

Recommendations Report

TBPG Firm Registration Advisory Committee

Date: January 29, 2021

To: Texas Board of Professional Geoscientists
Attention: Mr. Rene D. Truan; Executive Director
333 Guadalupe, Tower 1, Suite No. 530
Austin, Texas 78701
E-mail address: rtruan@tbpg.texas.gov

Re: TBPG Firm Registration Advisory Committee – Recommendations Report

Dear Mr. Truan:

Concerns were expressed by the Sunset Advisory Commission (SAC) regarding the necessity of Geoscience Firm Registration during its review of the Texas Board of Professional Geoscientists (TBPG) as part of the 86th Texas Legislature (2019).

The Firm Registration Advisory Committee (Committee) was formed in October 2020 to address those concerns. The Committee has reviewed input from its members and others representing various aspects of the practice of professional geoscience in Texas. Included were environmental, groundwater and engineering geologists and geophysicists, soil scientists, and associated geoscience firms. Input from public and private entities that rely on professional geoscientists and their registered firms to investigate and evaluate geologic surface and subsurface conditions that impact:

- (1) the fate and transport of soluble and insoluble contaminants that threaten human health and the environment. Specifically, inclusive of critical surface water and groundwater supplies;
- (2) design and construction of critical infrastructure projects such as dams, levees, pipelines, tunnels, railways, highways and bridges, and safety of those who build them;
- (3) existing or planned structures in areas that are subject to landslides/slope failures, stream erosion, coastal erosion, subsidence, seismic movement (earthquakes), and ongoing ground surface displacement along coastal faults (fault movement which damages any structure built on top); and
- (4) availability and protection of safe groundwater for rural municipal and agriculture water supplies critical to the people of Texas.

Other licensing programs in Texas with firm registration requirements were also considered. While the Committee was tasked with providing feedback regarding the SAC recommendation to discontinue firm registration, the Committee also identified specific ways in which Professional Geoscientists (PGs) and Registered Geoscience Firms protect health and safety of the public in Texas. This information was prepared to provide clarity to not only the public, but also legislative members and future SAC efforts.

Recommendations Report

TBPG Firm Registration Advisory Committee

With respect to the continuance of Geoscience Firm Registration in Texas, the Committee's Recommendation Report is divided into two sections:

- Section 1 (Firm Registration) provides a response to our primary task from the TBPG. It is clear that public regulatory agencies and private entities generally expect a firm to be the governing entity over performance of significant geoscientific work. For this reason, firms will often have quality assurance practices to ensure the PG's experience is consistent with a project's requirements, utilize peer review, and maintain liability insurance mandated by public agencies and private entities to protect against malpractice that threatens public health and safety, and public welfare.
- Section 2 (Role in Public Safety and Health Determinations in Identifying Risks by Professional Geoscientists) to ensure the misconceptions recorded in the SAC report have a formal response with suggested recommendations for the TBPG to consider to strengthen public understanding and recognition of the PG license value.

The attached information provides clear evidence countering the SAC assertion to "discontinue geoscience firm registration," and that "state regulation of geoscience is unnecessary to protect the public." Instead, there is overwhelming evidence of the key role PGs, and registered Geoscience firms, are playing daily to regulators¹, municipalities², and the general public that ensure environmental risks and geoscientific investigations are completed by competent professionals.

The Committee would agree that the current rule regarding firm registration is not sufficiently clear that Registered Geoscience Firms provide additional protection to the public beyond individual PG licensing. Therefore, as outlined in Section 1, our recommendation is to strengthen the language within the rule to include clear additional responsibilities beyond individual PG licensing requirements.

We hope our efforts will speak to the concerns expressed within the SAC Staff Report with Final Results (2018-2019; 86th Legislature) and demonstrate the value of licensing Professional Geoscientists and Geoscience Firm Registration in Texas. These include accepting primary responsibility (liability) for work products, quality assurance and ensuring the appropriate PG disciplines are assigned to individual product elements.

¹ Note the multitude of TCEQ and RRC statutory requirements and submitted comments cited below requiring a licensed professional and regulatory communication estimating up to 95% of the selected submissions are prepared by PGs.

² Note the municipal and groundwater conservation district input on how PGs are a vital part of protecting public health and safety

Recommendations Report

TBPG Firm Registration Advisory Committee

TBPG Firm Registration Advisory Committee Members

Kenneth S. Tramm, PhD, PG (#805), CHMM
Principal Geoscientist
Modern Geosciences, LLC (Firm # 50411)

Vincent Nacewski, PG (#720)
GHD Services, Inc. (Firm #50043)

Joseph M. Reilly, MSc, PG (#2279)
Chief Geoscientist
ExxonMobil Upstream Integrated Services

Thad Alan Slaughter, PG (#1954)
Compliance Director
ENTACT LLC (Firm #50057)

Richard G. Howe, PG (#27)
Terra Cognita, LLC (Firm #50364)

