Approved: 3-5-97Date

MINUTES OF THE HOUSE COMMITTEE ON ENVIRONMENT.

The meeting was called to order by Chairperson Steve Lloyd at 3:30 p.m. on February 11, 1997 in Room 526-S of the Capitol.

All members were present except: Rep. Kent Glasscock - excused

Rep. Dennis McKinney - excused

Committee staff present: Raney Gilliland, Legislative Research Department

Hank Avila, Legislative Research Department Mary Ann Graham, Committee Secretary

Conferees appearing before the committee: Dr. Larry Brady, Deputy Director, KS Geological Survey

Lawrence Skelton, President, KS Geological Society

Robert Vincent, Ground Water Geologist Thomas Hansen, Consulting Geologist

Dennis E. Hedke, Certified Petroleum Geologist

John Szturo, Chairman, Association of Engineering Geologists

Michael Barnett, Office Manager, Terracon Consultants

Kevin Bailey, Geologist

George Barbee, Executive Director, KS Consulting Engineers

William Gilliland, Professional Geologist

Don Schnacke, Executive Vice President, KS Independent Oil

and Gas Association

F. Doyle Fair, Consulting Petroleum Engineer Stan Peterson, Board of Technical Professionals

Others attending: See attached list

Chairman Steve Lloyd called the meeting to order at 3:30 p. m. He opened public hearing on HB 2099:

HB 2099:

An act concerning the practice of geology; providing for licensure and regulation as a technical profession; amending K.S.A. 74-7005 and 74-7006 and K.S.A. 1996 Supp. 74-7003 and 74-7013 and repealing the existing sections.

The Chairman asked Raney Gilliland, Legislative Research Department to explain the bill.

Chairman Lloyd welcomed Dr. Larry Brady, Deputy Director of Kansas Geological Survey to the committee. Dr. Brady presented testimony by Dr. Lee C. Gehard, Director of Kansas Geological Survey. (See Attachment 1) The Kansas Geological Survey supports registration and licensing of geologists who work in positions affecting public health and safety.

The Chairman welcomed Lawrence Skelton, President Kansas Geological Society. He presented testimony in favor of the bill. (See Attachment 2) The Kansas Geological Society is a professional organization of geologists and has been in continuous existence since 1923. Mr. Lawrence distributed written testimony for Stanley C.Grant, Certified Professional geologist. (See Attachment 3)

The Chairman welcomed Robert Vincent, Ground Water Geologist. Mr. Vincent presented testimony, (See Attachment 4) in support of the bill. He believes a need exists for the practical application of geology and hydrology to problems in the production of ground water, such as well yield loss, well interference, aquifer depletion and aquifer contamination.

The Chairman welcomed Thomas Hansen, Consulting Geologist to the Committee. He presented testimony in support of the bill. (See Attachment 5) Mr. Hansen is a self employed consulting geologist. The majority of

CONTINUATION SHEET

MINUTES OF THE HOUSE COMMITTEE ON ENVIRONMENT, Room 526-S Statehouse, at 3:30 p.m. on February 11, 1997.

his practice deals with groundwater contamination, which consists of defining an area of contamination, the geology and hydrogeology of a site, locating the source of the contamination at a site, and supervising installation of monitoring and recovery wells.

Chairman Lloyd welcomed Dennis Hedke, Certified Petroleum Geologist. He presented testimony to the committee in support of the bill. (See Attachment 6) He stated that additional testimony presented today will show that geologist registration bills have either already passed or are currently under consideration in 32 legislatures across the United States.

The Chairman welcomed John Szturo, Chairman of the Association of Engineering Geologists. Mr. Szturo presented testimony in support of the bill. (See Attachment 7) He feels the Engineering Geologists bears an important share of the responsibility for the public health, safety and welfare insofar as engineering works are affected by geologic factors.

The Chairman welcomed Michael Barnett, Office Manager with Terracon Consultants Inc. of Topeka. His testimony supported the bill. (See Attachment 8) He asked the committee to give strong consideration to this bill to provide for public health and safety in regard to performance of geological services for a wide range of projects.

The Chairman welcomed Kevin Bailey, Geologist, to the committee. He presented testimony in support of the bill, (See attachment 9) to the committee. He feels a total accountability by a professional geologist will only strengthen the common wealth for the state of Kansas.

The Chairman welcomed George Barbee, appearing as the Executive Director of the Kansas Consulting Engineers. He presented testimony (See Attachment 10) and stated that the bill in its present amended form, will not be opposed by the Kansas Consulting Engineers.

The Chairman welcomed William Gilliland, Professional Geologist, to the committee. He presented testimony in support of the bill. (See Attachment 11) He feels if geologists have a significant impact upon the safety, welfare, or health of residents of the state of Kansas; those individuals should take responsibility for their own actions, and be so held accountable.

The Chairman welcomed Don Schnacke, Executive Vice President Kansas Independent Oil and Gas Association. He provided testimony to the committee in support of the bill. (See Attachment 12) He believes the public will be better served in Kansas if a professional geologist is better defined and placed under the supervision of the State Board of Technical Professions.

Written testimony by William Bryson, who is a practicing consulting geologist and represents the interests of the Kansas Geological Society and Library in Wichita, Kansas, was distributed for the committee to review. (See Attachment 13) A number of questions by the committee concerning how the general public will know who is qualified as a geologist were directed to several of the conferees, Robert Vincent, George Barbee and Lawrence Skelton, who responded with their views. Written testimony was provided by Bill Henry, Executive Vice President for the Kansas Society of Professional Engineers, (See Attachment 14) to present the position of no opposition, by the Society, to the bill.

The Chairman welcomed F. Doyle Fair, Consulting Petroleum Engineer, Mr. Fair provided testimony, (See Attachment 15) in opposition to the bill. Mr. Fair stated that licensing of petroleum geologist will not cause one additional well to be drilled in Kansas and that licensing of petroleum geologists by "grandfathering" and then giving an exemption to them really says that their licensing means nothing to the state of Kansas. Petroleum geologists apparently see this as "added value" to their marketability in the job field. Their reasoning appears to be that a licensed petroleum geologist will be thought by the public at large to be more qualified than petroleum geologist that is not licensed.

The Chairman welcomed Stan Peterson, Board of Technical Professionals. He presented testimony to the committee. (See Attachment 16) The Board of Technical Professionals believes it can best serve the citizens of Kansas by continuing to regulate its existing four professions. The Board does not believe it would be efficient to add any of the disciplines or businesses being considered by the legislature for enhancement to the Board's roster of activities. Discussion and questions followed.

Hearing no other conferees the Chairman closed the hearing on <u>HB2099</u>. He thanked the conferees for appearing and the committee's attention. Tomorrow the committee will be hearing deer issues by Wildlife and Parks.

The meeting adjourned at 5:30 p.m.

The next meeting is scheduled for February 12, 1997

HOUSE ENVIRONMENT COMMITTEE COMMITTEE GUEST LIST

DATE: _____2-1/_97

NAME	DEDDECENTING
	REPRESENTING
Kevin Bailey & Paky	Dethenbush Twe Trol Reg. Gralogist
Tamela L. Buchanah-Lyon	Sutain-Rep. Carl Holmes
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Doyle Fair	Self
Charles toruner	Self,
Alex A. Kotoyan 12	Reflied Geologist KDOT
JOHN SZTURO	Hersociation of Engineering Geologists
Trudy aron	An Institute of architect
Sisa Meyer	HS Cov. Consulting
Michael Parnett William Gilliland	5e1f
William Gilliland	Self
Laurence L. Brady	Kausas Geological Survey
Tom Hansen	myself & colleagues
LAWRENCE H. SKELTON	KANSAS GEOLOGICAL SOCIETY
DENNY HEDKIL	SELF
Robert Vincent	Ground Water Associates
Don Schnack	ICIOGIA -
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Gary Koontz	Geologist

HOUSE ENVIRONMENT COMMITTEE COMMITTEE GUEST LIST

NAME	REPRESENTING	
Jamie Clover adams	Governors Office,	
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Letty Love	Tr. St. Salot T.P.	
STAN PETERSON	KAS. STATE BD. OF TECH. PROF	
Chip Winslow	KS, SPATE BOARDO OF TECH. PROF	
Dune Waterworth	The the Division of the Budget.	

Testimony before the House Environment Committee concerning the Geologist Licensing Bill (H.B. 2099) by

Lee C. Gerhard, State Geologist and Director Kansas Geological Survey

February 11, 1997

Over the last 25 years environmental laws and regulations have dramatically changed the scope of the practice of geology, changing it from being mostly resource exploration and development with adjunct engineering geology, to a scientific profession that is intimately associated with environmental assessment and mitigation, and environmental protection. The public needs to be assured that standards of practice are consistent and assure competency in those issues involving public health and safety. Whereas in the past our own practitioners have resisted licensing, it is now clear that there is a public responsibility to accept license and to meet public standards of practice.

The Kansas Geological Survey supports registration and licensing of geologists who work in positions affecting public health and safety, because the public rightfully expects high standards of professionalism, training, experience, and ethical behavior of those who affect their well-being. These are the same arguments that underlie the licensing of engineers, architects, and other professions.

Twenty-three states have already adopted geologist registration for these reasons; many more are considering or advancing such legislation. Lacking a Kansas licensing statute, your state geologist is licensed in Wyoming and has professional certification through the American Institute of Professional Geologists and the American Association of Petroleum Geologists.

Kansas is already heavily involved with implementation of federal laws and regulations dealing with environmental issues, with additional state and local requirements for environmental control and mitigation. In addition, Kansas is concerned about the relationship of agricultural-water use and stream flow, chemical contamination of ground water, and a myriad of other environmental issues. Most of these issues involve both geologic investigations and public health and safety. We are all familiar with the newspaper accounts and photographs of homes cracking apart as they slid down slopes in Overland Park, and roads slipping into jumbled slabs of blacktop near Manhattan.

House Environment 2-11-97 Attachment Geologist Licensing Bill (H.B. 2099) February 11, 1997 Page 2

Geologic hazards, resource conflicts with urban development, and land values tied to environmental regulations are all areas of geologic practice. Landslides, radon concentration problems, leaking underground storage tanks, recharge of aquifers, transfer of contaminants in ground water systems, earthquake susceptibility, salt intrusion into surface water, collapse of underground mines, salt dissolution collapses, and similar issues are part of the geologist's repertoire, but also impinge directly on public health and safety.

In some states engineers have objected to the licensing of geologists in fear of economic competition; this should never be an issue, since geologists may not practice engineering without license, nor should engineers practice geology without license. Geological engineers may be eligible for dual licensing, but they are few in number.

Pete Dohms, of Condor Minerals Management, Inc. of Pensacola, Florida, in a memo of January 31, 1993, elegantly stated the historical perspective, and I quote his words: "The public practice of geology is evolving in much the same manner as engineering did during the first half of this century. The states and the members of the profession have come to recognize that the public interest is served if geologists are registered at the state level and required to adhere to a high standard of professional conduct. Examination of the current situation suggests that virtually all states will require registration of geologists within the next ten to twenty years. In examination of requirements for both engineers and geologists in three example states it was learned that the requirements are essentially identical." Those three states are Arizona, California, and Florida.

My point is simply that geologists play a very important role in environmental and water issues and that the public interest demands that standards be set by the state. Kansas has its opportunity to provide for public protection and safety now, rather than later.

The Kansas Geological Survey supports House Bill 2099, which provides for licensure and regulation of the practice of geology in the public sector. We would not object to the extension of the act to include those geologists who are employed by the State of Kansas. Thank you for the opportunity to comment on the proposed legislation.

TESTIMONY
of
Lawrence H. Skelton

HOUSE BILL 2099 before House Environment Committee

February 11, 1997

Mr. Chairman, members of the Committee: I am Lawrence H. Skelton and am appearing before you this afternoon as president of the Kansas Geological Society. I am speaking in support of House Bill 2099. The Kansas Geological Society is a professional organization of geologists and has been in continuous existence since 1923. It presently has more than 800 members who are engaged in oil and gas exploration, environmental evaluation and remediation, water resource development, and mining. Our membership also includes geologists who are employed by several state, county and city agencies or who teach at the secondary or university level. All active Kansas Geological Society members hold at least a baccalaureate degree in geology or earth sciences. About a fifth of the members have masters degrees and 25 hold a doctorate degree in geology. Polls of our membership show continuing and strong support for a process to establish minimum standards for the practice of geology in the state of Kansas. We believe that House Bill 2099 does just that.

This hearing marks the third time that a geologist's licensing or registration bill has appeared before the Kansas House of Representatives. Today, I will furnish you a short summary of supporting arguments and objections previously raised and will indicate where in the nation that registration is presently required or is pending. I will include a few definitions to clarify some job titles. A geologist by definition is a "person versed in geology or engaged in geological study or investigation." Geology itself is defined as "the science which treats of the earth, the materials of which it is composed and the changes which it has undergone or is undergoing." A synonym is "earth science" which includes many different geological specialties including mining, petroleum and engineering geology. The licensing or registration of geologists is presently required in 23 states and is in the legislative process in nine other states. One of the nine is Nebraska where numerous Kansas geologists occasionally are employed. The state of Missouri which has required registration only for the past two years presently lists 120 some Kansas residents among those registered geoscientists authorized to practice their science in that state. A current map showing states requiring licensing or some form of registration is attached to this testimony.

In Kansas, previous attempts to register or license geologists have encountered three principal objections: grandfathering, the exemption of petroleum geologists from mandatory registration and the potential cost of a registration program. I will address these objections in order. The dictionary defines a grandfather clause as "a clause in some legislation forbidding or regulating a certain activity, which exempts those already engaged in it before the legislation was passed." A specific objection raised is an opinion that a knowledge-specific test should be applied across-the-board to all geologists

House Environment 2-11-97 Attachment 2

seeking registration and that "grandfathering" per se should not be allowed by this bill. Objections to this argument are first: that the four professions currently overseen by the Kansas Board of Technical Professions, which logically would oversee geologists, all had grandfathering periods before the imposition of formal testing; second, the other geologist-registering states had initial grandfathering periods...in fact, many Kansas geologists who don't work in those states licensed themselves during the grandfathering periods in case they should ever work there and to take advantage of reciprocity agreements among the registering states. Third, and legally perhaps the most important aspect, is that failure to grandfather could place the State in the tenuous legal position of denying a person their livelihood by prohibiting them from practicing their profession. Taking a test sounds simple but most practicing geologists who completed their education a few years or more ago would have the same difficulty passing the most often-used test (ASBOG) that a lawyer ten years out of law school would have passing the state bar or a public school teacher a few years past his or her education degree would have passing the National Teachers Examination required by many states. Historically, in most cases when certification is newly required by a state, the grandfather clause is instituted to protect experienced professionals and allow them to continue with the work they are doing.

