errors in judgement and a change in the business environment cannot be controlled. However, we can influence and control the application of ethical behavior within our lives. We are each challenged to understand ethical behavior, make ethical decisions, and promote ethical conduct on the part of ourselves and those around us.

(Note: The title of this article is modified from the title of the book The Man In The Mirror, published by Wolgemuth & Hyatt.)

Mr. Moore works for Bechtel Environmental in Oak Ridge, Tennessee.*
Technical Reviewers Wanted

AIPG members have a potential opportunity to participate in the technical review of monographs on innovative site and waste remediation technologies written by nationally recognized authorities.

The American Academy of Environmental Engineers and U.S. Environmental Protection Agency are conducting a joint project designed to produce a series of monographs on innovative site and waste remediation technologies. The monographs will provide experienced, practicing professionals guidance on the application of innovative processes in the following areas:
- Bioremediation
- Chemical Treatment
- Chemical Extraction
- Soil Washing/Soil Flushing
- Stabilization/Solidification
- Thermal Desorption
- Thermal Destruction
- Vacuum/Vapor Extraction

The purpose of the project is to foster the use of innovative processes considered ready for full-scale application by developing and publishing monographs providing reliable data that will be broadly accepted by the professional community. Therefore, highly respected experts were recruited both to oversee the development of the monographs and to write the initial drafts. In addition, in order to develop monographs representing a broad-based consensus, the drafts will be subjected to a twofold peer review - by (1) the committee of experts that is overseeing the project and by participating engineering and technical organizations (Participating Organizations) and (2) qualified engineers and scientists, participating in an at-large review through a Participating Organization(s).

AIPG members who are engineers or scientists having technical competence in one or more of the subjects addressed by the monographs, and who would like to participate in the at-large review, should contact William C. Anderson, who will refer them to the appropriate Participating Organization(s) so that they and the Organization(s) may undertake to arrange for their participation.

Those desiring to be referred should furnish the Academy a brief description (no longer than one single-spaced page for each area of competence) of their background in the area(s) of the monograph(s) they would like to review. In addition, solely for the purpose of referring applicants to a Participating Organization with which they might be familiar, they are requested to state whether or not they are members of any of the following organizations and, if so, which organization(s):
- Air & Waste Management Association
- American Institute of Chemical Engineers
- American Society of Civil Engineers
- American Society of Mechanical Engineers
- Hazardous Waste Action Coalition
- Society for Industrial Biology
- Water Environment Federation

The above information should be sent to:
William C. Anderson, P.E., DEE
Project Manager
WASTECH '93
130 Holiday Court, Suite 100
Annapolis, MD 21401

State Geological Survey Publishes First of a New Map Series

The Geological Survey of Wyoming has published the first in its planned series at 1:100,000-scale, color, geologic maps of Wyoming. Map Series 39, titled Geology of the Nowater Creek 30' x 60' Quadrangle, northcentral Wyoming, includes the southeastern portion of the Big Horn Basin, the southwestern flank of the Big Horn Mountains, and the northeastern flank of the Bidger Mountains. The map covers 1 degree of longitude and 1/2 degree of latitude, an area of about 1,755 square miles.

Map Series 39 is available from the Geological Survey of Wyoming, located on the campus of the University of Wyoming, P.O. Box 3008, University Station, Laramie, Wyoming, 82071. The map sells for $5.00 prepaid (add $1.50 for mailing rolled). Wyoming addresses add 5% sales tax.

For further information, contact Alan J. Ver Ploeg at (307) 766-2286.
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- Industrial Site Assessments
- Environmental Risk Management
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- Asbestos Services
- Waste Minimization

We have opportunities for proven leaders to help us expand our expertise in the following areas: National Accounts Management, Technical Operations Management, Senior Project Management, Profit Center Management and Sales & Marketing.
AL 2559
AGENCY: Real Estate Appraisers Board
TOPIC: BUSINESS AND CORPORATIONS
SUMMARY: Relates to informal disciplinary procedure; allows for review by Disciplinary Investigative Committee, and where applicable, takes such action as it deems necessary to informally settle disputes which may constitute a violation of Real Estate Appraisers Board's rules and/or statutes.
AGENCY CONTACT: Executive Director, Real Estate Appraisers Board, 600 Interstate park Drive, Suite 628, Montgomery, AL 36109
CITATION: AAC 780-X-14-02 Informal Disciplinary Procedure
PROPOSAL DATE: 11/30/92
COMMENT DEADLINE: 01/04/93

CA S 7
AUTHOR: Bolling
TOPIC: ENERGY
SUBTOPIC: OIL, GAS, PETROLEUM, AND COAL
SUMMARY: Provides for the payment of proceeds derived from the sale of oil or gas production within 90 days after the end of the calendar month within which subsequent production; provides for the royalty interest owners to share in production; provides for attorney's fees; provides for an accounting to certain royalty interest owners.
STATUS: PREFILED

CA S 28
AUTHOR: Wright
TOPIC: ENVIRONMENTAL PROTECTION AND POLLUTION CONTROL
SUBTOPIC: HAZARDOUS AND TOXIC WASTE - NON-NUCLEAR
SUMMARY: Directs the Department of Toxic Substances Control to require that a person performing onsite treatment in a transportable treatment unit notify the Department, on a form supplied by the Department, of each site where the treatment occurs, including the dates and times of the hazardous waste treatment at that site.
STATUS: INTRODUCED

CA 6777
AGENCY: Dept. of Pesticide Regulation/Envr. Monitoring and Pest Mgmt. Branch
TOPIC: CHEMICALS
SUMMARY: Adds pesticides to the Groundwater Protection List. Identifies new geographic vulnerability as the result of pesticide use, as Pesticide Management Zones. Modifies the way that pesticides containing aldicarb, atrazine, bentazon, bromide, dioxin, prometon, or simazine are regulated in such vulnerable areas, by removing the chemical specific designation of all current and proposed Pesticide Management Zones.
AGENCY CONTACT: Bill Farbe OR: Steven Monk, Environmental Monitoring and Pest Management Branch, Department of Pesticide Regulation, 1220 N St, Rm.