Raymond Sturdivant Jr., PG (#11343)
Eagle Environmental Services, Inc. (Firm #50282)

Robert L. Voorhies PG (#3601)
Senior Environmental Scientist
A&B Labs/ A&B Environmental Services, Inc

Allen Shane Estep, PG (#4574)
President
Etech Environmental & Safety Solutions, Inc.
(Firm #50125)

Grant L. Snyder, PG (#1458)
GLS Solutions, Incorporated (Firm #50387)

W. Kevin Coleman, P.G. (#1)
Geoscience Consultants Int'l, LLC (Firm #50397)

Thomas N. Smith (#6206)
Senior Geologist, Area Environmental Manager
SpecPro Environmental, 63d RD US Army Reserves

Norman R. Carlson, PG (#4703)
Chief Geophysicist
Zonge International, Inc. (Firm #50467)

Section 1: Firm Registration

Within the SAC Staff Report, the TBPG was directed to “discontinue geoscience firm registration.”

RECOMMENDATION:

The Committee unanimously recommends that Professional Geoscience Firm Registration be continued. Additionally, adding clarity to the current rules on the role a firm can often play in the expectations of private, public, and governmental entities should be considered. Please refer below for suggested language clarifying 22 TAC §851.30(d) in context.

JUSTIFICATION:

When evaluating the need for firm registration, it is important to note that a PG operating as a sole proprietor is not required to register. This is an optional step

22 TAC §851.30(c) A currently licensed P.G. who offers services as an unincorporated sole proprietor is exempt from the firm registration requirements in this section.

To understand the value of firm registration, one must fully understand the role Professional Geoscientists currently play in investigating contaminant releases that impact soil, soilgas, groundwater, air, surface water, and sediment in addition to inspection and monitoring of subsurface facilities and geohazards, and characterization and monitoring of geologic conditions which impact design and construction of critical infrastructure projects such as dams, levees, pipelines, tunnels, railways, highways and bridges, as well as existing structures. As further detailed in Section 2 of this Recommendations Report, the PG license is vital to how regulators, the public, private entities, and municipalities/governmental bodies make decisions concerning environmental and geoscientific risk. Similar in the role a Professional Engineer (PE) may play in the design and construction of a bridge or dam, our license represents a threshold of “public trust” to confirm an individual or group of individuals have the requisite experience, training, and judgment to properly evaluate a given geoscientific issue. As clearly demonstrated in Section 2 of this report, the PG’s “public trust” centers around the evaluation of geologic conditions impacting fate and transport of environmental contaminants and the design and construction of critical infrastructure projects, as related to public health and safety, and the environment.

As part of this “public trust,” it must be recognized that larger projects, often associated with higher risk, require significant professional insurance, project teams with diverse PG disciplines/specialties, and even the expectation of a long-term presence most often associated with professional firms. This is why professional firms (e.g., groups of professionals) are most often engaged rather than individuals by private and public entities to address geoscientific concerns. It is rare to see lone professionals contracted to execute/coordinate large projects on their own. This is not to say lone

Recommendations Report

TBPG Firm Registration Advisory Committee

practitioners do not also play a significant role in the practice of geoscience. Rather, these roles are different. By maintaining both individual licenses and firm registration, the TBPG will better reflect the needs of the public, private, and governmental sectors to have both a responsible individual connected to components of every project with new geoscientific data, but also firms that are registered and feel the responsibility of the “public trust” to maintain a diverse set of licensed professionals and serve as a long-term steward of every project. This overlap addresses the concern of individual licensees who will necessarily move from one firm to another. From a practical point of view, this is why PE firms are also registered in the State of Texas. Since PGs operate in a similar manner to PEs (e.g., data collection, evaluation, risk-based decision making) and address areas of geoscientific work that can occasionally overlap, this alone is an obvious reason to maintain firm registration for the good of “public trust.”

As a second point on firm registration, the Committee was also able to verify during our cursory review for this effort that municipalities, RRC, TCEQ, and TxDOT have all required firm registration with the TBPG within their review of submissions to verify that the responding firm would be capable of performing geoscientific work that may cover multiple areas of expertise. Removing Geoscience Firm registration would leave these contracting entities without an important standard for qualifying contractors.

As a third point and perhaps more specific to where “public trust” is derived, for a firm to offer geoscientific services, there are specific demonstrations and responsibilities that are required by the law. These rules set a threshold criterion that allows entities wishing to engage a firm for professional geoscientific work to quickly verify actual capability.