A second objection to the presented bill is the petroleum geologist exclusion. A petroleum geologist is "a geologist engaged in the exploration or production process of hydrocarbon fuels," that is, oil and natural gas. Probably 90% of the membership of the Kansas Geological Society are practicing petroleum geologists. Their employment does not directly affect the public health, safety and welfare of Kansas which HB 2099 principally addresses. Rationale for exempting petroleum geologists from mandatory registration is that petroleum geology practices are already overseen in all aspects by the Kansas Corporation Commission and the Kansas Department of Health and Environment. Petroleum geologists are usually employed by companies and thus are not usually in personal business contact with the public; that is to say, they practice their science for the company. An analogous situation is that of the engineers employed by Boeing Aircraft in Wichita or the petroleum engineers employed by Oxy Corporation in El Dorado. In fact, comparing the Wichita chapter directory of the Society of Petroleum Engineers to a list of registered professional engineers supplied by the Kansas Board of Technical Professions indicates that approximately 75% of petroleum engineers in the Wichita area are not registered P.E.'s. Additionally, studies performed by the National Society of Professional Engineers show that approximately 2/3's of all engineers legally practice without a license because of exemption. Their engineering is performed for the company just as the petroleum geologist performs his or her work for a major or independent oil operating company. The company has direct contact with the public and its corporate activities not only are regulated as above in realms of health and safety but also its public dealings are closely controlled by the Kansas Securities Commission. Because of these reasons, petroleum geologists as well as geologists in other extractive industries are not required to be registered in most other states where registration is in being. At any rate, my informal talks with many of the 46% of Kansas Geological Society members under the age of 45 indicate that they plan to register under this or a similar bill even if exempt from doing so.

H.B. 2099 as presented does apply to environmental and groundwater (hydrogeology) geologists and engineering geologists. These aspects of the science do directly affect the health and well being of the public. I will cite some examples of where registration may have been or will be useful. In the spring of 1995, two homes in the Overland Park area collapsed after heavy rains caused slope instability.

Had developers sought the advice of a qualified engineering geologist who correctly could have analyzed the site geology and potential hazards, the loss could have been avoided. Subpart F, part 265.90 of the amended Federal Resource Conservation and Recovery Act (RCRA) applies to surface impoundments, landfills or facilities used to manage hazardous wastes. It requires a groundwater monitoring program which can be waived if a written demonstration certifies that there is low potential for hazardous waste to migrate to the nearest water supply aquifer or to surface water. The written demonstration which must be kept on site must be, and I quote, "certified by a qualified geologist or geotechnical engineer." It seems to me that what constitutes a qualified geologist or geotechnical engineer may be legally moot in states without a geologist's certification program. I am sometimes asked to furnish geological information to persons or companies engaged in performing environmental site assessments in Wichita or Sedgwick County or adjacent counties. I have on several occasions provided appropriate data to long-distance callers who were performing the geological aspects of the assessment over the telephone rather than visiting the site and I have spent an hour or two explaining geology to an accountant on one occasion and a biologist on another, both of whom were sent to Wichita by their out-of-state employer to perform environmental assessments. Neither had a geology course in their formal education. On questioning, the accountant noted that his firm was small and had not yet employed scientists and the biologist advised that he was the scientist in his firm. The Kansas Geological Society believes that the geological parts of environmental assessments must be made by qualified persons, that is, by educated geologists who are certifiably experienced in the proper phases of their science. Similar rationale keeps us from visiting a pediatrician for a brain tumor or calling on a patent attorney to represent us in an automobile crash suit.

The last perceived challenge previously raised about the Geologist Registration Bill is the cost of its administration. Aspects of this question are ably addressed in testimony of Mr. William Bryson and Dr. Lee Gerhard presented today.

In summary, the Kansas Geological Society and I believe that the licensing or registration of geologists in Kansas is important and will provide the citizens of our state some assurance of having qualified professionals to deal with groundwater and other environmental quality protection and associated problems. Environmental laws relating to those subjects will continue to be passed at all levels of government and it is a certainty that compliance with those laws will hinge on well-conceived geological investigations and applications.

Chairman Lloyd, I sincerely thank you and the members of this committee for the opportunity to testify in support of the passage of House Bill 2099. I will be pleased to address any questions now or at the appropriate time.

ATTACHMENTS

- 1. Map showing licensing for geologists. Based on data as of 7 February 1997 provided by the American Institute of Professional Geologists, 7828 Vance Drive Suite 103, Arvada, Colorado, 80003.
- Article 265.90 of the U.S. Resource Conservation and Recovery Act (RCRA) copied from page 231 of RCRA Regulations and Keyword Index, 1994 edition, published by Elsevier Science, Inc., New York, N.Y.
- 3. Sources of Definitions used in testimony of L.H. Skelton, 11 February 1997.
- 4. [Grandfathering] Issues upon admission of a profession to Board of Technical Professions Supervision. Prepared by Boyd W. Howard, Attorney at Law in March, 1996, for Mr. Paul Gunzelman of the Kansas Geological Society. This testimony was presented by Mr. Gunzelman in supporting 1996 House Bill 2471, a predecessor of current House Bill 2099. The 1996 bill was passed by the House but, late in the session, failed to be passed by committee in the Kansas Senate.
- 5. Viewpoint License geologists to help engineers: The newspaper of the National Society of Professional engineers, April, 1996.

STATUS OF LICENSING FOR GEOLOGISTS A 0 ATLANTIC OCEAN 0 States With Registration Requirements States With Certification GULF ARCTIC OCEAN States with Definition MEXICO of Geologists BERING States Continuing Legislation Activity Data Source: AIPG, 02-0

§ 265.5

- (b) Ground-water contamination and monitoring data as specified in §§ 265.93 and 265.94; and
- (c) Facility closure as specified in § 265.115.
- (d) As otherwise required by Subparts AA and BB.

[45 FR 33232, May 19, 1980, as amended at 48 FR 3982, Jan. 28, 1983; 55 FR 25507, June 21, 1990]

Subpart F—Ground-Water Monitoring

§ 265.90 Applicability.

(d.

- (a) Within one year after the effective date of these regulations, the owner or operator of a surface impoundment, landfill, or land treatment facility which is used to manage hazardous waste must implement a ground-water monitoring program capable of determining the facility's impact on the quality of ground water in the uppermost aquifer underlying the facility, except as § 265.1 and paragraph (c) of this section provide otherwise.
- (b) Except as paragraphs (c) and (d) of this section provide otherwise, the owner or operator must install, operate, and maintain a ground-water monitoring system which meets the requirements of § 265.91, and must comply with §§ 265.92 through 265.94. This ground-water monitoring program must be carried out during the active life of the facility, and for disposal facilities, during the post-closure care period as well.
- (c) All or part of the ground-water monitoring requirements of this subpart may be waived if the owner or operator can demonstrate that there is a low potential for migration of hazardous waste or hazardous waste constituents from the facility via the uppermost aquifer to water supply wells (domestic, industrial, or agricultural) or to surface water. This demonstration must be in writing, and must be kept at the facility. This demonstration must be certified by a qualified geologist or geotechnical engineer and must establish the following:
 - (1) The potential for migration of hazardous waste or hazardous waste constituents from the facility to the uppermost aquifer, by an evaluation of:
 - (i) A water balance of precipitation, evapotranspiration, runoff, and infiltration; and
 - (ii) Unsaturated zone characteristics (i.e., geologic materials, physical properties, and depth to ground water); and
 - (2) The potential for hazardous waste or hazardous waste constituents which enter the uppermost aquifer to migrate to a water supply well or surface water, by an evaluation of:
 - (i) Saturated zone characteristics (i.e., geologic materials, physical properties, and rate of ground-water flow); and
 - (ii) The proximity of the facility to water supply wells or surface water.
- (d) If an owner or operator assumes (or knows) that ground-water monitoring of indicator parameters in accordance with §§ 265.91 and 265.92 would show statistically significant increases (or decreases in the case of pH) when evaluated under § 265.93(b), he may, install, operate, and maintain an alternate ground-water monitoring system (other than the one described in §§ 265.91 and 265.92). If the owner or operator decides to use an alternate ground-water monitoring system he must:
- (1) Within one year after the effective date of these regulations, submit to the Regional Administrator a specific plan, certified by a qualified geologist or geotechnical engineer, which satisfies the requirements of § 265.93(d)(3), for an alternate ground-water monitoring system;
 - (2) Not later than one year after the effective date of these regulations, initiate the determinations specified in § 265.93(d)(4);
 - (3) Prepare and submit a written report in accordance with § 265.93(d)(5);
 - (4) Continue to make the determinations specified in § 265.93(d)(4) on a quarterly basis until final closure of the facility; and
 - (5) Comply with the recordkeeping and reporting requirements in § 265.94(b).
- (e) The ground-water monitoring requirements of this subpart may be waived with respect to any surface impoundment that (1) Is used to neutralize wastes which are hazardous solely because they exhibit the corrosivity characteristic under § 261.22 of this chapter or are listed as hazardous wastes in Subpart D of Part 261 of this chapter only for this reason, and (2) contains no other hazardous wastes, if the owner or operator can demonstrate that there is no potential for migration of hazardous wastes from the impoundment. The demonstration must establish, based upon consideration of the characteristics of the wastes and the impoundment, that the corrosive wastes will be neutralized to the extent that they no longer meet the corrosivity charac-

RCRA 160

ATTACHMENT 3

SOURCES OF DEFINITIONS

Geologist - Dictionary of Geological Terms, Revised Edition, American Geological Institute, 1976, page 183.

Geology - Same as above.

Earth science - Adapted from Webster's New World Dictionary, Third College Edition, 1988, Simon and Schuster, page 426.

Grandfather clause - Webster's New World Dictionary, Third College Edition, page 586.

Petroleum geologist - Dictionary of Geological Terms, page. 324.

Geotechnical engineer - Personal communication with Dr. James Underwood, Professor Emeritus of Geology and former chairperson. Department of Geology, Kansas State University.

ATTACHMENT 4

Boyd W. Howard

Attorney At Law 1010 N. Main, Suite 2 Wichita, Kansas 67203 (316) 263-5267 FAX (316) 267-4331

March 11, 1996

Mr. Paul Gunzelman Kansas Geological Society 125 N. Market, Suite 1255 Wichita, KS 67202-1712

Re:

Issues upon admission of a profession to Board of Technical Professions supervision

Dear Paul:

Pursuant to your request, I have researched issues regarding the circumstances when professional organizations first come under the supervision and licensing requirements of the State. I have researched the so-called "grandfather" clauses which dealt with the persons who were already practicing in their professions at the time of the enactment of legislation that brought them under the supervision of state agencies. The state granted licenses to those people, but still had some light eligibility requirements for them. I located those statutes as well as those designating the regular eligibility requirements for licensing for those applying for licenses after the expiration of the grandfather periods.

1. LENGTH OF GRANDFATHER PERIODS

There are four professions, as you are aware, being supervised by the Board of Technical Professions: architects, engineers, land surveyors and landscape architects. Beginning with the engineers in 1947, the State of Kansas assumed a role in licensing and supervising each of those professions. The people practicing in those areas at the time the State decided to assume this licensing role were granted licenses through what is commonly referred to as a grandfather clause. In other words, they were not required to demonstrate their abilities by being tested, as was required after the expiration of the grandfather periods.

In each case, the grandfather clause lasted one year, beginning at the effective date of the legislation. Below is a chart showing the pertinent dates for each profession now supervised by the Board.

PERTINENT DATES OF ENABLING STATUTES

PROFESSION	DATE LEGISLATION	DATE LEGISLATION	FORMAL APPLICATION
	APPROVED	TOOK EFFECT	AND TESTING REQUIRED
Architects Engineers Land Surveyors Landscape Architects	April 2, 1949	July 1, 1949	July 1, 1950
	April 9, 1947	June 30, 1947	June 30, 1948
	March 13, 1968	July 1, 1968	July 1, 1969
	March 15, 1968	July 1, 1968	July 1, 1969

Note that, unlike the other professions, the landscape architects were given the incentive to get their licenses through the grandfather clause by January 1 of the year following the effective date of the legislation (1969). They could still obtain their licenses through the grandfather clause after that date, but if they did not, they could not hold themselves out as landscape architects. Restated, they could not hold themselves out to be landscape architects without first getting their license through their grandfather clause after January 1, 1969. Presumably, the other professions could hold themselves out as professionals without first obtaining their state licenses during their respective grandfather periods, as this incentive clause does not appear in the other statutes.

2. REQUIREMENTS FOR ADMISSION UNDER GRANDFATHER CLAUSES

Each bill bringing the various professions under State supervision deals with the issue of granting licenses to persons practicing their profession at the time of the effective date of the legislation in question. The portion of the bills dealing with this issue are very similar. Each of the four bills required the applicant desiring to be admitted under a grandfather clause, as opposed to the licensing clauses, to submit evidence to the supervisory board that the applicant: 1) was of good character, and 2) had been a resident of Kansas for the year immediately preceding their application.

The bills dealing with architects, surveyors and landscape architects state require that the applicants show that they had "been in responsible charge of" their respective kinds of work. The bills dealing with engineers and architects require that the applicant actually have been practicing their profession at the time of the effective date of the legislation. Below is a summary of the requirements under the various grandfather clauses:

REQUIREMENTS: ADMISSION WITHOUT TESTING

PROFESSION	GOOD	KANSAS	RESPONSIBLE	PRACTICING
	CHARACTER	RESIDENT ONE	CHARGE OF	AT EFFECTIVE
	SHOWING	YEAR PRIOR TO	WORK IN	DATE OF
	REQUIRED	APPLICATION	QUESTION	STATUTE
Architects Engineers Land Surveyors Landscape Architects	Yes	Yes	Yes	Yes
	Yes	Yes	No	Yes
	Yes	Yes	Yes	No
	Yes	Yes	Yes	No

Note, that the language requiring that the applicant be in "responsible charge" of the work in questions would seem to indicate that the applicant actually be practicing at the time of the legislation. Consequently, as a practical matter, the land surveyors and landscape architects were almost certainly required to have been practicing in their professions at the

goard of Technical Professions research letter March 11, 1996 Page Three

time of the effective date of the legislation. The language requiring the architects to be both in responsible charge of work, and practicing architecture appears to be redundant.

