

International Challenges will Confront State Licensure

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Abstract

Geologists are following a US trend to state licensure of professionals. The state statutes form barriers to free trade in professional services, and hobble the careers of many geologists. A growing number of international trade agreements, some signed by the US, are designed to remove such barriers and free the international trade in professional services. Australia has removed state licensure of professionals and increased the responsibility of national professional institutes, providing the lead to other countries. AIPG should grasp this unique opportunity to represent US geologists in international negotiations. Reciprocity agreements are being negotiated internationally by such institutes, not state bureaucrats. The US will have difficulty participating in international negotiations until state licensure statutes are removed or made nationally uniform and transparent. Studies by economists seeking to document public benefits from regulation of professionals indicate that the dubious benefits do not justify the increased costs. Geologists could use these studies and international trade agreements in a campaign to remove state licensure.

Introduction

Geologists in the author's home state of Colorado have drafted a state licensing statute. If signed into law, Colorado will join the other half of the US states that license geologists. In doing this, we are following a national trend to state licensing, which has been very popular among the professions. It provides guild protection under the guise of being for the safety and welfare of the public. However, in attempting to bring state licensing to Colorado, geologists are working against the growing tide of international agreements and arrangements designed to bring freedom of trade in professional services. Geologists are also working against a growing number of economic studies indicating that the protective benefits to the consumer from state licensing are inadequate to justify the significant increase in price that it inevitably brings for professional services.

Discussion

In 1994, the General Agreement on Trade in Services (GATS) was brought in under the newly formed World Trade Organization. More than 130 countries signed the agreement. It is internationally recognized as the most important multilateral trade agreement since the 1948 General Agreement on Trade and Tariffs (GATT). GATS provides a similar framework for trade in services as GATT does for trade in goods. The signatories, including the US, have agreed that developed countries will allow free trade in professional services by 2010, and the lesser developed countries by 2020.

The following quotes from the text of GATS provide the mechanism for establishing free trade in professional services and ensuring that licensing procedures do not form a restriction. The quoted text also provides for international recognition of qualifications without discrimination.

GATS Article VI (*Domestic Regulation*) Paragraph 4 states:

With a view to ensuring that measures relating to qualification requirements and procedures, technical standards and licensing requirements do not constitute unnecessary barriers to trade in services, the Council for Trade in Services shall, through appropriate bodies it may establish, develop any necessary disciplines. Such disciplines shall aim to ensure that such requirements are, inter alia:

- (a) *based on objective and transparent criteria, such as competence and the ability to supply the service;*
- (b) *not more burdensome than necessary to ensure the quality of the service;*
- (c) *in the case of licensing procedures, not in themselves a restriction on the supply of the service.*

Article VII (*Recognition*) Paragraphs 1 and 3 contain the following:

1. *For the purposes of the fulfilment, in whole or in part, of its standards or criteria for the authorization, licensing or certification of services suppliers, and subject to the requirements of paragraph 3 below, a Member may recognize the education or experience obtained, requirements met, or licenses or certifications granted in a particular country.*

1 When the term *registration* is used in the state statutes, it is generally with synonymous meaning to *licensure*, requiring the applicant to submit proof of adequate qualifications and pass a state approved exam, and providing penalties for breach of the statute or regulations.

3. *A Member shall not accord recognition in a manner which would constitute a means of discrimination between countries in the application of its standards or criteria for the authorization, licensing or certification of services suppliers, or a disguised restriction on trade in services.* (WTO, 1994).

A number of other trade agreements have been signed in recent years between nations to aid in freeing trade in services, including professional services. Major agreements involving the US are the North American Free Trade Agreement (NAFTA) signed in 1992, and agreements by the Asia-Pacific Economic Cooperation (APEC) group of countries.

NAFTA Article 1210 contains similar language on professional services to the above quotations from GATS. It also contains a comprehensive annex (Annex 1210) detailing implementation and expectations relating to professional services. It goes as far as suggesting an interview or oral examination as an alternative to a licensing examination, and encourages the development of temporary licensing (NAFTA, 1992).

Australia provides an excellent example of a developed country that has already implemented much of the professional services requirements and spirit of GATS. During past decades, Australia was following the US pattern, with its states requiring licensing under their statutes for professions such as lawyers, engineers, architects, and real estate appraisers. The six states, not the Australian Commonwealth government, have jurisdiction over occupations. In recent years, because of its international trade agreements (in particular an agreement with New Zealand), the states and the Commonwealth government have cooperated in removing these state level barriers to interstate and international trade in professional services. Australia is continuing to hand back to its national professional organizations the responsibility for enforcing standards, qualifications, and competency and ethics rules. The Australian Council of Professions, a government- and community-recognized body, has the responsibility of accrediting professional organizations and assuring that its member organizations meet high expectations in these areas.

A recent manuscript by Michael Lawrence shows how well the Australian professional system operates within the minerals industry from the perspective of The Australasian Institute of Mining and Metallurgy (AusIMM). His manuscript includes considerable discussion of enforcement of AusIMM's reporting standards and Code of Ethics. Mr. Lawrence, a geologist, is the 1999 Past President of AusIMM and sits on its Ethics Committee. His manuscript is titled, *Ethics and AusIMM's Best Practice Codes* (Lawrence, 2000).