From Title 6, Subtitle A (Regulation of Engineering and Related Practices) §1002.003(3a) *"Geoscience firm" means a firm, corporation, or other business entity as defined by the board and registered by the board to engage in the public practice of geoscience.*

22 TAC §851.30(a) *Registration required. Unless an exemption applies, as outlined in Texas Occupations Code §1002.351(b), a firm or corporation may engage in the public practice of geoscience only if the firm is currently registered with the TBPG; and (1) The geoscience services are performed by, or under the supervision of, a Professional Geoscientist who is in responsible charge of the work and who signs and seals all geoscientific reports, documents, and other records as required by this chapter; or (2) The business of the firm includes the public practice of geoscience as determined by TBPG rule and a principal of the firm or an officer or director of the corporation is a Professional Geoscientist and has overall supervision and control of the geoscience services performed in this state.*

22 TAC §851.30 (d) *Registration requirements. In order to be eligible to register as a Geoscience Firm, the firm must: (1) Affirm and demonstrate that the firm is an unincorporated sole-proprietorship or another business entity that offers or performs work that includes the public practice of geoscience; (2) Identify an Authorized Official of a Firm who shall be responsible for submitting the application for the initial registration of the firm with the TBPG; *** ensuring that the firm maintains compliance with the requirements of registration; ensuring that the firm renews its registration status as long as the firm offers or provides*

Recommendations Report

TBPG Firm Registration Advisory Committee

professional geoscience services; ensuring that the geoscientist is a currently licensed P.G.; and communicating with the TBPG regarding any other necessary matter; (3) Operate under a business model such that: (A) The geoscience services are performed by, or under the supervision of, a licensed Professional Geoscientist who is in responsible charge of the work and who ensures that the firm complies with all laws, codes, rules, and standards applicable to the public practice of geoscience and who signs and seals all geoscientific reports, documents, and other records as required by this chapter and ensures that all geoscientific reports, documents, and other records are signed and sealed by a licensed Professional Geoscientist; or (B) The principal business of the firm is the public practice of geoscience as determined by TBPG rule and a principal of the firm or an officer or director of the corporation is a licensed Professional Geoscientist and has overall supervision and control of the geoscience services performed in this state

***** Suggested Inclusion*****

accepts primary responsibility for all work contracted to the firm, appropriate PG disciplines are assigned to the work, appropriate peer review and quality assurance practices are in place

As demonstrated above, firm registration serves as a confirmational check on entities which wish to perform geoscientific services. With firm registration and the assigning of a PG in responsible charge of all work completed by the firm, it allows for an additional layer of oversight. Registered Geoscience Firms also serve a pivotal role in mentoring Geoscientists-in-Training (GIT) since they will often include multiple PG disciplines performing a variety of work. The responsible PG would review all work completed by the other PG's within the firm to ensure an accurate work product is conducted. Combine this with the demonstrated fact that regulatory agencies require work to be under a licensed professional (more often PG than PE) to allow assessment of public safety, and that firm registration is used by public entities to select whom they engage for services, it is clear the firm registration plays a vital role to the public and should be continued.

Section 2: Role in Public Safety and Health Determinations by Professional Geoscientists

Within the June 2019 SAC Report with Final Results were the following:

1. Continuance of the TBPG until September 1, 2025 (matching the sunset provision to the TBPEs). Note: HB1311 initially summarized that “Sunset staff found state regulation of geoscientists does not protect the public and recommended abolishing the board.” Further, the report noted that “State Regulation of Geoscientists Provides No Measurable Public Benefit and Should Be Discontinued” and “State regulation of geoscience is unnecessary to protect the public.”
2. Non-adopted elements to abolish the staff and begin wind-down efforts.
3. Direction to the TBPG to discontinue firm registration

COMMENT:

Since the SAC effort did not apparently identify representative conditions where the PG license was playing a role in public safety and this is contradictory with every member of the Committee’s experience, it was decided to provide additional clarity on this for the record and future review during the pending 2025 SAC review. It is notable than nearly all comments received by SAC were in support of the TBPG and licensing. We highly encourage review of these by any future SAC effort (<https://www.sunset.texas.gov/reviews-and-reports/agencies/comments/3082>).

As a first step in our effort to understand the SAC conclusions, the Committee reviewed the witness lists for both the March 12, 2019 House Committee Report (HB 1311) and April 16, 2019 Senate Committee Report (HB 1311). Since members of the Committee are familiar with municipal and state requirements within solicitations and guidance that PG, or PE, sealed efforts are required before acceptance, it was curious that not a single representative from a Texas municipality nor State agency (i.e., Texas Commission on Environmental Quality; TCEQ, Railroad Commission of Texas; RRC) requiring this license were present. In response to an email inquiry from the Committee, the current Voluntary Cleanup Program (VCP)/Brownfields Program Coordinator for the RRC included their “estimate that 95% of reports that I have received are from PGs.”³

During our review and visit with State agencies, it became apparent that no real effort to solicit formal input from the proper entities depending on the use of a PG license was made so legislative representatives could be fully informed. To rectify this, the Committee obtained demonstrative information from the TCEQ, RRC and municipal representatives for inclusion with this report. Selected excerpts from public comments to the SAC effort are included as well since many speak specifically to the role PGs play in protecting human health and the environment. These examples are provided below for reference.

³ Communication with TCEQ and RRC for this effort confirmed that many areas of geoscientific evaluation are outside typical PE areas of expertise. Hence, PGs play a more significant role in performance of this work.