3. REQUIREMENTS: APPLICATION THROUGH THE TESTING PROCESS

Each of the bills bringing the various professions under the Board established certain minimum requirements before an applicant was eligible to apply for admission. Each of them required either graduation from an appropriate college or university, or practical experience, or a mixture of the two, except for the bill regarding the architects. That statute did not give credit for school years short of getting a degree. The architects could either get a degree, or get some experience, but could not substitute one for the other. The enabling legislation for the architects is also the only one not giving credit for teaching in the applicant's chosen field.

Architects:

a) graduation, in architecture, from a Kansas Regents institution, or from an architectural school accredited by the national architectural accrediting board;

b) Seven years of practical experience of a character satisfactory to the Board.

Engineers:

a) graduation from a college or university having a 4 year curriculum in engineering approved by the Board as of satisfactory standing;

b) completion of 8 years of work in the practice of engineering of a grade and character satisfactory to the Board, and passing a written examination designed to show that he is qualified to practice engineering (NOTE: THE ACT IS NOT CLEAR AS TO WHETHER THIS EXAM IS DIFFERENT FROM THE ONE GIVEN BY THE BOARD -- I ASSUME THEY ARE ONE AND THE SAME);

completion of 12 years of work in the practice of engineering of a grade and character satisfactory to the Board. The applicant must be at least 35 years of age if applying under

each year of teaching equals one year of practical experience; d)

each year of successful completion of a college or university having a 4 year curriculum in engineering approved by the Board as of satisfactory standing, without having graduated from that school, shall be considered as equivalent to one year of actual practice. Graduation from a college of recognized standing with a degree other than engineering shall equal two years of practical experience.

Landscape Architects:

a) graduation from an approved college or university having a 4 year curriculum in landscape architecture and having a minimum of 2 years of training experience of landscape architectural work of a grade and character satisfactory to the Board;

Board of Technical Professions research letter March 11, 1996 Page Four

b) graduation from a college having an approved 5 year curriculum in landscape architecture and having a minimum of 1 year of training experience of landscape architectural work of

a grade and character satisfactory to the Board;

c) having completed 7 years of work in the practice of landscape architecture of a grade and character satisfactory to the Board. Each one year of completed in a school of landscape architecture approved by the board shall be considered to be equivalent to one year of actual practice. Graduation in a curriculum other than landscape architecture shall be equivalent to 2 years experience of the 7 specified above in this paragraph, up to a maximum of 2 years of practical experience;

d) graduation from a school of landscape architecture, if approved by the Board, provided that evidence of 5 years of actual practical experience is provided. (NOTE: I ASSUME THIS SECTION REFERS TO GRADUATION FROM A SCHOOL NOT APPROVED BY THE BOARD. THIS IS THE ONLY PROFESSION TO USE THIS CLAUSE)

Land Surveyors:

a) graduation from a college or university having a 4 year curriculum in engineering or surveying and passing a written examination of at least 8 hours designed to show that he is qualified to practice land surveying;

b) graduation from a college having a 2 year curriculum in land surveying as approved by the Board (of Technical Professions) and passing a written examination of at least 8 hours

designed to show that he is qualified to practice land surveying;

c) having completed 6 years of work in the practice of land surveying of a grade and character satisfactory to the Board, and passing a written examination of at least 8 hours designed to show that he is qualified to practice land surveying. Each one year completed in a school of land surveying approved by the board shall be considered to be equivalent to one year of actual practice, up to a maximum 4 years credit. Teaching land surveying in an accredited engineering or surveying curriculum may be considered as one year's worth of actual experience.

MINIMUM REQUIREMENTS BEFORE APPLYING FOR LICENSE BY EXAM

PROFESSION	COLLEGE DEGREE	YEARS OF EXPERIENCE AS SUBSTITUTE FOR DEGREE	CREDIT FOR NON-DEGREE COLLEGE WORK	CREDIT FOR TEACHING AS PRACTICAL EXPERIENCE
Architects	Yes	7	No	No
Engineers	Yes	12 (age at least 35)	Yes (year for year)	Yes
Land Surveyors	Yes	6	Yes (max. of 4 yr.s)	Yes
Landscape Architects	Yes	7	Yes (max. of 2 yr.s)	No

Note that although the legislation concerning the architects and landscape architects did not specifically give credit for time spent teaching, it is conceivable that the licensing

Board of Technical Professions research letter March 11, 1996 Page Five

authorities at the time may have exercised their discretion, and included "teaching" within the definition of practical experience.

I have attached copies of the session laws and statutes regarding the admissions standards. You may recall from an earlier discussion that copies of the statutes, particularly the older ones, are not available on short notice locally, and that the Session Laws are generally regarded as authoritative. If you have questions, I'll be available this evening, and most of the day Tuesday. Good luck!

Sincerely,

Boyd W. Howard BWH/moh

encl.

THE COMMITTEE ON ENVIRONMENT HB 2099 - Concerning the Practice of Geology WRITTEN TESTIMONY

by

Stanley C. Grant, Ph.D., Topeka, KS **Certified Professional Geologist** Registered Geologist, State of Arkansas

Mr. Chairperson and members of the Committee: I regret my inability to testify in person on behalf of HB 2099. The demands of my work at Kansas State University, however, prevent my appearance. I do believe that House Bill 2099 is important to the citizens of the State of Kansas.

In the 42 years that I have been a geologist, I have had the opportunity to serve as Director of the Iowa Geological Survey, Secretary of the Kansas Department of Health and Environment, CEO of my own geological and environmental consulting firm, and professor of geology at several colleges and universities in several states including lowa, and now at Kansas State University. During those times, I have observed hundreds of geologists at work. My present position, as an environmental research and training center administrator at KSU, has also given me substantial exposure to the work of consulting geologists.

I am pleased to say that most of my experience working with geologist colleagues has been very positive. However, I have been repeatedly called upon to evaluate, and frequently correct, the "professional work" of individuals who have identified themselves as geologists, but who are not geologists, either by education, experience, or by ethical practice. These individuals have done inaccurate, unethical, and even illegal work for citizens who hired them. Citizens, in good faith, contracted these individuals who called themselves geologists, and had every reason to expect quality work from them. People entrusted their environmental, ground water, or other geologic problems to individuals in whom they had every right to expect accurate, timely work. While many people do ask to see the credentials of professionals whom they hire, most citizens do not really know what constitutes a qualified professional unless they are able to see some document that certifies them or licenses them.

Unfortunately, there are some unscrupulous individuals posing as professionals of one kind or another. and who are able to take substantial sums of money from Kansans without providing a legitimate or accurate service. Often it may be days, weeks, or months before the client finds out that they were given inaccurate information, or that they were provided very poor work, because the individual that was hired was patently unqualified to do the very work they were hired to do.

The State of Kansas is not alone with this problem. Because the profession of geology provides some unique scientific specialties and qualifications for working with environmental resources, geologists are being called upon to provide consulting services more today than ever before. The profession of geology has become far more sophisticated over the past 25 years in the use of modern science and technology to solve, or help solve, all kinds of environmental problems. While many geologists are still employed in the petroleum and mining industries, in geological specialties in federal and state agencies. and as academicians, many new geologic careers have evolved that serve the needs of the public, government, and industry. Those geologists who serve in the public interest, and are involved in the health, safety, and well-being of our citizens, must be qualified to do the job correctly, thoroughly, and in compliance with standards of practice, and the law. Unqualified individuals can not do so, yet many try, and Kansans are placed in jeopardy when that happens.

A number of states have already dealt with this problem and have established licensing laws under which certain geologists practice their profession. Those programs appear to be working well. I believe we can establish legislation in Kansas which can be, at least in part, patterned from successful legislation in those states. The issue to me, as a professional geologist, is not the mechanics of the legislation as much as the ultimate protection the law will provide to Kansas citizens who need the services of qualified professional geologists.

I am pleased to provide this testimony and I appreciate the consideration of HB 2099 by this Committee.

Thank you. Hanty Chan,

HOUSE ENVIRONMENT 2-11-97 AHACHMENT 3

STANLEY C. GRANT, PH. D. PROFESSIONAL RESUME

February 1997

CURRENT POSITIONS

Associate Director, Great Plains/Rocky Mountain Hazardous Substance Research Center Kansas State University, Manhattan, Kansas Adjunct Professor of Geology and Civil Engineering, Kansas State University

Principal Scientist, Grant Environmental Consultants, Topeka, Kansas

FORMER POSITIONS

Secretary of Health and Environment, State of Kansas, June 1987 - July 1991

Consulting Geologist and Partner, Grant Geological Services, Independence, KS (1981-1987).

Director and State Geologist, Iowa Geological Survey, Iowa City, IA, 1975-1980.

Adjunct or Collaborating Professor of **Geology**, 1975-1980 University of Iowa, Iowa State University, University of Northern Iowa Professor of **Geology**, 1970-1975, University of Northern Iowa, Cedar Falls, Iowa

Officer, United States Air Force, Active Duty, 1956-69 Retired 1980, Lieutenant Colonel

Chief Geologist, 1955-56, Gas Hills Uranium Co., (American Nuclear, Inc.) Riverton, WY Petroleum Geologist, 1955, The California Company (Chevron), Casper, WY

EDUCATION

Ph.D., Geology, 1971, University of Idaho, Moscow, Idaho M.A., Geology, 1954 University of Wyoming, Laramie, Wyoming B.A., Geology, 1953, Coe College, Cedar Rapids, Iowa

PROFESSIONAL MEMBERSHIPS AND REGISTRATION

American Institute of Professional Geologists (Kansas Section president, 1985 & 1986) Certified Professional Geologist #4736

Association of Engineering Geologists

Registered Professional Geologist, State of Arkansas #583

Geological Society of America, Division of Engineering Geology

American Association of Petroleum Geologists, Division of Environmental Geosciences (Division Vice President, 1995-96)

Sigma Gamma Epsilon (National geological honorary)

Kansas Public Health Association

PERSONAL DATA

Married: Norine A. Kruse (Director, Division of Travel and Tourism; Kansas Department of Commerce and Housing), Topeka, KS

Home Address, 8251 SW 61st Street, Topeka, KS 66610-9042 phone 913-478-9221; e-mail scgrant@aol.com

A STATEMENT CONCERNING HOUSE BILL 2099

Statement presented to: Rep. Steve Lloyd, Chairman

Environment Committee

Topeka, Kansas February 11, 1997

Statement presented by: Robert L. Vincent, CPG, PHG

Ground Water Geologist

Ground Water Associates, Inc.

Wichita, Kansas

Mr. Chairman and members of the House Committee on Environment:

In 1985 when I left my employer of 28 years to form a geological consulting firm, Ground Water Associates, I believed that a need existed for the practical application of geology and hydrology to the problems that were arising in the production of ground water, such as well yield loss, well interference, aquifer depletion and aquifer contamination. Too often poor quality water was being used when better quality was available, or costly, low capacity wells were being pumped when larger more efficient ones could be obtained. All of this has proved to be true, and my consulting company is extremely busy. In fact, I have assisted other geologists in entering the field since there is so much work to be done. Additionally, during the past twelve years, the environmental problems have simply exploded. And, where ground water is concerned, these all start with geology. For these reasons, I am here to testify in favor of House Bill No. 2099, which provides for the licensure and regulation of the practice of geology.

The citizens of Kansas need to know that there is a profession which can and will help them solve their water problems; a profession which is sanctioned and regulated by the State. The public interest will be better served if geologists are licensed at the state level and required to adhere to a high standard of professional conduct.

Let me provide you with four examples of situations which have occurred due to the lack of a sufficient geologic investigation being made. In none of the following examples was a geologist involved until after the problem existed.

HOUSE ENVIRONMENT 2-11-97 Attachment 4 (1) A rural water district in central Kansas went bankrupt due to the fact that they lost 30 percent of their users due to the poor quality water that was being delivered. The system had been designed to pump the high iron and manganese content water through a small water treatment plant, but due to changes in the water quality entering the plant, it failed.

When we became involved with them about seven years ago, we investigated and found a supply of good quality water in a different aquifer only two miles from their system. The board members of the district asked why they weren't informed about this source when the district was started ten years earlier. The answer of course, was that their advisers of ten years ago were not geologists and really did not understand the options available to them.

- (2) A city in northcentral Kansas completed a new well with a well house in 1982. They were forced to abandon the whole installation in 1986 due to volatile organic chemical contamination. Why did this happen? the well was sited in a risky location. Our statement to the city was that just a nominal geologic investigation would have discovered the potential for contamination at the site. We have since located other well sites for the city which are yielding good quality water from areas of very little contamination risk.
- (3) A representative of a Missouri environmental firm called me from Salina inquiring about the geological conditions existing at a town in central Kansas. He had stopped in Salina because he thought some information concerning the ground water conditions at the subject town might be obtained from a local well driller. The driller was not familiar with the area and referred him to me. I suggested to the young man that he go back to Lawrence and obtain geologic information from the Kansas Geological Survey, study the data and then go to the subject town to begin the investigation of the volatile organic chemical contamination in the area.

Frankly, in my opinion, no professional would ever begin a project so unprepared.

(4) A rural water district in northeast Kansas had spent \$45,000 in two years attempting to rehabilitate two sand pumping deep wells that had been improperly designed and installed. Their advisors had told them that larger diameter bore holes could not be drilled in that area, and therefore the problem wells existed. Our investigation of the situation showed that properly designed wells could be installed. They were drilled and the problem was thus solved.

Other examples concerning numerous geologic problems could be

- 3 -

related, but it would make this testimony too long.

Over the past eleven years we have completed a lot of work in conjunction with many engineering firms. And, we have found this to be a good relationship for all parties involved, but particularly so for the client we are involved with. They receive the services of all the necessary disciplines on their projects. However, many projects are small, such as a property transaction, and may require only the initial geologic investigation. Other larger projects, such as ground water investigations, may be almost exclusively in the geologic realm. Therefore, the geologist needs to be in a position to be the responsible individual. Licensing of geologists will accomplish this matter.

In summary, I want to quote from a memorandum prepared by Mr. Peter H. Dohms, CPG, Pensacola, Florida concerning Protection of Public Health and Safety by Professional Geologists,

"The public practice of geology is evolving in much the same manner as engineering did during the first half of this century. The states and the members of the profession have come to recognize that the public interest is served if geologists are registered at the state level and required to adhere to a high standard of professional conduct. Examination of the situation suggests that virtually all states will require registration of geologists within the next ten to twenty years. In examination of requirements for both engineers and geologists in three example states (Arizona, California and Florida) it was learned that the requirements are essentially identical."

I will be pleased to answer questions concerning this testimony if there is time for it.

