**Why to retain licensing of geologists, well drillers, pump service contractors**

**by opposing SB1821/HB1969.**

 “Arguments” by IDFPL, Rep. Reis and Sen. Althoff to end licensure of geologists.

Counter arguments, questions, and reasons to retain licensure.

 “ Let free market rule” “create opportunity”

Allowing unlicensed (untested, inexperienced and unregulated) persons to perform highly technical tasks, bore holes into aquifers, make measurements of the properties of materials at waste disposal sites, and related matters – risks drinking water security. Poor decisions by unlicensed geologists, drillers, led to past problems such as contaminated wells, leaking landfills, mistakes in waste disposal that created Superfund sites, and the need for regulations and enforcement.

Persons who cannot pass geology, water well drillers, and pump installation/repair tests might work cheaply and perhaps be popular on “Angie’s List” but risk public water quality and unrecoverable contamination of aquifers because they lack knowledge or ethical performance of regulations, construction requirements, and best practices used by licensed professionals, who are all accountable to strict standards of performance.

“The IEPA can handle the environmental issues”

Work brought before the IEPA and testimony at public hearings is based upon facts and inferences of professional scientists and engineers. Licensure is a standard by which the public can gauge or measure arguments and studies. Besides, what are the qualification of IEPA staff?

“19 states do not have geologic licensure”

Stick to Illinois. We have complex glacial geology where materials at depth can change over very short distances, and ½ of the population depends upon groundwater. Protecting the quality of groundwater is the work of licensed professions based including licensed geologists. 31 states, and Canada have professional geologist registration. Licensed geologists recognize and evaluate earth hazards (e.g., sinkholes, landslides) and work with engineers and land-use planners to ensure safe development.

“Large companies can evaluate competency of geologists”

Many of AEG’s members work or own small companies. Eliminating licensure takes away an important tool for evaluation of qualifications and requires LOTS of time to evaluate candidates. This is an unfunded burden placed on business, industry and every level of government. What layperson has expertise and time to do validate credentials and check on experience, and assess competency of applicants?

“Low risk – what is the benefit to the public? “

This is a health and safety concern. Licensure adopted because of past problems, well contamination (sick families), geology was not considered when waste disposal facilities were build (often convenience and expediency). Illinois has 72 Superfund sites. Some of the 3,430 legacy landfills are examples of ground and surface water contamination because unlicensed persons made decisions about geology – this was the reason why licensing was adopted.

The Public depends on Licensed Professional Geologists to evaluate geological issues related to public and private water supplies, tunneling and deep foundation design and construction, and environmental evaluations. The Public depends on geologic work being conducted by qualified Licensed Professional Geologists, who have met stringent and specific standards as defined by the *Professional Geologist Licensing* Act.

“No disciplinary actions, few complaints, no enforcement”

The road to adopting professional geologist licensure sorted out those who were not qualified. Up to 50% of those taking the competency exam fail. This points to the success of the licensing process.

“Why so late in complaining?”

We did not have a hired lobbyist. Or was missed. Bills were done quickly and without announcement to the examining board.

“Taking away licensure will not affect regulation.”

Asking for elaboration seemed to throw them a curve, not in the script. The ‘old’ problems will return when the licensure is eliminated. Colorado has increased litigation because there is no geologist licensure – will additional judges and courts be made to handle the additional lawsuits?

“Other disciplines such as engineers can do this work”

Professional geologists have unique knowledge and expertise. Engineers are not educated in geology nor surveying as they were in the past). Geologists are distinguished by length, breadth and depth of education, training and observational skills not possessed by engineers other trades.

“Don’t need licensure because there are no problems”

Historically there have been many problems. One instance has been with poorly sited landfills. The legacy landfills were by people who did not have geologic education. Now they are superfund sites which cost millions of dollars of public money to clean up. Led to adoption of 1993 Subtitle “C” and Subtitle “D” regulations that require geologic considerations.

The elimination of licensure will allow return of past bad practices – because it is initially cheap to ignore geology and do what is right however, the problems will return and our future generations will suffer for bad, expedient decisions.

“The profession is self-regulating, and companies vet their staff”

Perhaps large companies can perform extensive vetting, but we do not have documentation of the extent and how they do this. Most companies are small and single consultant companies which might not have the staff to ‘vet’ their staff. BACOG, Illinois Coal Association and Aggregate producers have stated that licensure helps them conduct their work, and ensures the competency of individuals entrusted with public safety. Elimination of geologist licensure will be an impediment to business.

Firms employing professional geologists require professional certification. The quality of the firm is improved by licensure of professionals. Individual geologists perform the work and each individual is responsible for maintaining proficiency and competency in the profession. Licensure is the best way to ensure that individual professionals maintain their proficiency and competency in the field.

“What efficiencies can be made in licensure?”

Ask the geologist, water well drillers and pump service contractors’ examination boards. Inquire with states which license geologists.

 “Is certifying through a professional organization is sufficient”

The American Institute of Professional Geologists does not license geologists, nor does the group administer examinations of technical knowledge. The AIPG recommends state licensure to insure public health and safety.

“Make a statutory definition of professional geologist”

The Coal Association and Aggregate Producers pushed back and argued that the EPA does not currently have a definition for "Professional Geologist," which is what SB1821 would change the requirements to in the Environmental Protection Act (currently it says "Licensed Geologist"). They had major issues with this change since there would be no qualifications for the geologist doing the work. They were really concerned about this legislation because they rely on geologists in the mines for safety. They also were questioning why would the Department get rid of something that is obviously working well? If there are no complaints, what would happen if they stopped licensing geologists? Would safety be compromised?

“What does the state get from licensure of geologists”

State gets assurance that work is being done by competent professional. Saves cost of providing strict oversight by state personnel.

Community/public gets assurance that competent work is being done and that public aquifers are protected, natural hazards are identified and owners are advised of dangers.

Questions for sponsor of HB1969

p. 179 How does one distinguish between a report submitted by a licensed professional versus someone else who claims to have education and experience, but does not? Which report is most likely to be thorough and correct? How would you know?

Engineers do not have the education, training or testing in geology but they would be permitted to do this work. One might think “Geology sounds a lot like engineering, what is the difference?” Geologists are trained to observe, measure and assess the entire physical environment, the materials that compose it (rocks, soils, and water) and the dynamic physical and geochemical processes that drive it.

Engineers are more concerned with facility design including building and structural properties along with construction and constructability considerations. Geologists interpret earth materials (soil, rock) and processes and advise how to compensate for those conditions to assure safety. Engineers take this information, and working with geologists and others, determine how to design and build safe structures in a cost-effective manner. No other profession has comparable education and professional experience.

The act also seems to want to avoid competent testing for contaminated soil from USTs.