Recommendations Report

TBPG Firm Registration Advisory Committee

RECOMMENDATIONS:

The Committee recommends the following be considered by the TBPG to enhance and provide clarity in the role PG licensing plays to the public.

- **Regulatory Coordination** – The appointment of a Regulatory Liaison whom can work with the TCEQ, RRC, and other interested entities on obtaining representative metrics concerning the role PGs play in regulatory submissions, provide comment on regulatory guidance, and solicit input on TBPG efforts to enhance the license.
- **Public Outreach** – The TBPG should review current outreach efforts to regulatory entities, governmental entities, legislative bodies, and educational institutions to ensure the vital role being played by licensed PGs is being communicated. As a recent license addressing a field (Professional Geoscience) that has significantly fewer years of professional practice than engineering, it is incumbent on the TBPG to improve our outreach efforts and exemplify the role we play in protecting human health and the environment.
- **Evaluation of Additional Practice Areas** – While the Texas Geoscience Practice Act is a clear example of how expansive the Professional Geoscience area of practice is with Geology, Soil Science, and Geophysics as defined practice areas (disciplines), as the field has matured, more areas may merit individual definition and licensure. One possible practice area the Committee would like to be considered is an “Environmental” or similar discipline. While this will require the TBPG (e.g., Regulatory Liaison) to work with regulators on the areas of demonstrated knowledge and experience, it would likely serve both the public and regulatory community to clearly include these skill sets as a valued part of Professional Geoscience.

EXAMPLES:

The following provides a brief list of regulatory requirements that use the PG license to ensure all submissions have adequately addressed the evaluation of human health and public safety. This is not meant to be a complete listing as other items beyond those noted may also require performance under a licensed PG.

Recommendations Report

TBPG Firm Registration Advisory Committee

Texas Commission on Environmental Quality

As noted in the TCEQ's Mission Statement, "the Texas Commission on Environmental Quality strives to protect our state's public health and natural resources consistent with sustainable economic development." Hence, if the TCEQ sees the importance of licensed geoscientists in the collection and reporting of data so it is acceptable for decision making, this a basic place to start.

The TCEQ PG Working Group provided multiple examples of guidance and statutory references where the PG license is essential. Further, the TCEQ so values the PG license, that its own Leaking Petroleum Storage Tank (LPST) Corrective Action Project Manager (CAPM) allows use of the PG license as an exemption from the testing for this certification (see 30 TAC §30.195).

The TCEQ PG Working Group prepared the following summary to provide clarity on sealed submissions prepared by both PEs and PGs. Where both PE and PG notations are included, the TCEQ PG Working Group estimated an approximate 50/50 split in performance⁴ could be assumed.

Program Area	PE Seal	PG Seal
Radioactive Materials Division		
UIC rules and applications require P.E.s to stamp/seal well designs/well completion diagrams and well plugging reports	Mainly by PE	
UIC Class I application and the Class V Aquifer Storage and Recovery (ASR) application - Specific geology report		Always by PG
For modeling associated with Class I wells (e.g., pressure buildup evaluations), both P.E.s and P.G.s have stamped/sealed, just based on the knowledge/availability of the specific applicant/consultant	PE	PG
For UIC Class III in-situ uranium mining and for Class V remediation related injection well submittals,	PE	PG

⁴ Electronic correspondence with K. Tramm F(Modern Geosciences) from A. Berehe (TCEQ) on December 16, 2020

Recommendations Report

TBPG Firm Registration Advisory Committee

Program Area	PE Seal	PG Seal
UIC Class III in-situ uranium mining and for Class V well construction diagrams	Mainly by PE	
Edwards Aquifer Protection Program		
Edwards Aquifer Rules require a PE seal for submittal of an (most) application.	Mainly by PE	
Edwards Aquifer Rules - applications that require a Geologic Assessment		Always by PG
Remediation Division		
Affected Property Assessment Reports (APARs) per rule requirement Title 30 Chapter 350 - Most of these reports include information that would need a PG seal (unless a PE would be qualify to sign them).		Mainly PG
Ground water monitoring reports		Mainly PG
Leaking PST sites must also be signed (seal not required) by a registered Corrective Action Specialist (RCAS) and Corrective Action Project Manager (CAPM). Note that the RCAS/CAPM signatures are required only for LPST sites, and the Professional Geoscientist and RCAS/CAPMs can be the same person. Professional Engineers and Professional Geoscientists may sign in place of RCAS/CAPMs if they have applied for this reciprocal arrangement and have been approved by the TCEQ."	PE	PG
Water Quality Division		

Recommendations Report

TBPG Firm Registration Advisory Committee

Program Area	PE Seal	PG Seal
Concentrated Animal Feeding Operations (CAFOs) and Subsurface Area Drip Dispersal System (SADDs) program applications	Mainly PE	PG
Groundwater monitoring plans/data reports	PE	Mainly PG

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY - SUBMITTALS WHICH INCLUDE INFORMATION CREATED/PRODUCED BY LICENSED PROFESSIONAL GEOSCIENTIST (PG)

■ Waste Permits –

- Municipal Solid Waste Landfill Applications – application and guidance: https://www.tceq.texas.gov/permitting/waste_permits/msw_permits/msw.html#authorization
Rules – 30 TAC Chapter 330
([http://texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=330](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=330))

- Non-hazardous Industrial Solid Waste Permit Application – see attached file (Nonhazardous Industrial Waste Pllication.docx, page 16).