Holest L. Vincent

Testimony before the House Environment Committee concerning the Geologist Licensing Bill (H.B. 2099) Thomas J. Hansen, Consulting Geologist February 11, 1997

Who or what is a geologist? I am Thomas J. Hansen. I am a self employed consulting geologist. The majority of my practice deals with groundwater contamination, which consists of defining an area of contamination, the geology and hydrogeology of a site, locating the source of the contamination at a site, and supervising installation of monitoring and recovery wells. I appear before Planning boards on groundwater issues, file necessary permits and reports for my clients to various State agencies. I provide geological solutions for my clients to their complex problems.

Kansas Statutes define a "geologist" and "geology" under the Kansas Mined-land Conservation and Reclamation Act, cited as KSA 49-403 (u) & (v). Those definitions are as follows:

- (u) "Geologist" means a person engaged in the practice of geology who is a graduate of an institution of higher education accredited by a regional or national accreditation agency; who has a minimum of 30 semester or 45 quarter hours of undergraduate or graduate work in geology and whose post-baccalaureate training has been in geology.
- (v) "Geology" means the science which treats the earth in general, the earth's processes and its history; which investigates the earth's crust and the rocks and other materials which compose it; and the applied science of utilizing knowledge of the earth's history, processes, constituent rocks, minerals, liquids, gasses and other materials for the use of mankind.

A geologist may be your next door neighbor. He or she is a citizen of this great state of Kansas. A geologist may be working as a professor at one of our State Universities; a teacher at one of our high schools; an employee of the State (i.e. Kansas Geological Survey, Kansas Department of Health and Environment, Kansas Department of Transportation, Kansas

> House Environment 2-11-97 Attachment 5

Corporation Commission, Division of Water Resources); an employee of one of the Ground Water Management Districts in Kansas; an employee of the Wichita Airport Authority, an employee of a minerals extraction industry (i.e. oil and gas industry; solution mining industry, or a rock quarry); a geological consultant; an employee of The Boeing Company or Learjet performing environmental related work, utility mapping, computer programming; an employee of a Kansas environmental consulting firm overseeing the installation of monitoring or recovery wells at a contamination site; a consultant developing the water resources of Kansas; an expert witness in a lawsuit; and much more. The geological profession is varied and is composed of men and women interested in protecting the environment of Kansas and the citizens of Kansas.

Geologists who work with groundwater, waste disposal sites, or assessment of geologic hazards are practicing in areas related to public welfare. The costs of geological ignorance are staggering. Most citizens don't think of a geologist when property is purchased, land use zoning decisions are made, environmental legislation is passed, or building codes are drafted. Geologists have expertise which can prevent unwise decisions or great financial or human loss.

The Citizens' Guide to Geologic Hazards states "Geologists are essential for making regional plans to deal with major geologic hazards. The data that geologists provide about the history and immediate nature of any major geologic hazard establish the basis for risk assessment, emergency preparedness, land-use planning and public awareness programs. The principal tasks of professional geologists in regional projects are (1) to determine what hazards are likely to exist in the area under study; (2) to investigate them thoroughly enough to provide all the necessary data required to characterize the hazard and its anticipated impacts; (3) to compile and communicate pertinent information in a concise and comprehensive manner to other team members (such as engineers, planners, government representatives, and land owners); and (4) to ensure that the hazards are addressed in any final project plan.

Geologists are also indispensable investigators in local site evaluations. Site evaluations precede many projects which may range in magnitude from a single-family home to a nuclear power plant. Geologists work productively with site landowners, civil engineers, architects, contractors and regulatory personnel. The geologist will answer

at least two important questions: "How will the geologic conditions affect the success of the proposed use of the site?" (Example - Will a home built here likely complete its expected useful life?) and "How might the developed site eventually cause adverse impact through its geological setting?" (Example-If the storage tank site here eventually leaks, is it likely to contaminate groundwater supplies over a wide area?)."

At the present time I am a certified as a geologist by the American Institute of Professional Geologists (CPG # 3339) and The American Association of Petroleum Geologists (CPG # 1918). I am a Registered Geologist (RG # 0700) in the State of Missouri. On behalf of myself and the majority of my colleagues, I ask for your support and passage of House Bill 2099, so I may become a licensed geologist in my home State of Kansas.

by Dennis E. Hedke

House Bill 2099 before House Environment Committee The Honorable Steve Lloyd, Chairman February 11, 1997

Mr. Chairperson, members of the Committee:

I am a geological & geophysical consultant residing in Wichita, Kansas. I am a Certified Petroleum Geologist, as sanctioned by the American Association of Petroleum Geologists (AAPG). I am also a Certified Professional Geologist, as sanctioned by the American Institute of Professional Geologists (AIPG). Lastly, as concerns this committee today, I am a member in good standing of the Society of Independent Earth Scientists (SIPES). Each of these organizations maintains memberships on a national scale. The AAPG has a membership reaching all corners of the globe.

I received the Bachelor of Science in Geophysics from Kansas State University and the Master of Science in Materials Science from the University of Virginia School of Engineering. I currently serve as Chairman of the KSU Department of Geology Advisory Council as well as Vice-President / President-Elect of the Kansas Geological Society.

While these credentials are sufficient to grant me certification and recognition in every state of the United States and a myriad of foreign countries, I cannot currently claim that my home state of Kansas would grant me "professional" status. In fact, without this professional designation (registration), there are 23 states in this country where I cannot practice when dealing with issues relating to the environment or other issues relevant to the public trust.

Additional testimony presented today will show that geologist registration bills have either already passed or are currently under consideration in 32 state legislatures across the United States. The testimony given today relates to the third attempt to pass such legislation in the State of Kansas.

Viewed from the perspective of a geophysicist who has the privelege of investigating earth systems across a wide spectrum of depths and substantial variations in rock deposits (depositional environments), I find it difficult to imagine anyone other than highly trained earth scientists being in the position of 'final responsibility' (responsible charge) concerning these systemic observations.

However, as has been indicated by testimonies given in support of earlier bills, or will be represented by various testimonies given today, it is all too obvious that many underqualified individuals and entities put our populace at risk due to purported expertise related to critical public issue problems. In my opinion, there is only one group of trained scientists who have the proper technical background and ability to analyze complex three-dimensional subsurface problems: those individuals who have accumulated sufficient education and expertise in geological science.

House Environment 2-11-97 Attachment 6 To be sure, additional expertise may be required to comprehensively design, for instance, a deep subsurface hazardous waste site. The list of experts would likely include a civil engineer, chemist, biologist, perhaps even a petroleum engineer. But, I can assure you that no one in that list would be more capable of the type of scrutiny required to completely characterize the relevant rock systems, the most probable hydrogeologic flow regime or any other critical subsurface parameters, than the assigned professional geologist. This is not an issue of 'turf control' or competition, rather one of practical expertise and protection of the public interest.

Mr. Chairman, this is the third attempt to forward this type of bill. In the first attempt (HB 2496, January, 1993) we were met with resistance from peer groups, e.g. engineers, and a host of bill language concerns. This resistance caused the bill to die in committee. Subsequently, all of those underlying concerns have been addressed to the extent that these significant peer groups now support the proposed legislation. We also believe the language has been improved in many areas.

In the second attempt (HB 2471, January 1996), the bill passed the House, but when referred to Senate Committee on Governmental Organizations, the bill stalled when resistance from the Board of Technical Professions surfaced with reference to what can only be described as a typical 'grandfather' clause in the bill. This clause would allow a time window for registration of established practicing professionals without examination requirements. An individual becoming registered via 'grandfathering' would still be held to the highest accountability of education and experience requirements. Our review of this resistance relating to 'grandfathering' appears to have no legal basis whatever when comparing the legislative record generated by our peer groups during establishment of their respective professional practices with the Board of Technical Professions.

In our opinion the legislation proposed in HB 2099 meets or exceeds all previously raised concerns and includes a comprehensive set of objectives designed to parallel the better facets of legislation already serving the public in states where statutes are in place.

I submit this testimony to you with a single request. I believe it is time to protect the public interest by forwarding this legislation to the House floor for debate and vote. I would respectfully request that Committee debate be initiated as soon as possible and, assuming general agreement with the above, that the Committee release the bill with a <u>recommendation in support of the</u> legislation.

It has been a distinct privelege to present this testimony and I would be happy to entertain any questions you may have. Thank you for your time and attention.



Association of Engineering Geologists KANSAS CITY - OMAHA SECTION

Reply to:

John F. Szturo, HNTB Corp., 1201 Walnut, Suite 700, Kansas City, Missouri 64106

February 11, 1997

Kansas House Environmental Committee

RE: House Bill 2099 - Geologists Practices Act of 1997

Dear Committee Members:

As chairman of the Kansas City - Omaha Section, of the Association of Engineering Geologists, I am providing testimony in favor of the above mentioned Act. The Kansas City - Omaha Section represents 80 engineering geologists in the States of Kansas, Missouri, Nebraska, Iowa, South Dakota, and North Dakota. The Association of Engineering Geologists, nationally, represents over 2500 professionals in engineering, environmental, and ground water geology.

The geologists of the AEG apply their scientific training and experience to the broad field of civil engineering. Engineering geologists work in close coordination with construction, foundation, and highway engineers, hydraulic engineers and hydrologists. AEG members are also involved in the development and protection of safe public drinking water and protection of aquifers. They also assist in the detection and disposal of hazardous wastes. Many of the works associated with these professionals involve foundations for bridges, dams, power plants, large buildings and towers. They also interpret geologic conditions for tunnels, highways, railroads and pipelines. They evaluate geologic hazards such as bridge foundation scour (one of the leading causes of bridge failure), landslides, faults, earthquakes, radon, asbestos, ground subsidence, caverns, and expansion and collapsing soils. They also evaluate safe disposal of waste to the earth, land use planning and environmental impact analysis.

The Engineering Geologist bears an important share of the responsibility for the public health safety and welfare insofar as engineering works are affected by geologic factors.

As chairman of the local section of Association of Engineering Geologists, and as a geologist working in Kansas, I would like to voice my support for this much

House Environment 2-11-97 Attachment 7 needed Act. Many of the states adjacent to Kansas currently recognize the need and register geologists. As a matter of fact, 25 states now have active registration laws. These laws provide for the suspension and punishment of unethical and unqualified practice. Another fact is 135 of the 911 geologists recently registered in Missouri have a Kansas mailing address. Clearly, these Kansas geologists have met the standards required by surrounding states. Kansas should also regulate the geologists who come to practice in this state. Many of these states laws are similar in format to those which exist in all states for the engineering profession. Standard qualifications are also needed for geologists. This Act provides for these qualifications through experience and examination.

The citizens of Kansas deserve qualified professional geologists to watch over man's interaction with the environment. They also deserve sound, judgment when it comes to safe water, disposing of contaminants, waste management, design, construction and operation of fixed engineering projects, and identification of geologic hazards. Passage of the HB 2099 will further insure the protection of the citizens of Kansas by providing qualified professionals to make these judgments and assessments.

John F. Szturo Chairman, Kansas City - Omaha Section, Association of Engineering Geologists



ASSOCIATION OF ENGINEERING GEOLOGISTS

Committee on Professional Licensure Christopher C. Mathewson, Manager

Department of Geology & Geophysics, Texas A&M University, Mail Stop 3115, College Station, TX 77843-3115 Phone: (409) 845-2488, Fax: (409) 845-6162, E-mail: mathewson@geopsun.tamu.edu

11 February 1997

Environmental Committee Kansas House of Representatives Topeka, Kansas

To the Honorable Members of the Committee:

A significant number of geological studies are carried out to ensure the safe and economic construction of engineering projects; the protection of the public's health, safety and well-being, and the protection and cleanup of the environment. The role of geologists in the protection of the public and the environment has become increasingly more important as their expertise is relied upon to solve complex construction and environmental protection problems. To solve these complex problems, engineers, design professionals, regulators and the public must have confidence in the professional qualifications of the geologists who provide the needed scientific data, analyses and interpretations. If the State of Kansas is to ensure that only qualified geoscientists provide their services to the public, the Kansas Legislature must enact a Geologist Registration Act that would establish minimum professional standards and controls on the practice without conflicting with the practice of other regulated professionals.

Over twenty-five states have enacted some form of geologist, geophysicist and/or soil scientist registration law, ranging from a legal definition to full registration/licensure. These laws help protect the citizens in these states from natural hazards, such as landslides, earthquakes, and erosion; dam and building foundation failures; and environmental pollution from radioactive, hazardous, and municipal waste management sites and leaking underground pipelines and tanks.

The proposed "Geologist Practice Act", H. B. 2099 meets the goal to protect the public through the registration of geologists who directly affect the public health and safety, and the environment. The proposed act requires the registration and certification of geologists whose practice includes the investigation, analysis, and assessment of natural processes that are potentially hazardous to the public, such as:

♦ landslides, earthquakes, flooding and stream bank erosion, expanding, collapsing and corrosive soils, and coastal erosion;

• groundwater protection and contaminant transport;

• solid, industrial, hazardous, and nuclear waste management and disposal;

investigations of earth processes for urban and regional planning;

• geological and soil analyses for the design, planning and reclamation of mines; and

• geological investigation, analysis and interpretations for fixed engineering projects, to name a few.

The proposed act specifically exempts from registration or certification those geologists whose practice does not affect the public health or safety, or the environment such as:

♦ exploration for and development of (proving out) of natural resources including oil, gas, coal, gravel and aggregate;

• education and academic research; and

♦ industrial research and development.

Because, the public practice of engineering is regulated by the Kansas State Board of Registration for Professional Engineers, the act specifically exempts registered Professional Engineers. This allows registered engineers to continue their normal practice of engineering which includes certain portions of the practice of geology.

The proposed act also recognizes that the natural environment extends beyond political boundaries and, therefore, establishes methods to allow reciprocal registration agreements between states. These agreements, in themselves, improve the level of public protection by increasing the competition between qualified geologists and thereby preventing a monopoly of "Kansas geologists".

Registration of geologists in Kansas will greatly enhance the protection of the health and safety of the citizens of Kansas and the environment of Kansas now and in the future. The proposed "Geologist Practice Act" meets the goal of public protection without placing undue restrictions on geologists whose work does not affect the public and without infringing upon the professional practice of engineering carried out by Registered Professional Engineers in Kansas.

Passage of the Geologist Practice Act, H. B. 2099, is critical for the continued protection of the health, safety and well-being of the citizens of Kansas and for the enhancement and protection of Kansas environment.

Thank you for the opportunity to present this testimony.