A-149, P.O. Box 942871, Sacramento, CA 94271-0001, (916)554-1141
CITATION: 3/26 CCR 8000, 6416, 6458, 6486.
1-S & 7, 6800, 6802 pesticides: Grader Protection List
PROPOSAL DATE: 10/04/92
COMMENT DEADLINE: 12/04/92
HEARING DATE: 11/25/92

CT H 5014
AUTHOR: Chase
TOPIC: ENVIRONMENTAL PROTECTION AND POLLUTION CONTROL
SUBTOPIC: HAZARDOUS AND TOXIC WASTE - NON-NUCLEAR
SUMMARY: Authorizes the use of alternative procedures for the containment of oil and petroleum liquid spills.
STATUS: PREFILED

FL H 37
AUTHOR: Jones D
TOPIC: BUSINESS AND CORPORATIONS
SUBTOPIC: ADVERTISING
SUMMARY: Requires persons licensed by the Department of Professional Regulation to include license numbers on all printed materials or advertising related to the provision of services as a prerequisite for licensure or license renewal.
STATUS: 12/01/92 INTRODUCED

FL 1153
AGENCY: Dept. of Professional Regulation/Board of Professional Engineers
TOPIC: BUSINESS AND CORP.
SUMMARY: Specifies that a candidate must be able to show that he has completed all the necessary, required schooling, if he has graduated from a non-ABET approved engineering program.
AGENCY CONTACT: Angel Gonzales, Executive Director, Board of Professional Engineers, Northwood Centre, 1940 N Monroe Street, Tallahassee, FL 32399-0705
CITATION: FAC 21H-203.0013; Definitions
PROPOSAL DATE: 11/13/92
COMMENT DEADLINE: 12/04/92
HEARING DATE: 12/06/92

FL 11533
AGENCY: Dept. of Environmental Regulation
TOPIC: ENVIR. PROTECTION AND POLLUTION CONTROL
SUMMARY: Establishes the scoring system for petroleum contamination sites; ensures that the sites that pose the greatest potential threat to drinking water supplies are assigned a high priority for State administration clean-up.
AGENCY CONTACT: Brian J. Dougherty, Bureau of Waste Cleanup, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, FL 32329-2400
CITATION: FAC 17-771.101 thru 771.400
Petroleum Contamination Site Priority Ranking
PROPOSAL DATE: 11/06/92
COMMENT DEADLINE: 11/27/92
HEARING DATE: 12/04/92

FL 11452
AGENCY: Dept. of Professional Regulation/Board of Professional Engineers
TOPIC: BUSINESS AND CORPORATIONS
SUMMARY: Sets forth rules relating to the responsibilities of the professional engineers regarding document classification and submittal, delegated engineering, specialty engineers, the prime professional engineer, and computer hand and software, along with the purpose of the adoption of responsibility rules and the definition applicable.

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IL 5162
AGENCY: Pollution Control Board
TOPIC: ENVIR. PROT. & POLLUTION CNTRL
SUMMARY: Concerns procedural requirements for permitted landfills, deletes the provision allowing the Illinois Environmental Protection Agency to reconsider its permitting decisions prior to the filing of petition for review of the Agency's decisions prior to the filing of petition for review of the Agency's decision with the Board.
AGENCY CONTACT: Dorothy M. Gunn, Clerk, Pollution Control Board, State of Illinois Center, Suite 11-500, 100 W. Randolph Street, Chicago, IL 60601
CITATION: 35 IAC 813.106
PROPOSAL DATE: 11/08/92
COMMENT DEADLINE: 12/21/92

IL 5168
AGENCY: Department of Professional Regulation
TOPIC: BUSINESS AND CORPORATIONS
SUMMARY: Concerns the architecture registration examination.
AGENCY CONTACT: Jean A. Courtney, Department of Professional Regulation, 320 West Washington, 3rd Floor, Springfield, IL 62786, (217)785-0800
CITATION: 68 IAC 1150.40
PROPOSAL: 11/03/92
COMMENT DEADLINE: 12/21/92

ME 4112
AGENCY: Waste Management Agency
TOPIC: ENVIR. PROT. & POLLUTION CNTRL
SUMMARY: Establishes the goals, priorities, management strategies and facility needs for the future management of solid waste; provides guidance in planning and implementing waste management and recycling programs at the state, regional and local levels.
AGENCY CONTACT: Denise Lord, Maine Waste Mgmt Agency, State House Station 154, Augusta, ME 04333 (207) 287-5300
CITATION: 21 H-30,001 thru .007; Engineers' Responsibility Rules
PROPOSAL: 11/11/92
COMMENT DEADLINE: 12/14/92
HEARING DATE: 12/04/92

MD 4057
AGENCY: Department of Natural Resources
TOPIC: ENERGY
SUMMARY: Modifies regulations which will provide for the orderly and safe development of oil and gas resources in the State.
AGENCY CONTACT: Robert Miller, Director, Waste Resources Administration, Tawes State Office Building, E2, 580 Taylor Avenue, Annapolis, Maryland 21401 (410) 574-8346
CITATION: COMAR 08.10.01 .01, 08-09-12, and .14 Oil and Gas Explor. and Prod.
PROPOSAL: 12/11/92

MA 4070
AGENCY: Exec. Office of Public Safety/ Board of Building Regulations and Standards
TOPIC: REAL ESTATE AND CONSTRUCTION
SUMMARY: Updates the State Building Code regarding the subjects of masonry construction, construction in flood-prone areas, seismic requirements, and reference standards for structural steel.
AGENCY CONTACT: John J. Courtney, Department of Professional Regulation, 320 West Washington, 3rd Floor, Springfield, IL 62786, (217)785-0800
CITATION: 68 IAC 1150.40
PROPOSAL: 11/03/92
COMMENT DEADLINE: 12/21/92

MN 1222
AGENCY: Department of Natural Resources
TOPIC: RESOURCE MANAGEMENT AND PRESERVATION
SUMMARY: Directs and regulates the extent of reclamation that will be required of the operators of metal mines, where the metals mined are those other than iron ore and taconite; deals with all the major aspects of mining, including planning and siting, construction and operation, closure, deactivation, reclamation and any necessary post-closure maintenance that mine sites may appear.
AGENCY CONTACT: Ethical Practices Board, 1st Floor, Centennial Office Building, 658 Cedar St., St. Paul, MN 55155, (612) 296-5143
PROPOSAL: 11/02/92
COMMENT DEADLINE: 12/12/92
HEARING DEADLINE: 12/04/92, 12/07/92

MN 1237
AGENCY: Pollution Control Agency
TOPIC: ENVIRONMENTAL PROTECTION AND POLLUTION CONTROL
SUMMARY: Governs the management of petroleum contaminated soil generated from leaking petroleum storage tanks or other sources; establishes procedures for obtaining approval for land treatment of petroleum contaminated soil, and standards and operating requirements for sites used for the land treatment of petroleum contaminated soil.
AGENCY CONTACT: Mr. Chris Zadak, Pollution Control Agency, Tanks and Spills Sec-
STATE NET

tion 520 Lafayette Road North, St. Paul, MN 55105-4194, (612) 297-8318, (612) 297-8676 FAX

CITATION: MRAC 7035.0300, 7037.0100 thru 7037.3600 non seq.