Applicable rules can be accessed at:

https://www.tceq.texas.gov/permitting/waste_permits/iHW_permits/IHW_Rules.html

- RCRA Hazardous Solid Waste Permit application – see attached (RCRA Part B Application.pdf).

Information and guidance:

https://www.tceq.texas.gov/permitting/waste_permits/iHW_permits/iHW.html

Permit application format –

https://www.tceq.texas.gov/permitting/waste_permits/iHW_permits/iHW.html (see page 6)

Applicable rules can be accessed at:

https://www.tceq.texas.gov/permitting/waste_permits/iHW_permits/IHW_Rules.html

■ Underground Injection Control - Portions of the following documents must be prepared by PGs for submittal. Links to the applications and/or forms are included.

- UIC Class I Injection Well Application (initial, renewals, and amendments)
https://www.tceq.texas.gov/permitting/waste_permits/uic_permits/UIC_Guidance_Class_1.html
- UIC Class III Area Permit Application (initial, renewals, and amendments)
https://www.tceq.texas.gov/permitting/waste_permits/uic_permits/UIC_Guidance_Class_3.html

Recommendations Report

TBPG Firm Registration Advisory Committee

- UIC Class V Injection Well Inventory/Authorization Form (initial and amendments)
https://www.tceq.texas.gov/permitting/waste_permits/uic_permits/UIC_Guidance_Class_5.html
- UIC Class V Injection Well Application for Aquifer Storage and Recovery (initial and amendment)
https://www.tceq.texas.gov/permitting/waste_permits/uic_permits/UIC_Guidance_Class_5.html
- UIC Salt Cavern Disposal Supplemental Information Application
https://www.tceq.texas.gov/permitting/waste_permits/uic_permits/UIC_Guidance_Class_1.html
- Aquifer Exemption Request
- Well Completion Report
- Well Closure Report
- Status Report
- Monitoring Report
- General Correspondence containing cross-sections, diagrams, maps, geologic opinions, etc.
- See also the attached documents with instructions for submitting geologic information – (PG Seal Instructions UIC May 2018.docx and UIC Geoscience Technical Review rev O.pdf)
- **Site Assessments**
 - Phase II Assessments (e.g., Phase II Site Investigation Reports)
- **Risk-Based Assessment Reports** and other reports (e.g. groundwater monitoring reports) submitted to comply with the Underground and Aboveground Storage Tanks program (30 TAC, Chapter 334):
 - statute: <https://statutes.capitol.texas.gov/Docs/WA/htm/WA.26.htm#26.365>
 - Rule:
 - ([http://texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=334](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=334));
 - Corrective action project managers requirements:
([http://texreg.sos.state.tx.us/public/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=334&rl=451](http://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=334&rl=451))
 - ([http://texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=30&sch=E&rl=Y](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=30&sch=E&rl=Y))
- Affected Property Assessment Reports and other reports (e.g., groundwater monitoring reports) submitted to comply with the Texas Risk Reduction Program (TRRP) Rule (30 TAC, Chapter 350) specific rule citation §350.1 (2))
(<https://www.tceq.texas.gov/remediation/trrp/trrrule.html>):
 - Corrective Action Program – permitted (compliance plans) and non-permitted sites
 - Voluntary Cleanup Program (VCP)- instructions on the VCP application (see page 4 Section X – attached document VCP_Instructions_Geoscientists.pdf).

Recommendations Report

TBPG Firm Registration Advisory Committee

- State Superfund program - also see 30 TAC 335.348(n)
([http://texreg.sos.state.tx.us/public/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rl oc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=335&rl=348](http://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rl oc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=335&rl=348))
- Dry Cleaner Remediation Program (DCRP) –also DCRP application’s page 8, requires PG or PE Seal (see attached document, DCRP_Instructions_Geoscientist_Pg.8.pdf)
- Remediation State Lead cleanup contracts for:
 - Leaking Underground Storage Tank (LPST) sites
 - State superfund
 - DCRP
 - Additional guidance and forms can be found for each of the following programs at the sites indicated below:
 - LPST - https://www.tceq.texas.gov/remediation/pst_rp/downloads.html
 - TRRP - <https://www.tceq.texas.gov/remediation/trrp/guidance.html>
 - VCP - <https://www.tceq.texas.gov/remediation/vcp/vcp.html#Forms>
 - DCRP - https://www.tceq.texas.gov/remediation/dry_cleaners/forms.html
- Edwards Aquifer Program – Geologic Assessments
 - Instructions for Geologic Assessments
https://www.tceq.texas.gov/assets/public/compliance/field_ops/eapp/F-0585_geologic_assessment_instructions.pdf
- Water quality permits:

Certain permit applications are reviewed by agency PGs to evaluate a proposed or existing site to ensure compliance with agency rules, and protection of groundwater quality consistent with the Texas Water Code. Some of the agency’s rules require reports or certifications by licensed PGs to provide site-specific information that ensures groundwater protection requirements are met.