Sincerely yours

Christopher C. Mathewson, PE, REG

Past President, Association of Engineering Geologists

Manager, Professional Licensure Committee

To: Environment Committee

From: Michael D. Barnett

Re: Geologist Practices Act of 1997 / HB2099

Date: 11 Feb 1997

Thank you for the opportunity to present my opinions regarding licensing of geologists in the state of Kansas.

My name is Michael D. Barnett. I am a principal and office manager with Terracon Consultants, Inc. of Topeka. Terracon is a geotechnical, materials, and environmental engineering firm with 40 offices in 16 states. Terracon employs engineers, geologists, chemists, industrial hygienists and other scientists in order to provide our clients with quality, professional services.

I have a BA & BS in Mathematics with a 30 hour minor in Geology and a minor in computer science. I am a registered geologist in the states of Virginia, North Carolina, Arkansas, and Missouri. I am a member of the American Institute of Professional Geologists. I have 19 years of experience in the field of geology.

I am here today to ask you to give strong consideration to this bill. I ask your consideration of this bill not for the sake of ego, or to prompt more revenue for services, or to limit competition; but rather to provide for public health & safety in regard to performance of geological services for a wide range of projects.

Terracon uses scientists from different professions to provide our clients with quality services. Engineers and geologists frequently work together on geotechnical projects that involve complex geological considerations, such as possible seismic activity, sinkholes, previous mining activity, landslides, just to name a few.

Some state programs such as KDHE LUST Trust Fund require qualified geologists. Licensing will help identify qualified geologists to work on projects in these state programs.

One of our projects involved a subsurface exploration for a building addition in a city known for deep coal mining. The project engineer worked closely with a staff geologist to develop a drilling program that might encounter any earlier mining activity below the proposed building site. The data was reviewed by firm engineers and geologists and a report published that offered the design team members and the owner a high level of confidence that the new construction was not going to be located over or in the vicinity of previously mined areas.

Our environmental company worked on a landfill project combining the efforts of engineers and geologists to design a landfill to conform to recent changes in landfill regulations. The combined efforts in the areas of engineering and geology brought about a safe and economical product for the client and the public.

House Environment 2-11-97 Attachment 8 Groundwater considerations are a very high priority for our firm on projects. Pollution issues regarding groundwater on environmental projects demands the attention of both engineers and geologists. Groundwater characteristics often play a major role on large scale geotechnical projects such as earthen dams, landslides, and tunneling projects.

About 12 or 13 years ago, I was asked to speak at a lunch hour presentation to bridge engineers at the Docking Building. I spoke on the geological aspects of bridge projects, presenting actual conditions of bedrock encountered during subsurface explorations our firm had performed. I explained that geological weathering conditions can undermine bearing materials below initial bedrock contact during a subsurface exploration. My information made a few of the design engineers nervous. Quite often, they received geological or geotechnical reports that terminated the drilling upon initial contact with what appeared to be suitable bearing material. A qualified geologist would know to extend borings well into the bedrock to evaluate the material for consistency. Today, KDOT requires a much more extensive subsurface exploration for bridge projects.

I could describe many more examples where geology has a potential significant affect on the outcome of geotechnical and environmental projects. The majority of geologists presently employed by Terracon are licensed in at least one state. Licensing of geologists in Kansas will provide some basis for identifying properly trained, qualified individuals with adequate experience in the discipline of geology.

Thank you for your time and consideration.

Date:

02/11/97

To:

State of Kansas Legislators HB2099

From:

Kevin J. Bailey Hally

Subject: Registration of Professional Geologists

As a life time resident of Kansas and a practicing geologist since 1986, I favor, as do most of my associates, the professional registration of geologists in the state of Kansas for total accountability in the area of earth science. These associates, in both the private and consulting industries, agree that geologic interpretation and applications of geologic principles are integral parts of many actions involving public health, safety, and welfare. Geologists provide investigations and expertise in areas including: groundwater, stability analysis, construction of dams, foundation analysis, waste disposal, environmental remediation, energy fuels, mineral and aggregate mining. All of the above require the use of geological sciences, utilizing a comprehensive knowledge of the earth. Standards are necessary to set basic educational and experience prerequisites which are required for an individual to provide these services. I currently hold professional registrations in the states of Missouri, Kentucky and Tennessee. I have also recently applied with the state of Wisconsin. The increasing number of states adopting registration for professional geologists demonstrates a national recognition of the need to establish these basic requirements. I strongly believe that a total accountability by a Professional Geologist will only strengthen the common wealth for the State of Kansas.

House Environment 2-11-97 Attachment 9



Statement to House Committee on Environment House Bill 2099 Tuesday, February 11, 1997

Mr. Chairman and members of the committee, my name is George Barbee, appearing today as the executive director of the Kansas Consulting Engineers. The Kansas Consulting Engineers is an association of member firms performing design services for the construction of buildings, roads, bridges, highways, water plants, water systems, sewage plants, and other major infrastructure projects.

To design projects it is necessary to collect geologic data, so there was a considerable amount of interest and concern when House Bill 2099 and its predecessor bills were introduced. Concerns that this bill might require engineers to acquire yet another professional practice license to do what engineers have been doing for many decades.

Engineers were also concerned that non-engineer geologists might be allowed to practice engineering without having received the prerequisite education, experience, and license to legally practice engineering.

We knew that you were not fond of refereeing turf battles between various professions, so I am happy to report that the geologists, the Kansas Consulting Engineers, and the Kansas Society of Professional Engineers met throughout 1995 and 1996 to arrive at mutual agreement on an amended bill as provided to you in House Bill 2099 today. This compromise will: allow engineers to collect geologic data for design purposes; allow for licensure of geologists; and allow for one new geologist member to be added to the existing state board of technical professions.

The state board of technical professions is presently a 13 person board that administers the licensing law for engineers, architects, landscape architects, and land surveyors. These design professionals are licensed under one law to protect the health, safety, and welfare of the public. This bill would maintain the board at 13 by adding one geologist and eliminating one public member.

House Bill 2099, in its present amended form, will not be opposed by the Kansas Consulting Engineers.

Thank you for the opportunity to express our views, and I would be glad to stand for questions should you have any.

GEORGE BARBEE, EXECUTIVE DIRECTOR * 700 SW JACKSON ST., STE 702 * TOPEKA, KS 66603-3758 * (913)357-1824 * FAX (913)357-6629

AFFILIATED WITH:

KANSAS SOCIETY OF PROFESSIONAL ENGINEERS * AMERICAN CONSULTING ENGINEERS COUNCIL * PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE * NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

HOUSE ENVIRONMENT 2-11-97 Attach month 10 WILLIAM GILLILAND 2524 SW Mission Ave. Topeka, Kansas 66614 Phone 913-273-4383

Bachelor of Science and Masters of Science Degrees, in Geology, Kansas State University Registered Professional Geologist, No. 523, State of Arkansas Certified Professional Geologist, No. 3703, American Institute of Professional Geologists

Since 1966, I have worked the majority of my professional career in the State of Kansas, with twenty two years as a State worker in the Departments of Transportation and Agriculture. I have also worked in the oil & gas industry and operated my own consulting firm. I have taught geology courses in community colleges and universities, on a part-time basis, for fifteen years.

Based upon my background in government employment, industry and academia; I would like to express my support for House Bill No. 2099, for registration of geologists in the State of Kansas. If geologists have a significant impact upon the safety, welfare, or health of residents of the State of Kansas; those individuals should take responsibility for their own actions, and be so held accountable.

If geologists do not have an impact on safety, welfare, or health of residents of the State of Kansas; then they should not be regulated by the State. However, every building, bridge, and dam in Kansas is constructed upon geologic material. Every water well, contamination remediation well, mine, quarry, and underground storage facility; is constructed in geologic materials. Therefore; it appears reasonable to regulate geologists and the practice of geology, to ensure that the citizens of Kansas obtain the best information available for the many projects that interact with the Earth.

I became a Registered Professional Geologist in the State of Arkansas, because it was required for the geologic consulting work that I had proposed to do for an engineering firm. I have maintained registration in Arkansas, because it was the nearest state to Kansas with registration of geologists. I have found, over the years, that some "professionals" do not consider the work done by geologists to be important, because "we" are not held as accountable for our work. The registration, in another state, can be used to show that I am responsible for my work and professional opinion. Why should geologists have to seek that recognition outside the State of Kansas?

At this time twenty three states regulate geologists and / or geology. I consider it appropriate to do so in Kansas. Thank you for this opportunity to express my opinions on this subject.

House Environment 2-11-97 Attachment 11



KANSAS INDEPENDENT OIL & GAS ASSOCIATION

105 S. BROADWAY • SUITE 500 • WICHITA, KANSAS 67202-4262 (316) 263-7297 • FAX (316) 263-3021 800 S.W. JACKSON • SUITE 1400 • TOPEKA, KANSAS 66612-1216 (913) 232-7772 • FAX (913) 232-0917

Statement of Donald P. Schnacke, Executive Vice President
Kansas Independent Oil & Gas Association
before the
House Committee on Environment
February 11, 1997

RE: HB 2099 - Licensing of Geologists

My name is Donald P. Schnacke. I am the Executive Vice President of the Kansas Independent Oil and Gas Association. I am a licensed professional engineer and an attorney, both professions being regulated by established state regulatory organizations. I am appearing in favor of passage of HB 2099.

In my practice of engineering throughout the years, I often used the service of foundation drilling contractors who are normally supervised by trained geologists giving advice to structural engineers on how to design structural footings and foundations for building construction of all kinds - a very important and critical phase of the design profession.

In my work with KIOGA I've come into contact with experienced geologists who are at the heart of the oil and gas exploration business. Many of the independent companies that I represent in the Association are owned by individuals who are experienced and trained as geologists. No one should invest in a publicly offered drilling venture for oil and gas without the services of a qualified geologist. There lies one of the needs for this legislation.

I know that when the legislature is considering a new licensing effort, creating a new regulatory program over a profession that is not now regulated, legislators want to know what the public need is for the legislation. I believe my experience can be of help to you.

There are "geologists" and there are "geologists". I'm a graduate professional engineer, identified by the Board as a petroleum engineer, and my engineering degree is from Oklahoma State University and supports my being classified as such. I took twelve hours of geology, but I'm no geologist. Without regulation, as provided for in HB 2099, I can publicly claim to be a geologist. As a matter of fact, anyone can claim to be a geologist. That creates a problem. A public need to certify professional geologists is greatly needed in Kansas.

House Environment 2-11-97 Attachment 12 Statement of Donald P. Schnacke RE: HB 2099 - Licensing of Geologists February 11, 1997 Page 2

I talked to the Kansas State Securities Commissioner some time ago about this need. The offering of an oil and gas drilling deal to the public is regulated by the state's securities act. Within a prospectus there is often a letter or report or map prepared by an alleged "geologist" who states the drilling deal is a good investment. Often the person making this claim puts the word "geologist" under his name, implying he is a trained geologist whose judgment can be relied upon. As the Securities Commissioner has discovered, that is the furthest from the truth in some instances. It is misleading and is considered a fraud and contaminates the presentation of those making the offering. It would be in the public's interest for the State Securities Commissioner to require that on public offerings a licensed professional geologist be required to sign and seal a geological report and supporting maps so the public will know that professional expertise is behind the public offering.

The same can be said for the Kansas State Banking Commissioner and Kansas banks. In 1986 when the oil industry collapsed, the State Banking Commissioner began examining loan portfolios of individuals and companies that made loans on oil and gas ventures. The portfolios were embarrassingly empty of technical reports defining the nature of the lease or leases involved. Normally, the portfolio contained only the personal financial statements of the operators involved and nothing about the producing leases. The Banking Commissioner ordered all Kansas banks to require detailed technical reports about the operation and the producing leases which were the subject of the loans. That meant a report prepared by a licensed professional petroleum engineer, of which there are very few available as private consultants, or a "geologist". Here again, the "geologist" in question may or may not have the qualifications to protect the public and the banks. I said earlier the heart of a drilling and producing venture for oil and gas spins around the competency of the geologist and his report. What better way to assure the validity of a loan by an oil and gas operator than to have the report submitted to the bank by a licensed professional engineer, trained as a petroleum engineer, or a licensed professional geologist.

We believe the public will be better served in Kansas if a professional geologist is better defined and placed under the supervision of the State Board of Technical Professions.

Again, we recommend the passage of HB 2099.

Donald P. Schnacke

DPS:pp

TESTIMONY of William R. Bryson

HOUSE BILL 2099 before House Environment Committee

February 11, 1997

Mr. Chairman, members of the Committee, I am submitting this written testimony on House Bill 2099 for your consideration and to indicate my strong support for passage of a Geologic Practices Licensing Act. Due to a unexpected trip to Asia during the month of February, I will not be able to provide oral testimony as planned. I am a practicing consulting geologist and also represent the interests of the Kansas Geological Society and Library in Wichita, Kansas.

House Bill 2099 is essentially the name as last year's Substitute House Bill 2471 which passed the House in 1996 but died in the Senate Governmental Organization Committee. I wish to thank those of you who supported Substitute House Bill 2471 last year. The reintroduction of the measure this session indicates the value and importance we place on the licensing of geologists as a technical profession. The licensing or registration of geologists is now required in about one half of the states. Another half dozen states, like Kansas, have the issue before their legislature. one of which is Nebraska. Missouri, Illinois, and Alabama have passed laws for licensing or registering geologists during the past two years. The Committee will hear testimony from several conferees who will describe a multitude of reasons why the licensing of geologists in Kansas is important because their professional interpretations and decisions impact on public health and the quality of environmental and water resources. Kansas geologists now find themselves in the position of trying to catch up with the mainstream of other states in the proper recognition of the geologic discipline as a licensed practice. The recognition that geologic interpretations form the very basis for proper design of many engineering structures, for cost effective and efficient ground water monitoring systems in contamination site remediation projects and the selection of proper waste injection zones for deep industrial waste disposal wells has taken a long time to evolve: Such programs as Superfund, Underground Storage Tanks, and RCRA have intensified the importance of geologic application to feasibility studies, environmental assessments and state ground water protection plans. HB2099 represents the best collective effort at delineating an acceptable interface between engineering and geologic functions.

In the summer of 1995, geologists met with members of the Kansas Engineering Society (KES) and the Kansas Association of Consulting Engineers (KACE) to resolve differences in language. This effort was successful and I wish to thank Bill Henry and George Barbee for their assistance in arriving at acceptable language for last years bill and HB 2099. HB2099 contains the language and provisions which were agreeable to both the engineering and geologic community. In 1996, Substitute HB2471 also contained the language which included geologists as a profession subject

House Environment 2-11-97 Attachment 13 to the continuing education statutory mandate passed by the Legislature in 1995. HB2099 has the continuing education requirements included.