The third Organization of Economic Cooperation and Development (OECD) Workshop on Professional Services was held 20-21 February 1997, to develop strategies for implementing the professional services portion of GATS. The Chairman, in his concluding remarks, stressed the need for member countries to examine and remove their internal barriers to the trade of their own professionals to prepare their countries for the challenges of liberalized international trade. He presented the Australian strategy as the desired path for OECD member countries to follow. He stated that the move-

ment of professionals now permitted in Australia has benefited Australian nationals.

The US implementation of these various trade agreements and their full implications for US professionals are admittedly not clear at this early stage. But that means that now is the time for us, the geological profession, to get involved, before patterns are set. GATS and related documents use broad categories into which professions are lumped. Geological services generally fall into a category called *Related scientific and technical consulting services*. Geological engineering services could fall under *Engineering services*. The author has seen evidence of engineering bodies having representation at international trade planning workshops, but not geological bodies.

In 1994, the US filed a lengthy set of commitments and exemptions for GATS with the WTO, and supplemented this for two categories of services in 1995 and 1997 (US International Trade Commission, 1997). As we should expect from the US, the exemptions are substantial. Much of the document is devoted to maintaining the rights of individual states as exemptions. Many of the professional services limitations the US imposed on its GATS commitment are counter to the commitments it earlier made under NAFTA. For *Specialty Occupations*, which includes the professional categories, a maximum of 65,000 persons annually will be allowed 3-year visas. Full licensure is required in a US state if applicable in that state. State residency requirements are specified for engineers for many states. Despite this, the following suggests that we should expect and work for change for our profession.

Beginning in 2000 the WTO will concentrate on the accounting profession. Based on the lessons it learns from that implementation, it will undertake meeting the 2010 deadline for the other professions. The international community of accountants has worked hard in recent years to standardize, developing the International Accounting Standards. The US is the only country that has not yet adopted the basic principles of those standards. The pressures on the accounting profession flow over into the appraiser profession, since they work closely together.

In July 2000, the international community of appraisers addressed international standards and qualifications in some of the sessions at the Valuation 2000 convention in Las Vegas, Nevada. The International Valuation Standards Committee (IVSC), a non-governmental member of the United Nations, led the discussions. One session focused on the need and potential mechanisms for establishing international appraiser qualifications. The author participated in discussions, and has been asked to represent the international mining industry in future discussions with IVSC, due to his current role in developing standards for mineral property appraisal.

The Chairman of IVSC, Greg McNamara, himself an Australian, discussed Australia's abolition of state licensure for real estate appraisers, and the resultant increased enforcement responsibility for its national institute of appraisers. He presented this as a shining path to guide the way for other countries in preparing for international trade in the appraiser profession. Representatives from Malaysia and Europe were also able to present evidence of some significant progress in rationalizing their appraiser regulations and qualifications, but most countries have yet to make a

start. It was conspicuous that the focus of the discussion was on the role of national and international institutes in developing and enforcing uniform qualification standards and codes of ethics. The role of state licensure was only addressed from the standpoint of it being an impediment requiring rationalization. Apparently no US state felt a need to have a representative participate in the discussions.

Out of conspicuous international need, rather than driven by GATS, the international mining community has begun working towards developing international qualifications for professionals who are responsible for reports of mineral reserves and resources under international reporting standards agreed upon in 1999. The mechanism being considered is again based on uniform qualification and competency requirements, and enforcement of standards and codes of ethics by national institutes, with the national institutes possibly being accredited by an international council.

The US appraisal profession is working hard to obtain uniformity in statutes across the country. It has also developed a national registry of qualified appraisers. Despite this, substantial interstate barriers remain for real property appraisers attempting to ply their trade nationally. Therefore, at the above international appraiser qualifications session, the author posed the question, "How can we from the US expect to be allowed to work internationally, when we won't even allow ourselves to work nationally?" In response, at the close of the convention, the chairman of the qualifications panel commented that "the US has a lot of work to do."

For us as geologists, the interstate barriers that we have created are much more severe, due to incompatible statutes, lack of temporary reciprocity, and non-recognition of "grandfathered geologists" between states. Also, our need as a professional group to work nationally and internationally is much greater. For example, in the author's work on mineral property appraisal, he must go to the mineral property, which is rarely in his home state of Colorado. Many of us have had our careers hobbled by licensure barriers between states. Therefore, the above question posed to the appraisers is of greater importance to geologists.

When discussing reciprocity for geologists and minerals appraisers with international representatives, particularly from AusIMM, the author is invariably asked, why should they allow us into their backyard when our state licensing does not allow them into our backyard (e.g., Lawrence, 1999). It seems highly unlikely that these institutes will be interested in negotiating with state bureaucrats and vice versa. Without rationalization of our state licensure we will be left out of international reciprocity agreements.

Our state statutes for professional registration have been instituted based on the theory that they benefit the public through enhancing safety and welfare. However, this theory is coming under attack. Economic studies now demonstrate that the primary result of these state barriers is guild protection.