PROPOSAL DATE: 11/16/92
COMMENT DEADLINE: 12/18/92
HEARING DATE: 01/19/93

MN 1252
AGENCY: Pollution Control Agency
TOPIC: ENVIRONMENTAL PROTECTION AND POLLUTION CONTROL
SUMMARY: Relates to ground water protection from toxic release in solid waste.

AGENCY CONTACT: Allen Dotson, Groundwater and Solid Waste Division, Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, MN 55154-4194

CITATION: MCAR 7044.0100-1100
PROPOSAL DATE: 12/07/92
COMMENT DEADLINE: 01/07/93

NC 2310
AGENCY: Dept. of Environmental, Health and Natural Res./Div. of Coastal Mgmt.
TOPIC: RESOURCE MANAGEMENT AND PRESERVATION
SUMMARY: Addresses special needs for shoreline stabilization along barrier islands that could allow use of erosion-control structures to protect historic sites of national significance and commercial navigation channels.

AGENCY CONTACT: Dedra Blackwell, Division of Coastal Management, Department of Environment, Health and Natural Resources, P.O. Box 27887, Raleigh, NC 27611-7687, (919) 733-2293

CITATION: 15A NCAC 71H .0308
PROPOSAL DATE: 11/02/92
COMMENT DEADLINE: 12/02/92
HEARING DATE: 11/19/92

OH 3930
AGENCY: Environmental Protection Agency/Div. of Hazardous Waste Management
TOPIC: ENVIRONMENTAL PROTECTION AND POLLUTION CONTROL
SUMMARY: Relates to the contents of "Part B" of the permit application; special exclusions and exclusions for hazardous waste; lists of hazardous wastes; hazardous waste from non-specific sources; notification of intent to export to a foreign country; annual reports; cost estimate for facility closure; cost estimate for post-closure care; surface impoundment; design and operating requirements; landfill design and operating requirements; liability requirements.

AGENCY CONTACT: Kit Arthur, Environmental Protection Agency/Division of Hazardous Waste Management, 1800 Watermark Dr., Columbus, OH 43226-0149 (614) 644-2944

CITATION: [to be codified] 15 rules - haz. waste PROPOSAL DATE: 12/01/92
COMMENT DEADLINE: 01/01/93
HEARING DATE: 01/11/93

OR 9332
AGENCY: Energy Facility Siting Council
TOPIC: REAL ESTATE AND CONSTRUCT.
SUMMARY: Designates areas of Oregon as "suitable" or "unsuitable" for siting thermal power plants; updates the designations for meteorology (air quality), agricultural land use, and the boundaries of Newberry Crater.

AGENCY CONTACT: Bob Robinson, Dept. of Energy, 625 Marion St., NE, Salem, OR 97310, (503) 378-5194, 1-800-221-8035
CITATION: OAR 345-18, 345-40
PROPOSAL DATE: 12/01/92
COMMENT DEADLINE: 01/29/93

OR 9247
AGENCY: Water Resources Department
TOPIC: RES. MGMT AND PRESERVATION
SUMMARY: Contains the criteria for determining if wells have the potential to cause substantial interference with surface water supplies; ensures that all short-term interference can be regulated without the need for critical groundwater area determinations.

AGENCY CONTACT: Michael J. Zwart, Water Resources Department, 3850 Portland Road NE, Salem, OR 97310, (503) 378-8455 ext 207
CITATION: OAR 690-09-010, 09-020, 09-030, 09-040, 09-050
PROPOSAL DATE: 11/01/92
COMMENT DEADLINE: 12/04/92

OR 9290
AGENCY: Department of Corrections
TOPIC: BUSINESS AND CORPORATIONS SUMMARY: Conforms consultant selection procedures; relates to architects, engineers, and related professional consultants; repeals the rule in Consultant Selection procedures.

AGENCY CONTACT: Dave Schumacher, Rules Coordinator, Department of Corrections, 2575 Center Street, NE, Salem, OR 97310-0475
CITATION: OAR 291-25-005
PROPOSAL DATE: 12/01/92
COMMENT DEADLINE: 12/26/92

TX 10889
AGENCY: Board of Registration for Prof. Eng.
TOPIC: BUSINESS AND CORPORATIONS
SUMMARY: Concerns experience evaluation for engineers; allows applicants teaching in TAC/ABET-accredited curricula to claim teaching as meeting experience requirements for registration; expedites the approval process of applications for registration; adds environmental to the list of recognized branches of engineering in which applications for registration will be accepted or for which principles and practice examination will be available from the National Council of Examiners for Engineering & Surveying.

AGENCY CONTACT: Charles E. Nemir, P.E., Executive Director, State Board of Registration for Professional Engineers, P.O. Box 18329, Austin, TX 78760, (512) 440-7723

CITATION: 22 TAC 131.81, 131.112, 121.133
PROPOSAL DATE: 11/03/92
COMMENT DEADLINE: 12/03/92

UT 4532, 4531
AGENCY: Dept. of Natural Resources/Division of Oil, Gas and Mining
TOPIC: ENVIR PROT & POLL CNTRL/ENERGY
SUMMARY: Relates to waste management and disposal; clarifies the Division of Oil, Gas and Mining's regulations for Exploration and Production Waste (E and P wastes); proposes more specific rule as management and disposal of E and P Wastes requires specific standards. Relates to drilling and operating practices; clarifies how pollution control, site evaluations, plugging and abandonment, temporary abandonment, and shut-in wells are to be handled under Exploration and Production Waste (E and P Waste) management programs.

AGENCY CONTACT: Ronald J. Firth and Ronald W. Daniels, Division of Oil, Gas and Mining, Suite 350, 3 Triad Center, Salt Lake City, UT 84108-1203, (801) 538-5340
CITATION: R 64-9, R 64-9
PROPOSAL DATE: 11/01/92
COMMENT DEADLINE: 12/30/92
HEARING DATE: 12/02/92

VA H 730
AUTHOR: Brickley
TOPIC: RESOURCE MANAGEMENT
SUBTOPIC: MINERALS AND MINING
SUMMARY: Repeals the one percent local coal and gas severance tax and replaces it with one percent state coal and gas mining tax. Money collected from the tax is to be distributed to the counties and cities based on their school-age population; however, those localities with a composite index below 0.5 will have their school-age population figure doubled.