During the testimony in both the House and Senate Committees in 1996 on HB 2471, the Board of Technical Professions appeared as a neutral party but raised several issues of concern. We, as professionals were surprised to find Board opposition to the content of the Geologic Licensing Act because the measure contained provisions consistent with the licensing acts for engineers. architects, landscape architects and surveyors as well as geologist licensing acts for other states. It is my understanding the Board will appear as an opponent to HB2099. During the 1996 session, the geologic community endeavored to resolve differences with the Board, but without success. The Kansas Board of Technical Professions has some ideological attitudes toward longstanding legislative policies on the grandfathering of professionals, exemption of certain activities by professional geologists, and the purpose of tests and examinations, which are unique and would be unacceptable to any professions seeking to be licensed for the first time. The Kansas Legislature established the Board to administer licensing acts for technical professions, consequently, the geologists believe their licensing program should be housed under this administrative umbrella rather than under a separate Board of Geologists as is done in some other states. The geologists do not believe their ability to achieve licensing should be held to a higher standard than other professional groups were held to at the time their licensing act was passed.

As a part of this testimony, I have included three attachments which address concerns expressed by the Board in 1996 and apparently still exist.

- (1) Attachment I addresses the reason for the grandfathering provisions as expressed in Section 7 on page 6 of HB2099. The Board has expressed a strong desire that all geologists be tested before a license is issued. Attachment I explains why this is an ill conceived concept. It is not a condemnation of the Board's dedication to the protection of Kansas citizens but an attempt on our part to indicate grandfathering of geologist is a positive process and their fears are unfounded.
- (2) Attachment II addresses the concern by some over the exemption from licensing of those engaged in the performance of geological work which is exclusively limited to the exploration for and development of energy resources and economic minerals and does not have a substantial impact on public health, safety and welfare of citizens. This is contained in Section 6 (b) of HB2099.
- (3) Attachment III addresses facts about the ASBOG exam which is the test adopted by many states. Some Legislative concern was expressed after the Board gave testimony on the purchase of the exam as a part of the overall funding projections.

The Board ventured other concerns which require lesser discussion. One of these was the fragmentation of the Board due to the addition of a new profession. In 1978, the Kansas Legislature, in order to prevent a proliferation of separate technical profession boards dealing with the licensing of engineering and other professions whose practices and actions have impact on public health and the environment mandated the Board of Technical Professions as an umbrella

agency. In light of this fairly longstanding legislative policy, we believe the close relationship between engineering and geology in terms of everyday practice qualifies us for inclusion under the Board. We also believe that introduction of a bill for separate Board of Geologists, which many other states have, would have met with less acceptance by the Kansas Legislature. The Kansas Geological Survey has offered to administer the licensing act for geologists, if passed, during the first couple of years if the Board of Technical Professions would feel overburdened with the addition of a new profession. The Board was also concerned over the costs of program implementation for geologists licensing. As is true with the other professions licensed by the Board, we would expect that both application fees and annual fees to be commensurate with the costs of the program. The geologists are willing to pay a larger annual license renewal fee than the currently existing \$25 which is the statutory limitation. This desire carries no suggestion that the current ceiling should be raised for other professions licensed by the Board, however it does believe that \$25 per year is cheaper fare than geologists are paying for renewal licenses in other states.

I appreciate the opportunity to submit written testimony in support of House Bill 2099 and provide a perspective on some of the points of concern expressed by the Board and others in past years. Some of the conferees have been provided a copy of this testimony and will be prepared to address any questions which the members of the Committee have.

Attachment I

Reasons for the Grandfathering Provision

The purpose of the Board of Technical Professions is to safeguard the life, health, and safety of the public, and to maintain a high standard of integrity, skills, and practice in the technical professions. The Board asserts than any applicant should pass a national examination to be considered minimally competent to practice a technical profession. There are several valid reasons why this approach is flawed when applied to a group of technical professions who are being licensed for the first time. Some of these are as follows:

- (1) All states mandating geologists licensing have contained a clause which grandfathers in those who have the proper educational background, the minimum years of experience to qualify for a license and exhibit professional integrity. To require professionals who have been practicing for many years to pass an examination prior to license issuance may eliminate a large number of high quality performance professionals from carrying out their contractual obligations for clients or at least, delay continuation of their work until such time as they pass the standard exam. The purpose of the examination is to test those budding professionals who have recently graduated with the appropriate number of hours on geology courses and have less than the four years of experience. The test is to gauge their understanding of fundamentals of the science, their academic training and their short tenure of learning on the job. If all grandfathers were to be tested, a large series of specialty oriented tests would have to be designed to test how they apply the science to the current job. It is up to the individual geologist to recognize when they lack qualifications to practice in a certain field of geology where prior training is absent.
- (2) In most states, legislatures have been careful to not legislate a professional out of business by general passage of a licensing act. These legislatures have recognized the quality of work done by long standing professionals even though their formal academic training is in the distant past. The Kansas Legislature recognized the problem of some long time professionals not keeping up with new developments in their field and passes requirements for continuing education for all professions under the Board. The geologists subscribe to the continuing education requirement and applaud the legislature for their action. Some attorneys believe that the testing of all grandfathers without qualification may be unconstitutional because it assumes incompetency until proven otherwise.
- (3) Grandfathering is also a practical approach to the licensing problem. Without the licensing of those already practicing the profession, there will be very little income to the program for the first year or until the grandfathers pass the exam. Most experts in regulatory administration believe getting everyone into the program should be the first goal. The Kansas grandfather clause for geologists is unique in that persons not practicing the profession for less than four out of the last eight years may be tested.

Attachment II

EXEMPTIONS GRANTED TO OTHER PROFESSIONS

ARCHITECTS (74-7031)

1-2 Family homes & Agricultural Buildings Addition of store fronts, interior alterations, fixtures, cabinets, etc. Insurance ratings/loss prevention work

LANDSCAPE ARCHITECTS (74-7032)

Right to grow nursery stock and be called nurseryman, landscape nurseryman, gardner

Right of nurserymen to prepare and execute planting plans Practice of site development plans by architects Practice of engineering

ENGINEERS (74-7033)

Work performed for oneself on one's own premise
1-2 Family homes and Agricultural buildings
practice for the design of products manufactured for resale
Landscape Architecture for site development approaches

LAND SURVEY (74-7034)

Surveys incidental to construction and design work performed for oneself on one's own premise, (except for land conveyance) Farm surveys (except for land conveyance) Practices of Landscape Architects in performance of their duties

Attachment III

Facts About ASBOG Exam

1. The cost of purchasing the exam was \$18,000 in 1996. It is now about \$13,000. Originally the exam cost \$25,000 but has since been subscribed by 18 states thus reducing the costs.

If the state purchases the exam, the following payment options are open:

- (a) Pay for the exam up front in which case the cost would be \$13,000 with no payment in succeeding years.
- (b) Enter into a contract with ASBOG (Association of State Board of Geologists) to purchase exam over a specified number of years \$13,000/years = x dollars per year.
- (c) Enter into a contract with ASBOG whereby there is a \$25 surcharge paid by either the applicant or the state when someone takes the exam. The exam cost is \$300 (\$150 per part). In this case, the charge per exam part would be \$175 of which \$25 goes toward paying off the exam purchase cost.
- (d) Under (c); the Board of Technical Professions would not have to come up with any out of budget expenditure unless there was a decision at some later date to pay the balance of the amount either in total or by installment. No interest is involved. ASBOG does the billing to the state based on the number of examinations.
- 2. The annual dues to the ASBOG is \$3,000 and would have to come out of the fee income from the program. However, a state can belong as an associate state during the grandfather year for \$500. The only lack of privilege is that the state does not have a vote until it is a full member (\$3,000).
- 3. The cost of examination in terms of Board of Technical Profession staff workload is limited to collecting the fee for application plus examination, proctoring the exams, and notifying applicants of the results and sending out applications upon request.
 - --All exams are sent to ASBOG for grading.

<u>Analysis</u>

The costs to the Board of Technical Professions during FY1997 could be as little as \$500 for the ASBOG relationship or \$3,000 if full membership is desired.

Under ASBOG contract, the only payments to ASBOG would be for an applicant not eligible for grandfathering and where a test is taken in which case \$50 per exam surcharge or \$25/exam part would go toward the \$13,000.

The bottom line is that this is a very affordable arrangement and should not cause the Board of Technical Professions to dip into existing balances to any appreciable degree. The processing of this activity would not appear to be sufficiently burdensome to require long term extra staff. Such a small increase in total workload does not appear to warrant an additional clerical staff.



Kansas Society of Professional Engineers

A state society of the National Society of Professional Engineers

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Tuesday, February 11, 1997

Chairman Lloyd, members of the committee, I am Bill Henry, Executive Vice president for the Kansas Society of Professional Engineers and I appear before you today to present the position of no opposition by the Society to House Bill 2099.

The Board of Technical Professions currently is responsible for the licensure of engineers, architects, landscape architects and surveyors.

In the Spring and Summer of 1995 Representatives of the Geology Association and the Kansas Society of Professional Engineers and Kansas Consulting Engineers met together to discuss this licensure measure.

Kansas Society of Professional Engineers is a professional association composed of more than 1000 engineers who are licensed to practice engineering in the State of Kansas. While the society has reservations about adding new professions to the work load of the current staff of the Board of Technical Professions we do not oppose House Bill 2099 in its current form.

I have included a copy of the policy statement of the Kansas Society of Professional Engineers regarding licensure. Since Geologists do have college educations, and their practice does affect the public health and safety and a national examination is provided we believe this profession is similar to the professions that are currently licensed by the Board. Indeed our only reservation about adding this group to the Board of Technical Profession's regulation is the strain on the resources of the Board to govern this new licensed profession.

I would be happy to answer any questions of the committee in regards to our position.

Respectfully submitted,

Bill Henry, Executive Vice President Kansas Society of Professional Engineers

> HOUSE ENVIRONMENT 2-11-97 (913) 233-1867 Fax (913) 357-4153

KANSAS ENGINEERING SOCIETY BOARD OF TECHNICAL PROFESSIONS LICENSURE POLICY STATEMENT

The Kansas Engineering Society believes certain guidelines should apply to any future licensing of professions governed by the Board of Technical Professions.

First, any new profession seeking licensure should have a practice which has a definite effect on public health and safety.

Second, any new profession seeking licensure must have a nationally accepted licensure program comparable to that of the professions currently licensed by the Kansas Board of Technical Professions.

Third, any new profession seeking licensure should pay fees for the requisite support staff needed by the Board of Technical Professions.

Finally, educational requirements and experience for the practice of any new profession should be similar to those professions now governed by the Board of Technical Professions.

In the area of continuing professional competency the Kansas Engineering Society believes the Board of Technical Professions should be granted general enabling legislation to develop standards for mandatory continuing professional development for each of the professions governed by the Board.

Because of the Board's expertise and the Board's working relationship with each of the professions' practicing groups the members of the Kansas Engineering Society believe the legislative authority to adopt these standards should be broad and permissive.

F. DOYLE FAIR Consulting Petroleum Engineer Wichita, Kansas

Comments On HB 2099 On February 11, 1997 Before The House Of Representatives Environment Committee

> House Environment 2-11-97 Attachment 15

Mr. Chairman and committee members, I am Doyle Fair, a consulting petroleum engineer from Wichita. Since 1959 I have been self-employed and mineral appraisals for federal estate tax purposes have been a substantial part of my work. There is not a working day in my office when I do not come in contact with petroleum geologists.

Licensing of petroleum geologists will not cause one additional well to be drilled in Kansas. Licensing of petroleum geologists by "grandfathering" and then giving an exemption to them really says that their licensing means nothing to the state of Kansas. Petroleum geologists apparently see this as "added value" to their marketability in the job field. Their reasoning appears to be that a licensed petroleum geologist will be thought by the public at large to be more qualified than a petroleum geologist that is not licensed.

The bill's definition of "Practice of geology" includes among other things (and I read from the bill), "representation in connection with contracts entered into between clients and others and the preparation and certification of geological information in reports and on maps insofar as it involves safeguarding life, health or property." A petroleum geologist deals every day in the prospective value of the mineral property rights of royalty owners. On their recommendation an oil & gas lease is sought from one royalty owner but not another. The payment for seismic options is based on recommendations by petroleum geologists. They want investors to exchange money or "property" for an interest in a drilling prospect.

There is an old adage that those who do not learn from history are bound to repeat the same mistakes.

The State Board of Technical Professions has learned from the past that requiring an examination or examinations will reduce problems in the future. If this committee thinks the Board has improved the overall capability of those in the various professions they currently supervise, then let the State of Kansas

benefit from the Board's experience. Should the Board decide that contouring a map is the proper test for a petroleum geologist, then so be it.

Exhibit A to my remarks is the first page of the parent to HB 2099. It bears the margin notation of "KGS ... January, 1993".

The first proposed legislation was HB 2496 (Exhibit B) and started with the Committee on Energy and Natural Resources. Sec. 8(d) on the second page of the exhibit reflects wording almost identical to that used in Exhibit A. A new Sec. 9 was developed to exempt petroleum geologists from provisions of the statute but require geological documents submitted to a public agency to be sponsored by a licensed geologist.

Legislative language seems to have a character of its own. The "and", "but", "however", "if", "nevertheless", "nor" seem to have more significance than the longer words and punctuation is critical when an enforcement person interprets the statute.

Exhibit C is an enlarged copy of page 6 of HB 2099. The new Sec. 6 exempts petroleum geologists from provisions of this bill and by having a "nor" in the language it requires all geological documents to public agencies be approved by a licensed geologist. The supporters of this bill want petroleum geologists to be exempt from regulation and yet they want to carve out an area in the petroleum industry that is exclusively reserved for a licensed geologist. Under this bill all geological documents submitted by a geologist to the Kansas Corporation Commission (a public agency) have to be sponsored by a licensed geologist or unlicensed geologist having a master degree or doctorate. I am not aware that the Kansas

Corporation Commission has requested a change from how geological documents have been submitted in the past.

The hearings conducted by the Kansas Corporation Commission regarding proposed changes in the way the Hugoton Field was to be prorated is a good example of the benefits from licensing or registration in the petroleum industry. The data on which various experts based their opinions might have initially been proprietary but it eventually became public. Engineers and geologists with all sorts of degrees, licenses and registrations (experts by definition) took opposite positions on the issues with the same data.

