

**From:** [Sunset Advisory Commission](#)  
**To:** [Brittany Calame](#)  
**Subject:** FW: Public Input Form for Agencies Under Review (Public/After Publication)  
**Date:** Wednesday, August 15, 2018 3:21:43 PM

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-----Original Message-----

From: sunset@sunset.texas.gov <sunset@sunset.texas.gov> On Behalf Of Texas Sunset Commission  
Sent: Wednesday, August 15, 2018 2:44 PM  
To: Sunset Advisory Commission <Sunset@sunset.texas.gov>  
Subject: Public Input Form for Agencies Under Review (Public/After Publication)

Agency: TEXAS BOARD PROFESSIONAL GEOSCIENTISTS TBPG

First Name: Carolyn

Last Name: May

Title: Environmental Scientist

Organization you are affiliated with:

Email:

City: Richardson

State: Texas

Your Comments About the Staff Report, Including Recommendations Supported or Opposed:

This letter is in response and opposition to the Sunset Advisory Commission Staff Report which recommended the abolishment of the Texas Board of Professional Geoscientists.

Review of the Staff Report identified a fundamental lack of understanding of the purpose and responsibilities of geoscientists in the environmental field.

Geoscientists in the environmental profession conduct Human Health Risk-Based Assessments through the evaluation of soil, groundwater, sediment, surface water, and air samples. While the Texas Risk Reduction Program guides the risk-based assessments, professional judgement is required to determine the potential for human health exposure to chemicals of concern, the potential for ecological exposure or degradation due to chemicals of concern, and the potential for the migration of the chemicals of concern through various environmental media. The following is a brief list (not all inclusive) of items that are evaluated when a risk-based assessment is conducted:

- Extensive mathematical equations to determine exposure to humans, animals, and plants;
- The movement of chemicals through the soil (clay, silt, sand);
- Hydraulic gradient of groundwater/contaminant migration;
- The diffusion of air through vadose zone;
- Geologic features that serve as preferential pathways or barriers;
- The potential impact to drinking water wells from groundwater contamination
- Inhalation of chemicals indoor and outdoor;
- The uptake of chemicals of concern by plants; and
- The potential for ingestion of chemicals of concern by humans and/or

animals.

The results of the evaluation are provided in the form of various reports which are sealed by professional geoscientists and submitted to the TCEQ for review. The TCEQ staff completes the review of the Risk-Based Assessment, which is currently taking approximately 6 months or more. The TCEQ lacks the time and resources to verify that the Risk-Based Assessments were completed ethically or that the data provided is legitimate. The TCEQ relies on the professional geoscientist to provide complete, ethical, and accurate data.

The TCEQ is able to rely upon the professional geoscientist because the TBPG has ensured that the professional has the educational background, continuing education, and ethics required to complete the Risk-Based Assessment. By abolishing the TBPG, you would be promoting the completion of non-professional, unethical assessments, and endangering the public health and environment in doing so.

The Staff Report identified three primary reasons for recommending the abolishment of the Texas Board of Professional Geoscientists (TBPG): a lack of meaningful enforcement action, no measurable impact on public protection (i.e. no catastrophic event as the impetus for creating or maintaining this regulation), and more direct oversight of geoscientists' work provided by other state agencies.

The first finding stated that the TBPG had a lack of meaningful enforcement action – “The board has never received a complaint that posed significant harm or risk to the public.” First, licensed professionals operate under a code of professional conduct. Ideally, no complaints should be received by the TBPG. The fact that minimal complaints are received reflects the ethical nature of the professionals conducting the geoscience work. Second, when a complaint is filed through the TBPG, the form that must be completed to file the complaint states, “I am personally familiar with the facts and circumstances hereinafter presented and the impropriety of this matter suggests gross negligence, incompetence, or misconduct in the practice of professional geoscience. Because this matter affects the public’s health, safety and welfare, I am filing this complaint against the above-cited person(s), entity or entities believing that their activities and/or conduct may be in violation of the Act or Board rules.” This would indicate that every complaint received poses a potential for the significant harm or risk to the public.

The second finding stated that there was no measurable impact on public protection – “History shows no catastrophic event or public harm as the impetus for creating [or maintaining] this regulation.” Again, this shows a fundamental lack of understanding of the nature of the professional geoscientist in the environmental field. Many chemicals of concern typically encountered during the risk-based assessments are toxic and carcinogenic and the effects of the chemicals to human health or the environment can be chronic or acute. Chronic effects mean that a person can be exposed to a chemical and no effect of the exposure is observed until 20 years later when the person develops cancer or another fatal disease. Please note that the TBPG was established in 2001, not even 20 years ago. Chronic effects are similar to asbestos, only there are no microscopic fibers to identify the disease. There is a purpose for toxic tort, which is defined as “personal injury lawsuits brought about by negligent exposure to dangerous chemical or manufacturing bi-products.” Risk-Based Assessments conducted by professional geoscientist evaluate the exposure potential of the public to chemicals of concern to determine if they pose a significant threat to human health. De-regulating the professional geoscientist would allow someone without the educational background or ethical oversight to complete a Risk-Based Assessment, which poses a serious threat to public health.