WASHTON 8906
AGENCY: Board of Registration for Professional Engineers and Land Surveyors
TOPIC: BUSINESS AND CORPORATIONS
SUMMARY: Clarifies existing language and provides new language requiring that engineers and land surveyors take and examination; covers examinations, evaluations of candidates; comity; and examination review.

AGENCY CONTACT: WAC 196-12-030, 196-12-050, 196-20-031, 196-24-030, 196-24-050, 196-24-105
PROPOSAL DATE: 11/04/92
HEARING DATE: 12/04/92

WY S 7
AUTHOR: Committee on LabHasSocSerVa
TOPIC: ENERGY
SUBTOPIC: NUCLEAR ENERGY AND RADIOACTIVE SUBSTANCES
SUMMARY: Requires hospitals, manufactures, processors or other handlers of radioactive materials to register with Department of Health.

STATUS: 12/14/92 PREFILED
TODAY IN WASHINGTON

F. B. "Ted" Mullin, CPG-1716

Welcome to the new year. The bells have just stopped ringing and the new income tax forms are here. Who said that the federal government was slow?

Here is a list of headings from the Washington Report found in the December Pay Dirt magazine. It is a quick reference for December's political activity.

- Mining Wonders What Will Happen Under Bill Clinton
- Clinton Administration Is Expected To Transform West
- Predict Clinton Will Help Resolve Timber-owl Fuss
- Gore Quickly Reinforces Environmental Commitment
- GOP Defeats 3 Democratic Environmental Extremists
- Wyoming Governor Sullivan Is Mentioned For Interior
- Arizona's Babbitt Also On Interior Secretary List
- Ben Nighthorse Campbell To Be Only Indian In Senate
- Rahall Will Be Back With A New Cocklebur
- Montana Liberal Williams Wins The Lone House Seat
- English, Favoried By The Sierra Club, Wins New Arizona Seat

For other reports on mining activity in the western U.S., read Pay Dirt Magazine. There are two editions, the southwestern and the Rocky Mountain. Inside the front cover of this magazine is the statement that "Pay Dirt has gained the reputation of being fair, current, accurate, and believable, accepted by the mining professional community as its source of information in the western U.S." It is.

Gary Dillard, Staff Reporter for Pay Dirt, wrote the following message in the column entitled Editorially Speaking. It is worth repeating here for those of you who do not have access to the magazine.

The Greens Have A Job For You

A recent poll - so common in the presidential election year - said that the one subject most Americans care about is the economy. Newly elected officials can stuff everything else, from Murphy Brown and family values on down to Congressional ethics. Let's talk about dollars and cents.

Vice-President Al Gore is saying that the country can have both a strong economy and a clean environment. Which is true. When the national policy for both is reasonable.

But when the pendulum swings too the far green side, it's almost a guarantee that the economy will go to hell. A case in point is a recent chart in an Arizona newspaper that shows where the new jobs will be between now and 2000. (Remember, now, the green movement in Arizona has strongly protested every new mining operation that has been proposed in recent years, fights against logging, petroleum refining and just about any other industry.)

So what will the new jobs be? No. 1 is retail salesperson, of which there will be more than 30,000 such positions. What does this work pay? Usually starts at minimum, and may go up a little from there. Wonderful job to raise a family on. The No. 2 opportunity (with 24,000 openings) is for waiters and waitresses. Line up, college grads.

The only decent job in the top 10 was No. 3, for general manager and top executives. Not much here for a blue collar worker to raise his or her family on, either. The rest: fast food workers, general office clerks, cashiers, secretaries, bookkeeping clerks, laborers and helpers and janitors and cleaners. There will be about as many new jobs for janitors this decade as there are jobs for miners today.

So thanks to the green movement, mines will open in Chile and Mexico while American workers get to clean toilets.

Another "jobs" argument used by the greens is to point out that national parks are just as good for the economy as resource-production jobs. True or false? You judge.

the National Park Service recently pointed out that Colorado's National Parks generate 10 million a year in revenues. The state's non-fuel mining industry, on the other hand, generated four times that much in 1991. And while Colorado is one of the most scenic areas in the Union, it's only the 27th largest producer of non-fuel minerals.

While the parks generated 7,100 non-park related jobs, mostly they were high-paying ones pumping gas, changing sheets in motels and slinging hash. Colorado's metal mining sector, however, generated 3,400 jobs - in the highest paying industry in the nation. Nonmetals and coal provided another 2,900 jobs, while the petroleum and

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natural gas industry accounted for another 12,200 in

Another important point here is that the national parks
and the mines have existed in concert for many years,
since before the advent of either Mr. Gore or Earth Day.

But the Colorado mining industry, important as it is
today with a value of more than $400 million, had an
impact of almost $1.3 billion in 1980. Much of the drop
has been in molybdenum, a direct result of a decline in
the domestic steel industry. How much of that has been
a direct result of unreasonable environmental rules? Un-
fortunately, no one knows.

That's the point. Until government, and the allied green
movement, are willing to balance environment with
economy, there is every likelihood that retail sales and
waitressing will be the job opportunities of the future. At
least in this country." Gary Dillard, Staff Reporter

And now comes the government's attempt to tip the
balance and bring everything under control with regula-
tions. Here's the latest from the Federal Register.

Volume 57, No. 243, 12-17-92 - DOI, U.S.G.S. 30 CFR
Part 400 - Regulations for Obtaining Federal Assistance
in Financing Exploration for Mineral Reserves, pg. 59918.
Final Rule. Removes Regulations. No Funding, None an-
ticipated.

DOI - BLM General Land Office Automated Records
Project. Notice of Availability, pg. 60001. Retrieval of data
base and document images from optical disk is now
available for the states of Florida, Arkansas, Wisconsin,
Louisiana, Minnesota, and Michigan, for patents issued
for cash entries and homesteads before 7-1-1908. The
automated record system is available and supported from
8 a.m. to 5 p.m., M-F, at BLM, Eastern States, 7450
Boston Blvd., Springfield, Virginia 22153. Further infor-
lation is available at the Public Services Section at
703-440-1600.