Any time interpretation of geoscience is required, such as characterizing groundwater or soils, a PG, or qualified PE, is to provide that information in a certified report.

Below is a list of PG-certified plans or certifications required by rule or the Water Quality program:

- Recharge Feature Plans for subsurface area drip dispersal systems (30 TAC Chapter 222)
- Recharge Feature Certifications for concentrated animal feeding operations (30 TAC Chapter 321, Subchapter B)
https://www.tceq.texas.gov/assets/public/comm_exec/pubs/rg/rg-433.pdf
- Soil Evaluation Plan (30 TAC Chapter 222)
- Lack of Hydrologic Connection certification (30 TAC Chapter 321, Subchapter B)
- Well Buffer Exception Requests for confined animal feeding operations (CAFOs)
- Sludge rules (30 TAC 312) require a certification of results from a groundwater monitoring plan or a liner certification to demonstrate that a sludge disposal unit will not contaminate an aquifer.

Recommendations Report

TBPG Firm Registration Advisory Committee

- A PG or qualified PE must certify any required Groundwater Monitoring Plan and any results that provide interpretation of the data from required groundwater monitoring. A Groundwater Monitoring Plan could be required by the Playa Lake Policy statement or for a permittee to demonstrate groundwater protection.
- For wastewater treatment units or disposal areas located on the Edwards Aquifer, a geology report from a PG identifying any recharge features (this report is not required to comply with 30 TAC 213).

Below is a list of agency forms for municipal, industrial, sludge, and CAFO permits that have some required components to be completed by PGs. All can be queried at:

https://www.tceq.texas.gov/cgi-bin/comm_exec/forms.pl

- TCEQ-10055 Industrial Wastewater Permit Application Technical Report
- TCEQ-10054 Domestic Wastewater Permit Application Technical Report
- TCEQ-00744 (Form): Application for Permit to Process, Surface Dispose, or Incinerate Sludge (PDF)
- TCEQ-10451 (Form and Instructions): Application for Permit for Beneficial Land Use of Sewage Sludge (Word)
- TCEQ-00760 (Form): CAFO Technical Packet
- TCEQ-20111 (Form and Instructions): Notice of Intent (NOI) for Concentrated Animal Feeding Operations under the TPDES General Permit (TXG920000)

WATER QUALITY DIVISION

The Water Quality Division (WQD) is responsible for issuing wastewater permits for industrial and municipal facilities, sludge permits, septage registrations, concentrated animal feeding operations (CAFOs), stormwater permits, and wastewater reuse authorizations.

In addition to the rule packages below, the WQD may require geoscience information submitted by a facility to support a permitting decision or a variance to a rule requirement (where allowed) to be submitted by a Texas licensed professional geoscientist or engineer, in accordance with the Texas Geoscience Practice Act or Engineering Act. Certain permits, for example may require the development of a groundwater monitoring plan or a springs/seeps monitoring plan. **These plans involve geoscience and/or engineering and are required to be certified by a PG or PE. As a necessary part of the certification, the Division also verifies firm registration.**

RULES REQUIRING CERTIFICATION BY A TEXAS LICENSED PROFESSIONAL GEOSCIENTIST (OR ENGINEER):

CHAPTER 213 EDWARDS AQUIFER (more detail below)

RULE §213.5 Required Edwards Aquifer Protection Plans, Notification, and Exemptions

CHAPTER 222 SUBSURFACE AREA DRIP DISPERSAL SYSTEMS

RULE §222.73—Soil Evaluation

RULE §222.77--Protection of Groundwater (rule does not specify that the information is required by a PG, but when we require this geoscience information, it needs to comply with TGPA)

Recommendations Report

TBPG Firm Registration Advisory Committee

RULE §222.79 Recharge Feature Plan

RULE §222.81 Buffer Zone Requirements

RULE §222.125 Vertical Separation (rule does not specify that the information is required by a PG, but when we require this geoscience information, it needs to comply with TGPA)

RULE §222.151 Prohibitions (rule does not specify that the information is required by a PG, but when we require this geoscience information, it needs to comply with TGPA)

CHAPTER 309 DOMESTIC WASTEWATER EFFLUENT LIMITATION AND PLANT SITING

RULE §309.12 Site Selection to Protect Water in the State

RULE §309.13 Unsuitable Site Characteristics

RULE §309.20 Land Application of Sewage Effluent

CHAPTER 312 SLUDGE USE, DISPOSAL, AND TRANSPORTATION

RULE §312.44 Management Practices (rule does not specify that the information is required by a PG, but if the facility chooses to submit site specific data in lieu of published information, it needs to comply with TGPA)