In 1989 the Financial Institutions Reform, Recovery and Enforcement Act or "FIRREA" was passed. The end result was that every state had to have a federally approved licensing program for appraisers in that state. Valuations above a specified dollar level had to be prepared by a state licensed appraiser if a government agency was involved in the financing. Reasoning that licensed appraisers for bank mineral evaluations would eventually be required, I attended the required courses and took the 3-4 hour exam to obtain a license to appraise in Kansas.

- Was "grandfathering" permitted in the Kansas statute? -- No
- Did some appraisers decide not to get licensed? -- Yes
- Was it fair? -- Yes

As long as the appraiser worked on projects below the threshold amount, the report by an unlicensed appraiser was acceptable.

A comparable situation exists within the Board of Technical Professions:

An architect is not required to be licensed if working on plans for one and two family dwellings or agricultural buildings.

An engineer is not required to be licensed if working on products manufactured for resale to the public.

What the geologist is doing determines whether a license is required. The proponents of this bill say that petroleum geologists do not generally have a substantial impact upon the public health, safety and welfare. *THEN*, there is no need to license *all* of them. If a petroleum geologist decides to work in an area that does have a substantial impact upon the public health, safety and welfare, then the Board of Technical Professions should be free to set the rules for licensing.

The new Sec. 7 is the vehicle by which the opinion of the Kansas State Board of Technical Professions as to who should be licensed has been thrust aside and the opinions of two geological associations embraced: the American institute of professional geologists and the division of professional affairs of the American association of petroleum geologists.

The new Section 7 conflicts with 74-7017 <u>Examination requirement</u>. "No applicant seeking original license to practice any technical professional shall be entitled to such license without first meeting the requirement to take and pass an examination utilized by the board."

Many citizens want smaller government bureaucracies. If the Board of Technical Professions was interested in operating a larger bureaucracy they would quickly embrace any group of people that wanted to be licensed. Quality not quantity appears to be their goal.

My suggested changes to this bill are shown on Exhibit D. Thank you.

A BILL TO BE ENTITLED

"THE KANSAS PROFESSIONAL GEOLOGISTS PRACTICE ACT"

AN ACT

relating to the registration of professional geologists and the practice of geology; defining terms; creating and establishing the powers of the Board of Registration for Professional Geologists; establishing the requirements for registration of geologists and in specialties thereof, providing for the issuance, renewal, suspension and revocation of registration certificates; providing for the regulation of the practice of geology; making provisions for practice without the necessity of registration; prohibiting certain acts and conduct; imposing sanctions and penalties for violations of the Act; and repealing all laws or parts of laws in conflict.

BE IT ENACTED BY THE LEGISLATURE OF THIS STATE:

Section 1. Title; Purpose; Scope

- 1.1 Title. This Chapter shall be known and may be cited as "The Registration of Geologists Act of 1993."
- **1.2** Purpose. In order to safeguard life, health and property of the citizens of this State and to promote the public welfare, the practice of geology in this State is declared to be subject to regulation in the public interest.
- 1.3 Requirement for Registration. Only those persons who are registered pursuant to this Chapter, or who are exempted from or otherwise permitted hereby, shall practice, offer or attempt to practice geology or any specialty thereof, or in any manner make use of the term "Registered Professional Geologist" or claim any specialty in geology, as a professional, business or commercial identification, title, name, representation or claim or otherwise hold themselves out to the public, as provided in Section 2.7, as being qualified to practice geology or any of its specialties.
- 1.4 Public documents and reports. Any geologic report or geologic portion of a report required by or supporting compliance with municipal, county, State, or federal laws, ordinances or regulations, which incorporates or is based on a geologic study or on geologic data, shall be prepared by or under the supervision of a registered geologist as evidenced by the geologist's signature and seal as provided in Section 6.8.
- 1.5 Public Contracts. This State, its political subdivisions, and all public boards, districts, commissions, or authorities shall contract for geological services only with persons registered under this chapter or with business entities employing geologists registered under this chapter, who shall be in responsible charge of the geological work.



HOUSE BILL No. 2496

By Committee on Energy and Natural Resources

2-17

AN ACT concerning the practice of geology; providing for the licensure and regulation thereof as a technical profession; amending K.S.A. 74-7003, 74-7004, 74-7005, 74-7006, 74-7007, 74-7013, 74-7023 and 74-7033 and repealing the existing sections.

Be it enacted by the Legislature of the State of Kansas: Section 1. K.S.A. 74-7003 is hereby amended to read as follows:

74-7003. As used in this act:

(a) "Technical professions" includes the professions of engineering, land surveying, architecture and, landscape architecture and geology as the practice of such professions are defined in this act.

(b) "Board" means the state board of technical professions.

(c) "License" means a license to practice the technical professions granted under this act.

(d) "Architect" means a person whose practice consists of:

- (1) Rendering services or performing creative work which requires architectural education, training and experience, including services and work such as consultation, evaluation, planning, providing preliminary studies and designs, overall interior and exterior building design, the preparation of drawing, specifications and related documents, all in connection with the construction or erection of any private or public building, building project or integral part or parts of buildings or of any additions or alterations thereto, or other services and instruments of services related to architecture;
- (2) representation in connection with contracts entered into between clients and others; and
- (3) observing the construction, alteration and erection of buildings.
- (e) "Practice of architecture" means the rendering of or offering to render certain services, as described in subsection (d), in connection with the design and construction or alterations and additions of a building or buildings; the design and construction of items relating to building code requirements, as they pertain to architecture, and other building related features affecting the public's health, safety and welfare; the preparation and certification of any architectural design features that are required on plats; and the teaching of



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the Kansas practitioner has affixed the seal.

(d) On and after July 1, 1994, any geologic report or geologic portion of a report required by or supporting compliance with city ordinance, county resolution or state or federal laws which incorporates or is based on a geologic study or on geologic data shall be prepared by or under the supervision of a licensed geologist as evidenced by the geologist's signature and seal.

New Sec. 9. The provisions of this act requiring licensure or the issuance of a certificate of authorization under K.S.A. 74-7036 and amendments thereto to engage in the practice of geology shall not

be construed to prevent or to affect:

(a) The practice of geology by any person before July 1, 1994.

(b) The performance of geological work by officers and employees of the United States practicing solely as such officers and employees.

- (c) The performance of geological work exclusively in the exploration for and development (proving out) of energy resources and base, precious and nonprecious minerals, including sand, gravel and aggregate, and neither having a substantial impact upon the public health, safety and welfare, as determined pursuant to rules and regulations adopted by the board nor requiring the submission of reports or documents to public agencies as provided in subsection (d) of K.S.A. 74-7023 and amendments thereto.
- (d) The conduct of geologic research through academic institutions, agencies of the federal or state governments, nonprofit research institutions or for-profit organizations, including submission of reports of research to public agencies as provided in subsection (d) of K.S.A. 74-7023 and amendments thereto.
- (e) The teaching of geology or related physical or natural sciences, except for teaching of any specialty of geology affecting the public health or safety.
- (f) (1) The acquisition of engineering data involving soil, rock, groundwater and other earth materials; evaluation of the physical and chemical properties of soil, rock, groundwater and other earth materials; and the utilization of these data in analysis, design and construction by licensed professional engineers; and (2) similar geological work performed by persons or organizations licensed or registered in any other profession or occupation related to geology, provided that such work is permitted under the applicable licensing or registration law, and is incidental to the practice or the profession or occupation for which licensure or registration is required.

(g) Performance of work customarily performed by such physical or natural scientists as chemists, archaeologists, archaeological geologists, geographers, oceanographers, pedologists and soil scientists,

this act to be taken by an applicant for licensure to practice geology.

New Sec. 5. Minimum qualifications of applicants seeking licensure

as geologists are the following:

(a) Graduation from a course of study in geology, or from a program which is of four or more years' duration and which includes at least 30 semester or 45 quarter hours of credit with a major in geology or a geology specialty, that is adequate in its preparation of students for the practice of geology;

(b) proof of at least four years of experience in geology of a character satisfactory to the board, as defined by rules and regulations of the board;

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(c) the satisfactory passage of such examinations in the fundamentals

of geology and in geologic practice as utilized by the board.

New Sec. 6. The provisions of this act requiring licensure or the issuance of a certificate of authorization under K.S.A. 74-7036 and amendments thereto to engage in the practice of geology shall not be construed to prevent or to affect:

(a) The practice of geology by any person before July 1, 1998.

(b) The performance of geological work which is exclusively in the exploration for and development of energy resources and economic minerals and which does not have a substantial impact upon the public health, safety and welfare, as determined pursuant to rules and regulations adopted by the board, nor require the submission of reports or documents to public agencies.

(c) The acquisition of engineering data, geologic data for engineering purposes and the utilization of such data by licensed professional engi-

neers.

(d) Performance of work customarily performed by graduate physical or natural scientists.

New Sec. 7. (a) Subject to the provisions of subsection (b), a person who applies for licensure as a geologist before July 1, 1998, shall be considered to be qualified for licensure, without further written examination, if the person has:

(1) Experience consisting of a minimum of four years of professional practice in geology or a specialty thereof, of a character acceptable to the board; and

(2) (A) graduated from an accredited institution of higher education with a bachelor of science or bachelor of arts or higher degree, with a major in geology; or

(B) graduated from an accredited institution of higher education in a four-year academic degree program other than geology, but with 30 semester hours or 45 quarter hours of credit in geology.

(b) A person who meets the qualifications of subsection (a), in the



HOUSE BILL No. 2099

By Representatives Edmonds and Geringer

1-27

AN ACT concerning the practice of geology; providing for licensure and regulation as a technical profession; amending K.S.A. 74-7005 and 74-7006 and K.S.A. 1996 Supp. 74-7003 and and 74-7013 and repealing the existing sections.

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Be it enacted by the Legislature of the State of Kansas:

Section 1. K.S.A. 1996 Supp. 74-7003 is hereby amended to read as follows: 74-7003. As used in this act:

- (a) "Technical professions" includes the professions of engineering, land surveying, architecture and, landscape architecture and geology as the practice of such professions are defined in this act.
 - (b) "Board" means the state board of technical professions.
- (c) "License" means a license to practice the technical professions granted under this act.
 - (d) "Architect" means a person whose practice consists of:
- (1) Rendering services or performing creative work which requires architectural education, training and experience, including services and work such as consultation, evaluation, planning, providing preliminary studies and designs, overall interior and exterior building design, the preparation of drawings, specifications and related documents, all in connection with the construction or erection of any private or public building, building project or integral part or parts of buildings or of any additions or alterations thereto, or other services and instruments of services related to architecture;
- (2) representation in connection with contracts entered into between clients and others; and
 - (3) observing the construction, alteration and erection of buildings.
- (e) "Practice of architecture" means the rendering of or offering to render certain services, as described in subsection (d), in connection with the design and construction or alterations and additions of a building or buildings; the design and construction of items relating to building code requirements, as they pertain to architecture, and other building related features affecting the public's health, safety and welfare; the preparation and certification of any architectural design features that are required on plats; and the teaching of architecture by a licensed architect in a college



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or university offering an approved architecture curriculum of four years or more.

- (f) "Landscape architect" means a person who is professionally qualified as provided in this act to engage in the practice of landscape architecture, who practices landscape architecture and who is licensed by the board.
- (g) "Practice of landscape architecture" means the performing of professional services such as consultation, planning, designing or responsible supervision in connection with the development of land areas for preservation and enhancement; the designing of land forms and nonhabitable structures for aesthetic and functional purposes such as pools, walls and structures for outdoor living spaces for public and private use; the preparation and certification of any landscape architectural design features that are required on plats; and the teaching of landscape architecture by a licensed landscape architect in a college or university offering an approved landscape architecture curriculum of four years or more. It encompasses the determination of proper land use as it pertains to: Natural features; ground cover, use, nomenclature and arrangement of plant material adapted to soils and climate; naturalistic and aesthetic values; settings and approaches to structures and other improvements; soil conservation erosion control; drainage and grading; and the development of outdoor space in accordance with ideals of human use and enjoyment.
- (h) "Professional engineer" means a person who is qualified to practice engineering by reason of special knowledge and use of the mathematical, physical and engineering sciences and the principles and methods of engineering analysis and design, acquired by engineering education and engineering experience, who is qualified as provided in this act to engage in the practice of engineering and who is licensed by the board.
- (i) "Practice of engineering" means any service or creative work, the adequate performance of which requires engineering education, training and experience in the application of special knowledge of the mathematical, physical and engineering sciences to such services or creative work as consultation, investigation, evaluation, planning and design of engineering works and systems, the teaching of engineering by a licensed professional engineer in a college or university offering an approved engineering curriculum of four years or more, engineering surveys and studies, the observation of construction for the purpose of assuring compliance with drawings and specifications, representation in connection with contracts entered into between clients and others and the preparation and certification of any engineering design features that are required on plats; any of which embraces such service or work, either public or private, for any utilities, structures, buildings, machines, equipment, processes, work systems, projects and industrial or consumer products or equipment

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of a mechanical, electrical, hydraulic, pneumatic or thermal nature, insofar as they involve safeguarding life, health or property. As used in this subsection, "engineering surveys" includes all survey activities required to support the sound conception, planning, design, construction, maintenance and operation of engineered projects, but excludes the surveying of real property for the establishment of land boundaries, rights-of-way, easements and the dependent or independent surveys or resurveys of the public land survey system.

(j) "Land surveyor" means any person who is engaged in the practice of land surveying as provided in this act and who is licensed by the board.

"Practice of land surveying" includes:

(1) The performance of any professional service, the adequate performance of which involves the application of special knowledge and experience in the principles of mathematics, the related physical and applied sciences, the relevant requirements of law and the methods of surveying measurements in measuring and locating of lines, angles, elevation of natural and man-made features in the air, on the surface of the earth, within underground workings and on the bed of bodies of water for the purpose of determining areas, volumes and monumentation of property boundaries;

(2) the preparation of plats of land and subdivisions thereof, including the topography, rights-of-way, easements and any other boundaries that affect rights to or interests in land, but excluding features requiring en-

gineering or architectural design;

(3) the preparation of the original descriptions of real property for the conveyance of or recording thereof and the preparation of maps, plats and field note records that represent these surveys;

(4) the reestablishing of missing government section corners in ac-

cordance with government surveys; and

(5) the teaching of land surveying by a licensed land surveyor in a college or university offering an approved land surveying curriculum of four years or more.

(I) "Person" means a natural person, firm, corporation or partnership.