Vol. 57, No. 246, 12-22-92 - Part II, EPA. Water
Pollution Controls - Final Rules. Water Quality Standards;
priority toxic pollutants, numeric criteria.

Vol. 57, No. 247, 12-23-92 - Part VII, DOI-BLM. 43
CFR Part 8360. Visitor Services - Rules of Conduct - Final
Rule. Belt up on Public Lands or they can ticket you!

Vol. 57, No. 251, 12-30-92 - DOI-BLM. Decision of the
Secretary to extend the reduction in rental fees for oil and
gas leases, pg. 62351. Extends reduction announced in
the FR in Vol. 57, No. 25, Feb. 6, 1992, and effective 3-1-93
through 2-26-96.

DOI-FWS - 50 CFR Part 18, Mammal Protection Act. It
seems that BP and several other oil and gas production
companies as well as a few geophysical companies have
petitioned the Fish and Wildlife Service for help with polar
bears (Ursus eatus geologus) where "concern has been
directed at polar bear encounter incidents where human
life is in jeopardy". The regulations are being proposed
that will among other things, provide for "Polar Bear
interaction training and knowledge of polar bear interac-
tion plans will be required of each person operating under
these regulations".

As for me, I certainly hope that the Fish and Wildlife
Service will be responsible for the training of the polar
bears about the interaction plans. Not a geologist's job....

AGI Installs 1993 Executive Committee

The American Geological Institute
installed its 1993 Executive Com-
mittee officers at the semiannual meet-
ing of its Member society Council,
Oct. 26, in Cincinnati.

Donald C. Haney, CPG-4053, who
served as 1992 president-elect of the
Executive Committee, is president for
a one-year term. Haney is director of
the Kentucky Geological Survey, and
he received the 1992 AGI Medal in
Memory of Ian Campbell at the Cin-
cinnati meeting. John J. Amoruso,
CPG-1745, will serve as president-
elect. Amoruso heads an oil and gas
exploration and production com-
pany. Amoruso Petroleum Co., in
Houston.

Continuing for his second year as
treasurer is Robert R. Jordon, CPG-
1262, who also is chairman of AGI's
Finance Committee. Jordan is direc-
tor of the Delaware Geological Survey
and professor of geology at the
University of Delaware.

Holmes A. Semken, University of
Iowa, Iowa City, and Stephen H.
Stow, Oak Ridge National Laboratory,
Oak Ridge, Tennessee, are newly
elected for two-year terms as AGI
secretary and member at large, re-
spectively.

1992 President Christopher C.
Mathewson, CPG-2486, Texas A&M
University, College Station, remains
on the Executive Committee in 1993
as past president, and he will chair
the Nominating Committee.

Marcus E. Milling, CPG-4518,
AGI's executive director, serves as an
ex officio member of the committee,
as does Frank W. Harrison Jr., CPG-
2500, newly elected chairman of the
AGI Foundation Board of Trustees.

Executive Committee officers are
selected by AGI's Nominating Com-
mittee and elected by its Member
Society Council.

The American Geological Institute
is a non-profit federation of 23 mem-
ber organizations that represent
geologists, geophysicists, and other
earth scientists...
Noted in State Net: A bill prefiled in the Connecticut House would repeal "the prohibition upon fortune-telling and palm, card and other psychic readings."

Tongue in cheek query: Does this mean that much of the work done by geologists in the Nutmeg State has heretofore been illegal? If this bill will legalize us and improve our stature, how can we not support it?

Seriously: One of the principal problems that geologists, at least in some parts of the country, have to overcome is that of image. Too often, we have been associated in the minds of some of the public with "blue sky" promotions and various other types of scams. And, this has not been limited to the resource geologists. On more than one occasion, unscrupulous mineral promoters and land developers have taken the attitude that "If you won't sign off on this, I can find someone who will. There are lots of seals for sale." And, in reviewing the work of others, engineers as well as geologists, how many seals have you seen that you suspect actually have been "sold"?

I once knew a land development and property management firm whose principals were all educated as engineers. None was registered. Their attitude, frankly stated, was that they did not want the professional liability; that they could "buy a seal" i.e., a licensed engineer, anytime they needed one. Whether this was legally true or not is immaterial. The attitude and perception were there.

On another occasion, my attention was called to two evaluation reports on the same producing oil property. They were dated, signed and sealed by the same licensed engineer, for the same client. One was a "buyers" report. The other was a "sellers" report. The "optimistic" one was presented as part of an offering package to prospective buyers of the property. The other, more pessimistic and probably more realistic, was confidential and for in-house use by the seller. The conservative report came to our attention purely by accident. Less sophisticated prospective purchasers apparently were taken in.

The property subsequently was sold, not to someone in the "oil patch", but to a group of physicians in a distant state. They had relied on the report which was presented, rather than ordering one of their own. They eventually lost a "bundle" on the property. When he saw the two reports, our production manager, an engineer, suggested to the state engineering registration board that the author of the report was unethical. Our engineer felt that in his "optimistic" report, the author should have disclosed the existence of his more conservative evaluation. The board's only response was that their licensee was practicing within his field of proficiency and, therefore, not at fault. They appeared to ignore the specific allegation. A few years later, the same board threatened a firm of geologists doing a geologic investigation of a foundation problem with legal action for practicing engineering without a license. One must question whether this board's primary purpose was protection of the public, or protection of its licensees' "turf".

We do not suggest that this board is typical. But, we do suggest that the profession, even more than the public, must be constantly alert to practices that may be perceived to be unethical. An act that technically may not be in violation of a code of ethics may still be perceived as unethical by the consuming public. And, that perception is critical to our future as a profession. For our own sake, as well as the public's, we must be diligent in our promotion of good ethical practice by all geologists, whether licensed or not. We must strive to build a public perception of geologists as professionals who are truly deserving of the public trust.
PART 1

THE GEOLOGIC REPORT

Title Page
The title page has the title of the report, the date of submittal and the organization or individual to whom submitted. In the latter case, a person's title or position as well as their organization are needed. Usually the individual to whom a report is submitted is the person who requested the report unless another individual or organization has been specifically designated. The title page also has the name and signature of the project geologist and of the advising or reviewing geologists, if any, and any required credentials (license, registration, etc.). A sample title page follows.