In August 2000 the Productivity Commission, an Australian government body, published a staff research paper titled *Restrictions on Trade in Professional Services* (Nguyen-Hong, 2000). It is a comprehensive international study of the economic effects of regulation of professional services, and is partially based on an extensive review of the literature. It identifies and quantifies restrictions affecting domestic and

international trade in legal, accountancy, architectural, and engineering services for about 30 countries including the US. The document clearly demonstrates the increased price to the consumer that these barriers add. For the US, domestic barriers are estimated to add a minimum of 3.8% and possibly much more to the cost of providing engineering services, while barriers to foreign services are estimated to increase their price to the US consumer by at least 7.4%. Barriers for legal services are much greater. Nguyen-Hong cites attempts by many economists to document benefits from professional regulation as providing ambiguous to negative outcomes, suggesting that regulation is of negative benefit. From his review (page 10) he concludes "... the bulk of the literature indicates that restrictions can increase prices without offsetting benefits of improved quality." This document will likely be used to encourage the removal of remaining domestic barriers for professionals in Australia, and as a weapon under GATS and other trade agreements to aid the removal of professional barriers of other countries.

Conclusions

In light of the above, William Siok, Executive Director of AIPG, has asked the author to consider forming a committee to work with international bodies such as those mentioned above. Our goal must be to promote AIPG as the appropriate body to represent the credentials of qualified and competent US geologists. We must also be involved in establishing international standards and qualifications for geologists. This could be the once-in-a-century opportunity to greatly enhance the prestige of AIPG. The Association of State Boards of Geologists (ASBOG) is already attempting to take this representation role internationally. However, it does not yet have a mechanism to represent the geologists of 50 states, nor the geologists of all specialties.

From this author's perspective, US geologists at this moment have two choices if we do not want to be increasingly isolated from the international community, or have decisions imposed on us by bureaucrats or courts. We can follow the path described above of US real property appraisers, in attempting to institute completely uniform geologist licensure statutes across all 50 states, with a national registry body. The goal would be to make all state boundaries invisible to a geologist licensed in any one of the states. The barrier of the ASBOG exam would remain to be fought over in the international arena.

Alternatively, we can take this opportunity to follow the Australian example. This would involve using the implications of GATS and NAFTA, and studies such as Nguyen-Hong's, to blast away at the barriers that we have erected against our own interstate mobility. Are we brave enough to embrace this dream of taking away the decisions from state regulators as to whether we are qualified and competent, and put those decisions in the hands of our peers and clients who are in the best position to judge? Maybe we can even be brave enough to embrace this opportunity to use the help of the international community to also attack state licensure of engineers, which has allowed engineers to sometimes capture the work of more competent geologists.

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BOOK REVIEW

RESTORATION OF CONTAMINATED AQUIFERS, 2nd Edition

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Review by James A. Jacobs, CPG-07760, President of FAST-TEK Engineering Support Services

This popular textbook published by CRC Press/Lewis Publishers has been completely updated since the original book *Restoration of Petroleum Hydrocarbon Contaminated Aquifers* was published in 1991. The objective of this well-researched book is to present the state-of-the-art knowledge on restoration of aquifers impacted by petroleum hydrocarbons and other organic compounds and their breakdown products. This second edition expands the scope of the earlier text by examining all forms of hydrocarbon contamination. These authors are "pros," having together over 60 years of experience in the environmental field. Between them, they have written hundreds of articles and several books. Their contribution to the profession is the easy-to-understand language of these highly technical concepts. Testa, a geologist, and Winegardner, an engineer, hit a home-run with this 446- page volume.

The 13 chapters are well organized and concise. The first part of the book includes an introduction and a history and regulatory framework. The middle section of the book relates to characteristics of the subsurface with a description of hydrogeologic principles, hydrocarbon chemistry, fate and transport, and NAPL subsurface characterization. The last part of the book focuses on remedial technologies, handling of coproduced waters, remediation strategies for dissolved plumes, and treatment of impacted soil in the vadose zone. The authors also examine economic considerations of aquifer restoration, LNAPL recovery case histories, and site closure.

The value of the book is its appeal to a variety of users. Without compromising clarity, the authors provide a text that can benefit three separate groups of users: new hires, students, and practicing professionals.

As a training manual for new hires into the environmental field, this book provides hands-on and practical information that can augment the training of a field engineer or scientist. The common-sense approach, with simple and elegant explanations of why certain techniques work and why others don't work, is invaluable to the new hire. The diagrams are the types that are found in actual work-plans and reports. This aspect is invaluable to the new hire, especially for companies not having a current field training manual or program. The 174 figures and 59 tables clarify the up-to-date concepts.

As a textbook for an environmental engineering or environmental science course, the book provides the basic and advanced concepts for the student in college or short course. The real-world case studies provide value in what has been tried and what works in the field.

As an up-to-date general reference book for practicing environmental professionals, this book is well-integrated and flows from beginning to end. All the main concepts are here in this one book, creating a useful addition to the library of the environmental professional. In contrast to other books, which are a collection of articles by various authors, this book is cohesive and flows nicely from one chapter to another, hitting on the most important concepts.