The third finding stated that more direct oversight of geoscientists' work is provided by other state agencies. Appendix B of the Staff Report stated that the Sunset staff interviewed staff from the TCEQ (among other agencies) when conducting this evaluation. It is difficult to believe that anyone at the TCEQ would indicate that they had the staff resources, financial resources, or that all of the staff have the educational background to provide more direct oversight to geoscientists' work. Current review time for documentation submitted to the TCEQ is approximately six months or more.

The staff is currently overworked, with multiple remediation sites to oversee, and the staff is currently underpaid.

The TCEQ is a governmental agency that is funded by tax dollars.

Transferring oversight of geoscientists' work to the TCEQ would result in additional funding, additional rules/regulation, and an increase in staff for the TCEQ. On the other hand, the TBPG has operated in the black and even contributed over \$200,000 to the general fund. Over \$200,000 to the general fund may not seem like a large contribution; however, the overall cost of the TBPG was nearly \$1,000,000 in the 2017 fiscal year. How many representatives feel comfortable recommending increased taxes for their constituency to pay for the funding and oversight of geoscientists' work?

Additional findings provided in the Staff Report that are unjustified:

- Public protection not the primary reason to initiate regulation – The staff report cited a portion of a quote from the comments section of a bulletin published by the Houston Geological Society in 1993. “What we are dealing with here is a true right-to-work-issue, folks. So, if you hope to be able to practice your geologic profession in Texas without being subservient to a registered engineer – or even to be able to practice at all – better wake up!”

What the Staff report failed to cite was the complete quotation which indicated that “the primary beneficiaries of the Texas registration act would have been ... professional geoscientists working on environmental projects that affect the public domain.” In addition, the Sunset Staff failed to cite the body of the Geological Society Bulletin, on pages 46 and 47, which indicated that one of the two primary reasons for the establishment of the TBPG was for “Public Safety and Welfare.” The bulletin stated, “We have a growing file of documented cases wherein unqualified engineers approved projects in which unappreciated geologic factors resulted in or contributed to project failure and substandard performance.”

- The Staff Report provided the figure that “Texas employed 7,780 geoscientists in 2017 while the board licensed just 4,029 – meaning that almost half of the practicing geoscientists in Texas are unregulated.”

In review of the Sunset Advisory Commission Staff Report dated July 2013 and titled, “Final Report with Legislative Action, Texas Board of Architectural Examiners, Texas Board of Professional Engineers, and Self-Directed Semi-Independent Agency Project Act” (2013 Staff Report), the licensing of Professional Engineers (PE) and the exemptions provided to PE’s were summarized. The 2013 Staff Report indicated that in 2011, “the Board licensed 2,651 new Professional Engineers, bringing the total number of licensees to 55,407. This total represented only about 37 percent of individuals who performed engineering-related work in Texas. The other 63 percent of individuals, such as engineers working for private industry, practiced under exemptions from the Engineering Practice Act.” The fact that 63% of practicing engineers are not licensed or regulated was not identified as an Issue for the Sunset Advisory Commission review.

- “While geoscientists contribute their services to public works projects throughout Texas, such as water and wastewater treatment facilities, landfills, and polluted site clean-ups, general members of the public are not typically the consumers of direct geoscience services.”

While the public does not typically directly use geoscience services, they are directly affected by the work that is completed. In the 2013 Staff Report, a review of the purpose of Architects indicates that the public is not typically the consumer of architect designs. This lack of direct involvement was not identified as an Issue for the Sunset Advisory Commission in the previous report. Please note that many consumers of geoscience work are unable to independently determine the competency of a geoscientist and without state regulation, could be at risk of contracting with someone who is not qualified to perform needed geoscience services.

There are several additional examples of the Staff Report omitting significant portions of evidence or reviewing the TBPG using a different standard than other professional organizations, which I’m sure many of my colleagues and the public will point out; however, based on the limited time to respond, not all of those examples can be listed here. To ensure public health and environmental protection, I recommend the continuation of the Texas Board of Professional Geoscientists. Please feel free to contact me with any questions - 214-346-6232. Thank you for your time.

Any Alternative or New Recommendations on This Agency: For the safety of public health and environmental protection, I recommend the continuation of the Texas Board of Professional Geoscientists.

My Comment Will Be Made Public: I agree