From: Sunset Advisory Commission
To: Brittany Calame
Subject: FW: Public Input Form for Agencies Under Review (Public/After Publication)
Date: Wednesday, August 15, 2018 2:01:58 PM

-----Original Message-----
From: sunset@sunset.texas.gov <sunset@sunset.texas.gov> On Behalf Of Texas Sunset Commission
Sent: Wednesday, August 15, 2018 1:25 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: Rosemary

Last Name: Wyman

Title: Executive Vice President, Principal Geologist

Organization you are affiliated with: Baer Engineering and Environmental Consulting, Inc.

Email:

City: Austin

State: Texas

Your Comments About the Staff Report, Including Recommendations Supported or Opposed:
August 15, 2018

To the members of the Sunset Commission,

I have prepared this letter in response to your recent recommendation to discontinue the regulation of professional geoscientists. I have been a licensed geoscientist (TX751) since the inception of the program. Please allow me to draw your attention to the following points:

1. Much of my work contributes to the protection of human health and safety.
For example, in 2007 a large (80-feet tall, 400-feet long, 250-feet wide) mulch pile caught fire in Helotes, Texas. The area was impacted by smoke, and more than 400 residents were displaced from their homes while the fire was extinguished. This process took several weeks. Unfortunately, the mulch pile was located directly over the Edwards Aquifer. Water poured onto the burning mulch would penetrate the pile, pick up chemical by-products of combustion (many of them carcinogenic), and ferry them into the aquifer. San Antonio Water System (SAWS) well fields pump more than 100 million gallons of water per day from the Edwards Aquifer, and the neighboring subdivision contained numerous sole-source domestic water wells.

I was hired to conduct aquifer protection and monitoring. Working with the firefighting company, we developed a plan to minimize the water used to extinguish the fire. I developed a network of approximately 50 wells (both domestic and municipal). We monitored the network twice daily for indicators of firewater migration. When/if a well was impacted, we set up water filtration units to keep the carcinogens out of the resident's drinking water. This project included geologic field work, flow analyses, and calculations having a very real effect on human health. Knowing that I was hired, residents were comforted by my professional credentials and many years of experience in this field. Without regulation, a professional geologist might not have been hired for the job.

2. There is currently an over-abundance of private certification and accreditation programs for niches in our industry. For example, a Google search for stormwater certification will bring up a list of private certifications. (See list below.) This list is not complete, but my point is made. When private companies can establish "certifications" without the control of regulation, the results are expensive and inconsistent. In order to protect public assets, such as lakes, rivers, and trees, we need benchmark qualifications that are backed up by government regulations.

CERTIFICATION
Certified Professional in Erosion & Sediment Control™ CPESC®
Certified Erosion, Sediment and Stormwater Inspector™ CESSWI™
Certified Professional in Stormwater Quality ™ CPSWQ®
Certified Professional in Municipal Stormwater Management ™ CPMSM®
Certified Professional in Industrial Stormwater Management ™ CPISM™
Qualified Preparer of Storm Water Pollution Prevention Plans – Texas QPswppp
Certified Stormwater Manager CSM
Certified Environmental Storm Water Compliance Professional CESCP
Qualified Compliance Inspector of Stormwater QCIS
Qualified SWPPP Practitioner QSP
Qualified SWPPP Developer QSD
Certified Erosion and Sediment Control Lead CESCL

3. I have a B.S. in Earth Sciences and an M.S. in Geology and Physics. My work requires:
a. GEOLOGY: so I can identify groundwater flow regimes, predict the potential presence / absence of water, and identify potential impacts to human health and safety based on the migration of contaminants in the groundwater.
b. PHYSICS: so I can run, analyze, and explain field tests. These include: ground-penetrating radar, potential field measurements, electro-magnetic induction, seismic, and other techniques for minimizing costs while exploring the sub-surface.
c. CHEMISTRY: so I can identify contaminants and understand their partitioning in the groundwater. This chemical knowledge keeps my clients safer, while minimizing costs.

Geology is not a profession someone can "pick up" in the field. There is a level of education that is required in order to be a good and professional geologist.

4. I have performed a significant amount of work having direct impact to the public. Another example took place at a Dollar General store in a small Texas town. There had been a leaking underground storage tank nearby, and the store was impacted by gasoline vapors. The soils directly beneath the building contained gasoline. It was financially impractical to move the store, so I installed a soil vapor extraction system in the soils immediately under the building. I also installed several injection points through the floor in the store, and began administering doses of hydrocarbon-degrading bacteria and surfactant. The vapor extraction removed the vapors and brought in fresh oxygen for the microorganisms. This was effective for several days, until the soil vapor extraction stopped working. The failure was because the clays below the building had a strong shrink/swell response to water. I changed out the formulation to a brine-tolerant bacteria mix and used salt water instead of plain water. This returned the soils to a less expanded state and allowed the project to continue. This project had an impact on the public health, safety, and welfare. I would not expect an unlicensed practitioner to be familiar enough with horizontal drilling, clay chemistries, or sodium-tolerant bacteria to have made this project work.

For these reasons (and many more provided by examples I can cite, upon request), I do not believe it is correct to say there has been no measurable impact of geoscientist licensing on public protection.

Geoscientists in the oil and gas industry are exempt from licensing. Their work affects the finding and production of hydrocarbon resources. They are not tasked with drinking water protection, contaminant migration, or other projects that affect the public health, welfare, and safety. It is not unreasonable that their vocation has a different focus.

I respectfully ask that you reconsider your findings. A qualified and regulated geoscience profession is essential to the health, welfare, and safety of the citizens of Texas.

Sincerely,
Baer Engineering and Environmental Consulting, Inc.

Rosemary Wyman, P.G. (TX751)
Executive Vice President
Principal Geologist

Any Alternative or New Recommendations on This Agency:
Continue the licensure as is.

We could also be swept under the Professional Engineering board.

My Comment Will Be Made Public: I agree