A PRELIMINARY ANALYSIS OF
THE QUALITY OF STONE
TO BE USED IN THE SMITH DAM,
NEW ALBANY, NEW YORK

Prepared for:
Mr. Radford N. Smith, President
Sampson Construction Company

Submitted by:
Jones Associates

Reviewed by:

Leonard R. James, CPG-0000
Project Head

Date: February 5, 1993

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Recommendations and Conclusions

All reports must contain conclusions. But a report leading only to conclusions without recommendations may be considered a passive report in that action is not demanded on the part of the person or entity for whom the report has been written. A report which also contains recommendations is viewed as a dynamic report, i.e., action is demanded by the work. In either case, recommendations and conclusions should ideally form the first portion of the report. If this is not possible, they should appear very early in the report. This is a courtesy to the people to whom a report is submitted. Because decision-making persons are primarily interested in the results of the report and not in its technicalities, they should not have to look beyond the first few pages to get the essence of the work.

Recommendations are "action-oriented," i.e., they are statements of what specifically must be done as the logical outgrowth of the work that is being reported.

Make recommendations short, concise and preferably listed numerically.

The recommendations should generally be listed in the same sequence as that of the conclusions which engendered them.

Write recommendations specifically for the person most likely to act upon them.

Recommendations should not include any of the lines of reasoning which led to them.

Conclusions differ from recommendations in that they are passive, i.e., they do not demand action.

Make conclusions short, concise and preferably listed numerically.

Write conclusions specifically for the same person as the recommendations.

Conclusions should not include any of the lines of reasoning which led to them.

Introduction

The introduction puts the work into the context of time, space, personnel, bounding conditions and objectives.

Initiation

This paragraph should identify the person who requested the work, his or her position, organization and the date and manner of the request.

In the case of a consultant, if the initial contact led to a proposal, this section should include the date of transmittal of the proposal, who accepted the proposal and how it was accepted. In the case of a government agency or company, show the date when the decision was made to carry out the work.

Three New Ground Water Publications Available

Three new publications including the 1992 Petroleum Hydrocarbons Conference Proceedings, Hydrogeological Decision Analysis, and Contaminant Hydrogeology are now available from the National Ground Water Association (NGWA).

Copies of the proceedings, catalog #P656, can be ordered from the NGWA Bookstore for $43.75 ($35 to NGWA members), by sending complete payment, plus $4 shipping and handling to NGWA Bookstore. Shipping charges for Canadian orders are $8 and $15 for international orders. Subscribers to the Ground Water Management Series may redeem a coupon for this publication.

Hydrogeological Decision Analysis by Alan Freeze describes the application of decision analysis to engineering design for projects in which the hydrogeological environment plays an important role. The first section of the book lays the framework, while the rest of the book describes how the methods can be applied in geotechnical and waste-management applications. This book, catalog #T822, is available for $12.50 ($10 for NGWA members).

Contaminant Hydrogeology by C.W. Fetter presents a comprehensive and up-to-date treatment of ground water contamination and examines its prevention and rectification. The text contains example problems, case studies, and a review of the required math. The book, catalog #T826, is available for $61.25 ($49 for NGWA members).

To order any of the titles mentioned or to request an NGWA Bookstore Catalog, contact the NGWA Bookstore, P.O. Box 182039, Dept. 017, Columbus, Ohio 43218-2039 or call (800) 551-7379. Visa, MasterCard, and Discover are accepted.

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Dear Editor:

In his article titled "Geologists and The Internal Revenue Service," Earl Hoover repeatedly uses such terms as "engineering services," "engineering assistance," and "engineering features such as valuation issues." But I.R.S. "engineers" neither plan nor build anything, so are not engineers. Instead, they are appraisers, as Mr. Hoover finally observes when he says "Technical guidelines include standard appraisal handbooks, texts on business and finance."

I've made three appraisals of major mining properties for the I.R.S. in Alaska in just the past two years, so as outsiders go, I'm pretty familiar with what Mr. Hoover was talking about.

The point here is that, because it is the appraisal of mineral properties that is involved, geologists are far better candidates for the work than most, but in doing so they are not "engineers." Long ago-- Mr. Hoover notes that it was in the late 1920s-- geologists handled the job of oil-properties appraisal to petroleum engineers on a silver platter, and that profession not only preempted the field of valuation but then called it "engineering." You've got to watch those guys.

Robert H. Paschall, CGP-118

Deltaic Reservoirs Workshop

The Oklahoma Geological Survey (OGS) and the Bartlesville Project Office of U. S. Department of Energy will co-sponsor the sixth annual workshop designed to transfer technical information that will aid in the search for, and production of, our oil and gas resources. Fluvial-dominated deltaic reservoirs that already have been discovered contain large volumes of remaining oil and gas, and they have great potential for additional recovery using advanced recovery technologies. The purpose of this Workshop will be to enhance science and technology transfer through discussions and reports on surface or subsurface studies dealing with the geologic setting, depositional environments, and diagenetic history of such reservoirs, as well as reservoir characterization and the engineering factors that influence hydrocarbon accumulation or hydrocarbon production.

The 2-day Workshop, to be held in Norman, Oklahoma, on March 23-24, 1993, will focus on deltaic reservoirs in fluvial-dominated environments of the southern Midcontinent, including Oklahoma and parts of Kansas, Arkansas, Texas, Colorado, and Alabama. The Workshop will consist of 19 papers presented orally and about 15 informal poster presentations, and will be attended by 200-300 participants. Registration is only $50.

For further information, contact Ken Johnson at the OGS: 100 East Boyd, Rm. N-131, Norman, OK 73019 (405) 325-3031.

Barriers to Women in Science & Engineering

The barriers prohibiting women from achieving equity in science and engineering, which often comprise a "triple penalty" of cultural, attitudinal and structural bias, are examined in a new report by the Commission on Professionals in Science and Technology. The report finds that although generally better educated than in earlier years, American women continue to endure higher rates of unemployment, and, when employed, lower salary levels than their male counterparts.

This is clearly demonstrated in the science and engineering professions. Budget and recession-based cutbacks for research & development have provided fewer job opportunities, allowing the gap between unemployed men and women to widen. Women are more likely than men to be laid off first, especially when seniority is a factor. In academe, women's standing in the academic pecking order is likely to place them in positions outside the tenure track, or not yet tenured, again making them prime candidates for workforce reductions.

Visit the AIPG Booth #264


May 5-8, 1993. Protecting the Earth - Challenges to Science and Technology, Congress Center East of Königs Messe. Contact: Köln Messe, Messen- und Ausstellungs-Gen-m.b.H. Köln, Messenplätze 1, Postfach 21 07 60, W-5000 Köln 21, Ph.: (021) 21/821-0, Fax: (021) 21/821-2574.