- (m) "Plat" means a diagram drawn to scale showing all essential data pertaining to the boundaries and subdivisions of a tract of land, as determined by survey or protraction. A plat should show all data required for a complete and accurate description of the land which it delineates, including the bearings (or azimuths) and lengths of the boundaries of each subdivision
- (n) "Geologist" means a person who is qualified to engage in the practice of geology by reason of knowledge of geology, mathematics and the supporting physical and life sciences, acquired by education and practical experience, who is qualified as provided in this act to engage in the prac-

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tice of geology and who is licensed by the board.

(o) "Practice of geology" means:

(1) The performing of professional services such as consultation, investigation, evaluation, planning or mapping, or inspection, or the responsible supervision thereof, in connection with the treatment of the earth and its origin and history, in general; the investigation of the earth's constituent rocks, minerals, solids, fluids including surface and underground waters, gases and other materials; and the study of the natural agents, forces and processes which cause changes in the earth;

(2) the teaching of geology in a college or university offering an approved geology curriculum of four years or more by a person who meets the qualifications for education and experience prescribed by section 5

and amendments thereto; or

(3) representation in connection with contracts entered into between clients and others and the preparation and certification of geological information in reports and on maps insofar as it involves safeguarding life, health or property.

Sec. 2. K.S.A. 74-7005 is hereby amended to read as follows: 74-7005. (a) Membership of the board shall be as follows:

(I) Four members shall have been engaged in the practice of engineering for at least eight years and shall be licensed engineers. At least one of such members shall be engaged in private practice as an engineer. At least one of such members shall also be licensed as a land surveyor, as well as a licensed engineer.

(2) Two members shall have been engaged in the practice of land surveying for at least eight years and shall be licensed land surveyors.

(3) Three members shall be licensed architects of recognized standing and shall have been engaged in the practice of the profession of architecture for at least eight years, which practice shall include responsible charge of architectural work as principal.

(4) One member shall be a licensed landscape architect and shall have been engaged in the practice of landscape architecture for at least eight years, which practice shall include responsible charge of landscape architectural work as principal.

(5) One member shall be engaged in the practice of geology, shall have been engaged in the practice of geology for at least eight years and, on and after January 1, 1998, shall be a licensed geologist.

(6) Three Two members shall be from the general public of this state.

(b) Each member of the board shall be a citizen of the United States and a resident of this state.

(c) The amendments to this section shall not be applicable to any member of the board who was appointed to the board and qualified for such appointment under this section prior to the effective date of this act.

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Sec. 3. K.S.A. 74-7006 is hereby amended to read as follows: 74-7006. (a) Whenever a vacancy shall occurs in the membership of the board by reason of the expiration of a term of office, the governor shall appoint a successor of like qualifications. All appointments shall be for a term terms of four years, but no member shall be appointed for more than three successive four-year terms. The term of each member first appointed after January 1, 1903, for the purpose of computing the length of the term of such member, shall commence on the first calendar day subsequent to the day of expiration of the preceding term, regardless of when the appointment is made, and shall end on June 30 of the fourth year of the member's term for those members whose terms commence on July 1, or on June 30 following the third full year of the member's term for those members whose terms commence on January 1. Thereafter, for the purpose of computing the length of term of a member of the board.

- (b) The terms of members appointed to the board shall commence on the July 1 immediately following the day of expiration of the preceding term, regardless of when the appointment is made, and shall expire on June 30 of the fourth year of the member's term.
- (c) Each member shall serve until a successor is appointed and qualified. Whenever a vacancy shall occur in the membership of the board for any reason other than the expiration of a member's term of office, the governor shall appoint a successor of like qualifications to fill the unexpired term.
- (d) The governor may remove any member of the board for misconduct, incompetency, neglect of duty, or for any other sufficient cause.
- Sec. 4. K.S.A. 1996 Supp. 74-7013 is hereby amended to read as follows: 74-7013. (a) The board may adopt all bylaws and rules and regulations, including rules of professional conduct, which are necessary for performance of its powers, duties and functions in the administration of this act.
- (b) The board may, through rules and regulations, may adopt, enforce, and audit mandatory continuing education as a condition for license renewal or reinstatement for each of the technical professions as determined by the board.
- (c) Subject to the provisions of subsection (d), it shall be is the responsibility of the member or members of the board who hold a license to practice the profession for which an applicant seeks to be licensed, to provide and have graded any examination required by this act to be taken by such applicant.
- (d) Before January 1, 1998, it is the responsibility of the member of the board described in subsection (a)(5) of K.S.A. 74-7005 and amendments thereto to provide and have graded any examination required by

this act to be taken by an applicant for licensure to practice geology. New Sec. 5. Minimum qualifications of applicants seeking licensure as geologists are the following: (a) Graduation from a course of study in geology, or from a program which is of four or more years' duration and which includes at least 30 semester or 45 quarter hours of credit with a major in geology or a geology specialty, that is adequate in its preparation of students for the practice 8 of geology; (b) proof of at least four years of experience in geology of a character satisfactory to the board, as defined by rules and regulations of the board-11 and 12 the satisfactory passage of such examinations in the fundamentals of geology and in geologic practice as utilized by the board. New Sec. 6. The provisions of this act requiring licensure or the issuance of a certificate of authorization under K.S.A. 74-7036 and amendments thereto to engage in the practice of geology shall not be construed to prevent or to affect: The practice of geology by any person before July 1, 1998. 18 (b) The performance of geological work which is exclusively in the exploration for and development of energy resources and economic minerals and which does not have a substantial impact upon the public health, safety and welfare, as determined pursuant to rules and regulations adopted by the board, nor require the submission of reports or documents adopted by the board, nor require the submission of reports or documents 24 to public agencies. to public agencies. (c) The acquisition of engineering data, geologic data for engineering purposes and the utilization of such data by licensed professional engineers. Performance of work customarily performed by graduate physical -(d) Performance of work customarily performed by graduate physical or natural scientists. or natural scientists. New Sec. 7. (a) Subject to the provisions of subsection (b), a person who applies for licensure as a geologist before July 1, 1998, shall be considered to be qualified for licensure, without further written examination, if the person has: (1) Experience consisting of a minimum of four years of professional 34 practice in geology or a specialty thereof, of a character acceptable to the 36 board: and (2) (A) graduated from an accredited institution of higher education with a bachelor of science or bachelor of arts or higher degree, with a major in geology; or (B) graduated from an accredited institution of higher education in 40 a four-year academic degree program other than geology, but with 30 semester hours or 45 quarter hours of credit in geology. 42 (b) A person who meets the qualifications of subsection (a), in the -(b) A person who meets the qualifications of subsection (a), in the

1	discretion of the board, may be required to take and pass an examination	1	discretion of the board, may be required to take and pass an examine
2	as required by this act if the person is not engaged in the practice of	. 2	as required by this act if the person is not engaged in the practice of
· 3	geology on July 1, 1997, and has not engaged in the practice of geology	3	geology on July 1, 1997, and has not engaged in the practice of geology
4	for at least four of the eight years immediately preceding July 1, 1997.	4	for at least four of the eight years immediately preceding July 1, 1997.
5_	(c) Upon application, a person who is licensed, registered or certified	5	(c) (b) Upon application, a person who is licensed, registered or certified
6	as a geologist in another state having standards at least equal to those		
7	required for licensure as a geologist pursuant to this act may be issued a		
8	license as a geologist pursuant to this act.		
9	(d) On and after July 1, 1997, and before July 1, 1998, upon appli-	9	(d) On and after July 1, 1997, and before July 1, 1998, upon appli-
10	cation, a person who holds a valid certification from the American insti-	10	cation, a person who holds a valid certification from the American insti-
11		11	tute of professional geologists or the division of professional affairs of the
12	American association of petroleum geologists may be issued a license as	12	American association of petroleum geologists may be issued a license as
13	a geologist pursuant to this act.	13	a geologist pursuant to this act.
14	Sec. 8. K.S.A. 74-7005 and 74-7006 and K.S.A. 1996 Supp. 74-7003		C G-F
15	and 74-7013 are hereby repealed.		
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17	publication in the statute book.		
	11 12 13 14 15	as required by this act if the person is not engaged in the practice of geology on July 1, 1997, and has not engaged in the practice of geology for at least four of the eight years immediately preceding July 1, 1997. (c) Upon application, a person who is licensed, registered or certified as a geologist in another state having standards at least equal to those required for licensure as a geologist pursuant to this act may be issued a license as a geologist pursuant to this act. (d) On and after July 1, 1997, and before July 1, 1998, upon application, a person who holds a valid certification from the American institute of professional geologists or the division of professional affairs of the American association of petroleum geologists may be issued a license as a geologist pursuant to this act. Sec. 8. K.S.A. 74-7005 and 74-7006 and K.S.A. 1996 Supp. 74-7003 and 74-7013 are hereby repealed. Sec. 9. This act shall take effect and be in force from and after its	as required by this act if the person is not engaged in the practice of geology on July 1, 1997, and has not engaged in the practice of geology for at least four of the eight years immediately preceding July 1, 1997. (c) Upon application, a person who is licensed, registered or certified as a geologist in another state having standards at least equal to those required for licensure as a geologist pursuant to this act may be issued a license as a geologist pursuant to this act. (d) On and after July 1, 1997, and before July 1, 1998, upon application, a person who holds a valid certification from the American institute of professional geologists or the division of professional affairs of the American association of petroleum geologists may be issued a license as a geologist pursuant to this act. Sec. 8. K.S.A. 74-7005 and 74-7006 and K.S.A. 1996 Supp. 74-7003 and 74-7013 are hereby repealed. Sec. 9. This act shall take effect and be in force from and after its

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THE BOARD OF TECHNICAL PROFESSIONS AND ADDITIONAL DISCIPLINES

PREPARED FOR THE HOUSE GOVERNMENTAL ORGANIZATION COMMITTEE

The Board of Technical Professions believes it can best serve the citizens of Kansas by continuing to regulate its existing array of four professions. The Board does not believe it would be efficient to add any of the disciplines or businesses being considered by the Legislature for enhancement to the Board's roster of activities. Major reasons for the Board's position are as follows:

- 1. FRAGMENTATION OF BOARD MISSION. Board effectiveness and activity is directly related to the number of disciplines regulated, regardless of the number of licensees within a discipline. Therefore, each additional discipline dilutes the board's ability to effectively monitor and regulate the practice of a technical profession, while at the same time increasing the responsibilities of the Board and its executive director by up to 20 percent, considering the following:
- Board time spent in deliberations/disciplinary hearings
- Issuance of regulations
- Approval of applicants
- Conflict resolution
- Routine handling of inquiries and complaints
- **2. IMPACT UPON BOARD SIZE/COMPOSITION**. At 13 members, the Board of Technical Professions is one of the largest regulatory Boards in Kansas and operates with a staff of only 4 employees. Adding disciplines would increase the size of the Board and would:
- Interrupt the efficiency of the Board's existing committee structure (See attached explanation)
- Require additional staff positions and attorney/investigative time
- Result in an inordinate workload for the member(s) of the newly regulated discipline(s)
- 3. CONSISTENCY WITH THE BOARD'S EXISTING REQUIREMENTS. Currently, all professions licensed by the Board are required to meet stringent requirements consisting of education, experience/internship, and passage of a rigorous national examination. The addition of discipline(s) would either require:
- Individuals now practicing, regardless of age, to pass an extensive examination; or
- The grandfathering of a large number of existing practitioners
- 4. ISSUES OF GRANDFATHERING. If a large percentage of a discipline are grandfathered, it would be appropriate to question the public benefit of placing any regulations upon the discipline. It is noteworthy that the Board's experience reflects that nearly 40% of present disciplinary cases result from the 8% of its licensees that are land surveyors, the majority being ones who were grandfathered into licensure status by legislation in 1969 and 1988.
- 5. CONTINUING EDUCATION REQUIREMENTS. As a result of 1995 legislation, the technical professions under the board are required to obtain continuing education for license renewal. At this time the board recognizes the impact involved in board time, cost and staffing needs to fully implement these requirements, and as a consequence has requested additional staff and fees for its existing operations. If an additional discipline is added, additional staff time and resources will be necessary.

House Environment 2-11-97 AHACKMENT 16 6. ECONOMIC IMPACT UPON THE REGULATED AND THE PUBLIC. Presently the Board's operations are self-sustaining, through licensure renewals and reciprocity application fees collected by the Board. New disciplines should be individually self-sustaining, or their addition would represent an unfair subsidy by the existing licensees. Therefore, any new discipline(s) being licensed would require a very high licensure fee if their numbers are relatively small. This cost will be borne by the public through increased fees for service, raising the fundamental issue of whether the public's protection is adequately enhanced by the price paid for regulation.

7. ECONOMIC IMPACT UPON THE BOARD. Any additional disciplines have an obvious fiscal impact on the Board's operations. For example, the fiscal note on H.B. 2099 indicates an estimated lump sum cost of at least \$57,775 for the first year, and an estimated lump sum cost of at least \$33,500 for subsequent years. The Board believes this is a conservative estimate of cost, since it does not include various unknown costs such as:

- Attorney and Investigative fees
- Office space and relocation (It is expected that the Board will be required to relocate its office due to this increase in activity.)
- Additional travel expenses
- Related exam costs
- Proctoring fees

WHAT IS THE BOARD OF TECHNICAL PROFESSIONS?

The primary function of the Board of Technical Professions is to carry out its statutory authority to protect the health, safety and welfare of the general public by regulating the professions of Engineering, Architecture, Land Surveying, and Landscape Architecture. A significant amount of the Board's efforts involve monitoring and regulating the practice of technical professions. The Board members review investigations and conduct formal disciplinary hearings. addition, the Board processes applications for examination of candidates and licensure of qualified individuals and corporations in the technical professions. The total number of current licensees is 11,933. The present number of Intern Engineers is 12,079. The Board of Technical Professions was created by the 1976 Legislature to consolidate the former Kansas State Registration and Examining Board of Architects, State Board of Engineering Examiners, and the Kansas State Board of Registration and Examination of Landscape Architects. That Board had eight (8) members from the four (4) professions of engineering, architecture, land surveying and landscape architecture and one (1) public member. The 1992 Legislature increased the size of the Board from nine (9) to thirteen (13) members, and provided additional authority to enforce the Board of Technical Profession's Practice Act. The current membership of the Board consists of four (4) engineers, three (3) architects, two (2) land surveyors, one (1) landscape architect, and three (3) members from the general public. The board holds regular board meetings approximately 6 times a year. All of the board's work, as well as meetings, are conducted in a committee forum with the architects and landscape architects working together as a committee, and the engineers and land surveyors working as a committee to review issues specific to those professions. Then, all 13 members meet with staff and board counsel as a full board to discuss committee recommendations, board policy issues, and disciplinary matters.