RULE §312.64 Management Practices

CHAPTER 321 CONTROL OF CERTAIN ACTIVITIES BY RULE

SUBCHAPTER B CONCENTRATED ANIMAL FEEDING OPERATIONS

RULE §321.34 Permit Applications

RULE §321.38 Control Facility Design Requirements Applicable to Concentrated Animal Feeding Operations (CAFOs)

RULE §321.40 Concentrated Animal Feeding Operation (CAFO) Land Application Requirements

RULE §321.47 Requirements for Animal Feeding Operations (AFOs) Not Defined or Designated As Concentrated Animal Feeding Operations (CAFOs)

SUBCHAPTER C MEAT PROCESSING

RULE §321.55 Protection of Groundwater

TCEQ Forms (permit applications and instructions)

All TCEQ forms can be found here: https://www.tceq.texas.gov/publications/search_forms.html

TCEQ-10053-inst (Instructions): Instructions for Completing the Domestic Wastewater Permit Application (Word)

TCEQ-10053 (Form): Domestic Wastewater Permit Application (Word)

TCEQ-10054 (Form): Domestic Wastewater Permit Application Technical Report (Word)

TCEQ-10054 (Form): Domestic Wastewater Permit Application Technical Report (Word)

TCEQ-10055 (Form): Industrial Wastewater Permit Application Technical Report (Word)

TCEQ-10056 (Form and Instructions): Sewage Sludge Technical Report (Word)

TCEQ-00760 (Form): CAFO Technical Packet

TCEQ-00565 (Form and Instructions): Instructions and Application to Register a Site for Beneficial Land Application of Domestic Septage (Word)

General Permit

TXG920000 Concentrated Animal Feeding Operations

Recommendations Report

TBPG Firm Registration Advisory Committee

Edwards Aquifer Rules citations

30TAC213.3 (14) defines “Geologist” as A Texas licensed professional geoscientist who has training and experience in groundwater hydrology and related fields that enable that individual to make sound professional judgments regarding the identification of sensitive features located in the recharge zone or transition zone.

The rules require a Geologist perform different tasks:

213.3 (13) **Geologic assessment** - A report that is prepared by a geologist describing site specific geology.

Water Pollution Abatement Plans: 213.5(b)(3) (3) Geologic assessment. For all regulated activities, the applicant must submit a geologic assessment report prepared by a geologist describing the site-specific geology. The report must identify all potential pathways for contaminant movement to the Edwards Aquifer. Single-family residential subdivisions constructed on less than ten acres are exempt from this requirement. The geologic assessment report must be signed, sealed, and dated by the **geologist** preparing the report.

Organized Sewage Collection Systems: 213.5(c)(3)(K) Sewer lines bridging caverns or other sensitive features. Sewer lines that bridge caverns or sensitive features must be constructed in a manner that will maintain the structural integrity of the line. When such geologic features are encountered during construction, the location and extent of those features must be assessed by a **geologist** and must be reported to the appropriate regional office in writing within two working days of discovery. Notification and inspection must comply with the requirements under subsection (f) of this section.

Organized Sewage Collection Systems: 213.5(c)(4)(C) Geologic assessment. A geologic assessment, as described in subsection (b)(3) of this section, must be performed by a geologist along the path of the proposed sewer line(s), plus 50 feet on each side of the proposed sewer line(s). The geologic assessment report must be signed, sealed, and dated by the **geologist** preparing the report.

USTs: 213.5(d)(2)(C) Geologic assessment. For all facilities located on either the recharge zone or transition zone, a geologic assessment prepared by a geologist, as described in subsection (b)(3) of this section, must be submitted for the site. The geologic assessment report must be signed, sealed, and dated by the **geologist** preparing the report.

ASTs: 213.5 (e) (2)(C) Geologic assessment. For all facilities located on either the recharge zone or transition zone, a geologic assessment prepared by a geologist, as described in subsection (b)(3) of this section, must be submitted for the area containing the aboveground storage tank system. The geologic assessment report must be signed, sealed, and dated by the **geologist** preparing the report.

Notifications and Inspections: 213.5(f)(2)(B) Regulated activities near the sensitive feature may not proceed until the executive director has reviewed a geologic assessment report prepared by a geologist that consists of information required under subsection (b)(3)(C) and (D) of this section for the sensitive feature and has reviewed and approved the methods proposed to protect the sensitive

Recommendations Report

TBPG Firm Registration Advisory Committee

feature and the Edwards Aquifer from potentially adverse impacts to water quality. The geologic assessment report must be signed, sealed, and dated by the **geologist** preparing the report.