May 17-21, 1993. International Coalbed Methane Symposium, Birmingham, AL. Contact: Dan A. Thompson, The University of Alabama, College of Continuing Studies, Box 870388, Tuscaloosa, AL 35487-0388, Ph.: (205) 348-8222.


June 7-10, 1993. RSMAS Colloquium and Forum on Global Aspects of Coral Reefs: Health, Hazards and History, Miami, FL. Contact: Ref Meetings, Univ. of Miami/RSMAS, 4600 Rickenbacker Causeway, Miami, FL 33149-1089.


June 13-17, 1993. Eleventh Rapid Excavation and Tunneling Conference (RETC), Boston, MA. Contact: Meetings Dept., SME, P.O. Box 625002, Littleton, CO 80162, Ph.: (303) 973-9550.


June 24-25, 1993. ASTM Symposium on Analysis of Soils Contaminated with Petroleum Constituents, Atlanta, GA. Contact: Symposium Chairman Tracey O'Shay, Georgia and Louisiana, P.O. Box 80072, Austin, TX 78727-0072, Ph.: (512) 475-2302.


August 1-5, 1993. International Symposium on Hydrometallurgy, Salt Lake City, UT. Contact: Meetings Dept., SME, P.O. Box 625002, Littleton, CO 80162, Ph.: (303) 973-9550.

August 15-19, 1993. Carboniferous to Jurassic Pangaea: A Global view of environments and
resources, Calgary, Alberta, Canada. Annual Meeting of the Canadian Society of Petroleum Geologists in collaboration with the Global Sedimentary Geology Program. Contact: Benoit Beauchamp, Geological Survey of Canada, 33033-33 St. NW, Calgary, Alberta, Canada T2L 2A7, Ph.: (403) 292-7190.

August 23-28, 1993. Aapg Rocky Mountain Section, Salt Lake City, UT. Contact: Aapg Convention Dept., P.O. Box 979, Tulsa, OK 74101, Ph.: (918) 584-2555.

September 13-15, 1993. Aapg Mid-Continent Section, Amarillo, TX. Contact: Aapg Convention Dept., P.O. Box 979, Tulsa, OK 74101, Ph.: (918) 584-2555.

September 20-22, 1993. Aapg Eastern Section, Williamsburg, VA. Contact: Aapg Convention Dept., P.O. Box 979, Tulsa, OK 74101, Ph.: (918) 584-2555.

September 20-22, 1993. Aapg Gulf Coast Section, Shreveport, LA. Contact: Aapg Convention Dept., P.O. Box 979, Tulsa, OK 74101, Ph.: (918) 584-2555.


1994


UPDATE ON
The Citizens' Guide to Geologic Hazards

The printer is working on it now and we expect to receive it here at Headquarters by the first week of March. If you purchased a copy you can expect to receive it within the first two weeks of March. If you would like to place an order or receive more information on the book call Aapg Headquarters at (903) 431-0831.

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AN INVITATION

The NORTHEAST SECTION of AIPG cordially invites all AIPG Members to the 30th Annual Meeting of the Institute

Theme: Geologists in a Strained Economy

October 13-16, 1993
Sheraton Monarch Place Hotel
Springfield, Massachusetts

Featuring:
• A strong technical and educational program
• Exhibits and Poster Sessions
• Fall foliage tours to the Berkshires and Mystic Seaport
• Exciting social events

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Election Results

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Screening Brd Chr.: Carole A. O'Brien, CPG-6628
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Awards Committee:
William Shafer, CPG-1620
Donald Palmer, CPG-2742
John Noyes, CPG-5080

MEMBERS IN THE NEWS

Walter A. Boyd, Jr., CPG-3241, chief reservoir geologist, has retired from Columbia Gas Transmission Corp. after more than 34 years of service with Columbia Gas Transmission Corp. Walter joined Columbia in 1958 as a reservoir geologist. In 1973, he was promoted to senior reservoir geologist and, in 1986, was promoted to chief reservoir geologist. He is a 1943 graduate of Austin High School, Austin, Texas. He earned his bachelor's degree in geology in 1953 from the University of Texas. Walter is also a member of the Houston Geological Society, the American Association of Petroleum Geologists, Tulsa, Oklahoma, and serves on the Committee on Natural Gas Reserves for the American Gas Association. Walter and his wife, Dorothy, reside in Houston.

Travis H. Hughes, CPG-3529, has joined HCI as a Principal in Lakewood, Colorado. Travis' 32 years experience includes 16 years as a Professor of Geology and Geochemistry and a 5 year term as a Chairman of the Geology Department at the University of Alabama. He was Vice President of Geosciences for the consulting firm of P.E. LaMoreaux & Associates for 10 years prior to joining HCI. He is past President of the American Institute of Professional Geologists and has received numerous awards for research and service. He has performed geologic work throughout most of the U.S. and in several foreign countries.

James A. Kalinec, CPG-8666, to environmental scientist, Radian Corp., Austin, Texas. Previously exploration geologist, Chevron USA Production, New Orleans.

Wilson M. Laird, CPG-0176, has received the Arthur Gray Leonard Medal from the University of North Dakota, Grand Forks, ND, for his work and accomplishments in the field of geoscience. The medal was presented in commemoration of the 50th anniversary of his appointment as state geologist and chairman of the university's geology department. He is now a consultant in Kerrville, Texas.

Ronald J. Wallace, CPG-8153, to senior geologist, Engineering-Science, Atlanta, Georgia. Previously environmental geologist, Exxon USA, Atlanta.

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AIPG MEMBERSHIP BENEFITS

Certification
AIPG certifies the qualifications of professional geologists prior to admitting them into membership. By means of a rigorous and thorough peer review process, the Institute investigates applicants who voluntarily apply for self-regulation through the Institute. This screening carefully evaluates their education, experience, technical competency, and ethical conduct. If they meet AIPG’s high standards, applicants are granted Certification and the title of "Certified Professional Geologist" (CPG). When the letters CPG follow an individual's name, they proclaim to the public that this person has met the standards and subscribes to the Institute’s Code of Ethics and Bylaws.

Representation
Members are represented by qualified geological professionals. Congress, Legislatures, and Federal and State agencies are lobbied on specific mining, petroleum, water, environmental and other issues of special interest to geologists.

A portion of AIPG’s monthly magazine The Professional Geologist (TPG) is devoted to reporting developments at all government levels. Thirty-six sections of AIPG provide group representation on a state or regional level and offer opportunities to meet, work and exchange ideas and information with colleagues.

Education
At the national and section level, AIPG provides materials designed to enhance the professional knowledge and skills of its members. Educational opportunities range from seminars and short courses to sectional and national meetings. To encourage high standards of educational programs, the Institute recently established a program of Accreditation of Continuing Education opportunities offered by other organizations.

The Institute prepares and distributes comprehensive publications giving background and scientific explanations on geologically-related matters of public concern. Topics include: ground water, radioactive waste, and hazardous waste.


Insurance
Professional liability, health, and life insurance are available to members.

Information
AIPG disseminates information to its members and to the public in a number of ways on a wide variety of topics. The Institute publishes a monthly magazine The Professional Geologist (TPG). It is mailed to members and interested individuals, businesses, and political leaders. Subscriptions are available to non-members.

A comprehensive Membership Directory is published annually. Copies are sent to federal, state, regional and local governments, libraries, consulting firms, corporations, and other potential users of geologic services throughout the United States and abroad. The Directory may also be purchased by non-members.

REQUEST FOR APPLICATION AND ADDITIONAL INFORMATION

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Arvada, CO 80003-2125
(303) 431-0831 • FAX (303) 431-1322

Please send me information on:

☐ Certification - (degree and 36 semester hours in a geological science, plus five years of experience).

☐ Candidate for Certification - (degree and 36 semester hours, but less than five years of experience).

☐ Student (major in a geological science and minimum of 18 semester hours in geological sciences).

☐ Publications ☐ Subscriptions

☐ Advertising Rates ☐ Insignia Items

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Applications Received - (December 22, 1992 - January 26, 1993)

Applicants for certification must meet APG’s standards as set forth in its Bylaws on education, experience, competence, and personal integrity. If any Member has any factual information as to any applicant’s qualifications in regard to these standards, whether that information might be positive or negative, please mail that information to Headquarters within thirty (30) days. This information will be circulated only so far as necessary to process and make decisions on the applications. Negative information regarding an applicant’s qualifications must be specific and supportable. Persons who provide information which leads to an applicant’s rejection may be called as a witness in any resulting appeal action.

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STORO, Steven P.O. Box 82994, Fairbanks, AK 99708. Sponsors: Donald Keell, Bruce Giffen, John Dersch.

TALLEY, Keith L. 7826 Zilonia Ct., Houston, TX 77040. Sponsors: Thomas Uphoff, Norm Rosen, Glenn Breed.


WRIGHT, Stephen S. 1438 Arborcrest St., Houston, TX 77082. Sponsors: Kent Bowker, Dorothy Peterson, R. Scott Butler.


Candidate for Certification
MERSEBAUER-KEMPFF, James L. 3701 Fuller Dr., Midland, MI 48640. Sponsors: Andrew Frese, James Krause.


NEW MEMBERS (Call and welcome as professionals and add them to your directory)
FORD, Robert W., CPG-6694 1062 E. Stone Valley Way, Sandy, UT 84094, (801) 466-6769.
HURSKY, Michael J., Jr., CPG-8695 45 Wynnecliff Dr., Carnegie, PA 15106, (412) 825-9827.

MASSENGALE, William M., CPG-8696 1218 East Beringer Dr., San Jacinto, CA 92583, (907) 338-2055.
RYAN, Michael J., CPG-8697 P.O. Box 251, Gander, NL, Canada A1H 5H9.

SWEATMAN, Mark B., CPG-8698 2426 Davis Dr., Brighton, MI 48116, (313) 227-6240.
WERTZ, William K., CPG-8699 626024, 2426 Davis Dr., Brighton, MI 48116, (313) 227-6240.


NEW CANDIDATES FOR CERTIFICATION
COTTRELL, Kenneth J., CFC-0045 RD-7 Box 800, Sussex, NJ 07461, (201) 256-5454.

HOMEN, Louie A., CFC-0046 5001 Carroll Dr., The Colony, TX 75056, (214) 387-4785.

IN MEMORIAM


APMG Membership Totals

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<th></th>
<th>As of 01/31/91</th>
<th>As of 01/26/93</th>
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<td>TOTALS</td>
<td>4,512</td>
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FEBRUARY 1993 • The Professional Geologist 23
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Great Gift Ideas!

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<tr>
<th>Item</th>
<th>Quantity</th>
<th>Price</th>
<th>Total</th>
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<tr>
<td><strong>Tee Shirt</strong></td>
<td></td>
<td>$12.50</td>
<td></td>
</tr>
<tr>
<td>Russell, 50% cotton, white with royal blue silk screen AIPG seal. Sizes M, L, XL, add $2.00 for XXL.</td>
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<td><strong>Sweat Shirt</strong></td>
<td></td>
<td>$21.50</td>
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<td>Russell 9 oz, 50% cotton, royal blue with white silk screen AIPG seal. Sizes M, L, XL, add $2.00 for XXL.</td>
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<tr>
<td><strong>Golf Shirt</strong></td>
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<td>$30.00</td>
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</tr>
<tr>
<td>Outerbanks, 100% cotton, white with royal blue embroidery of AIPG in upper left chest. Sizes L, XL, add $2.00 for XXL.</td>
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<tr>
<td><strong>Golf Cap</strong></td>
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<td>$15.50</td>
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<td>Poplin, sewn eyelets, adjustable leather strap, stay-front liner, traditional green under visor, plastic visor insert, royal blue with white silk screen AIPG seal. One size fits all.</td>
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<tr>
<td><strong>Coffee Mug</strong></td>
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<td>$10.50</td>
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<td>12 oz., ironstone, shatterproof, microwaveable, cobalt blue, gold band and AIPG seal.</td>
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<tr>
<td><strong>Plaque</strong></td>
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<td>$38.00</td>
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<td>Walnut, for 8.5&quot; x 11&quot; certificate, with acrylic cover and brass tacks. (Specify clear or non-glare).</td>
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<tr>
<td><strong>Deluxe Ballpoint Pen</strong></td>
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<td><strong>Gold Lapel Pin/Tie Tack</strong></td>
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<td><strong>Certificate</strong></td>
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<td>(Add $2.00 for mounting - plaque sold separately).</td>
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<td><strong>Self-Inking Stamp</strong></td>
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<td><strong>Steel Die</strong></td>
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<td><strong>Steel Die</strong></td>
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<td><strong>TOTAL AMOUNT</strong></td>
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<td>$62.45</td>
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