213.5(f)(2)(B)(i) Upon completion of any lift station excavation, a **geologist** must certify that the excavation has been inspected for the presence of sensitive features. The certification must be signed, sealed, and dated by the geologist preparing the certification. Certification that the excavation has been inspected must be submitted to the appropriate regional office.

213.5(f)(2)(B)(i)(II) Construction may continue if the **geologist** certifies that no sensitive feature or features were present.

213.5(f)(2)(D) For an approved underground storage tank facility plan, a geologist must certify that a completed tankhold excavation has been inspected for the presence of sensitive features. The certification must be signed, sealed, and dated by the **geologist** preparing the certification.

213.5(f)(2)(D)(i) Construction may continue if the **geologist** certifies that no sensitive feature or features were present.

*Please see the attached Geologic Assessment form requires the **Firm's registration** number on the first page. Additionally, the attached Instructions to Geologists document calls out the requirement of a geologist (PG). Also, the attached Geologic Assessment table must also be signed and sealed by a PG.*

Radioactive Material Division

Examples of application forms for Underground Injection Control (UIC) Program permits highlighting of the requirements for Professional Geoscientists (P.G.) and Firms to conduct, review, stamp/seal their geoscience work. Listed below and attached are some of the key UIC rules and documents:

- TCEQ UIC Rules in Title 30 Texas Administrative Code (30 TAC) Sec. 331.21 – see page 38
- TCEQ UIC Rules in 30 TAC 331.62(a)(9) and 331.65(b)1 – see pages 6, 19, 20
- TCEQ UIC Class I Injection Well Permit Application – see pages 6, 7, 27, 28, 38, 40, 41
- TCEQ UIC Class V ASR Application Form – see pages 3, 14, 15

P.G. requirements pertaining to the TCEQ Radioactive Materials (RM) regulatory program and licensing. RM licenses are issued by the TCEQ for disposal of radioactive wastes, including low-level radioactive wastes and non-oil and gas naturally occurring radioactive materials (NORM). RM licenses are also issued for uranium recovery operations, including in situ recovery of uranium from relatively shallow geologic formations in Texas. Listed below and attached are relevant documents relating to the role of Texas P.G.s and RM licenses:

- Licensing Brief Description
- Technical Review SOP
- Geotechnical Review SOP

Recommendations Report

TBPG Firm Registration Advisory Committee

Remediation Division

The division oversees the cleanup of hazardous and nonhazardous pollutants released into the environment using a risk-based approach. Except for release from underground and above ground storage tanks regulated under 30 TAC 334, the Texas Risk Reduction Program (TRRP) rules govern all cleanups overseen by the division. Under both rules there are requirements that geoscience work be signed, sealed and dated by qualified professionals as required by the TPG rules.

- TRRP requirements can be found under 30 TAC 350 Subchapter A:
§ 350.1(2) – All engineering, geoscientific, and surveying information submitted to the agency shall be prepared by, or under the supervision of, a licensed professional engineer, licensed professional geoscientist, or licensed professional surveyor and shall be signed, sealed, and dated by qualified professionals as required by the Texas Engineering Practice Act, the Texas Geoscience Practice Act, the Texas Professional Land Surveying Practices Act and the licensing and registration boards under these acts.
- Petroleum Storage Tanks cleanups regulated under 30 TAC 334 the requirement for PG are found under 30TAC 30 Occupational Licenses and Registrations - Subchapter E: §30.195(b) A professional geoscientist licensed to engage in the public practice of geoscience in the State of Texas may become licensed as a corrective action project manager and is exempt from the requirements in this subchapter by submitting:
 - (1) an application form provided by the executive director;
 - (2) a signed written request;
 - (3) a copy of the license as a professional geoscientist; and
 - (4) a written statement from the Texas Board of Professional Geoscientists (TBPG) that the applicant is currently licensed to engage in the public practice of geoscience in the State of Texas and that the TBPG is not aware of any reason that the applicant is not qualified to perform corrective action. A geoscientist who obtains a license as a corrective action project manager in this manner is exempt from the requirements in this subchapter.

(c) The commission shall reserve the authority to pursue all appropriate enforcement actions, sanctions, and or penalties, in accordance with applicable law and rules if the TBPE or the TBPG does not pursue appropriate disciplinary or enforcement actions due to a lack of statutory or regulatory authority or jurisdiction, or for any other reason.

Railroad Commission of Texas

The RRC's mission is to serve Texas by "stewardship of natural resources and the environment, our concern for personal and community safety, and our support of enhanced development and economic vitality for the benefit of Texans."

<https://www.rrc.state.tx.us/about-us/organization-activities/mission-statement/#:~:text=Our%20mission%20is%20to%20serve,for%20the%20benefit%20of%20Texans.>

RRC PERMITTING

Within the RRC Oil and Gas Application and Permits website guidance

(<https://www.rrc.state.tx.us/oil-gas/applications-and-permits/environmental-permit-types-information/>) the following is noted.

Engineering and geologic work products must be prepared under seal of a registered professional engineer (P.E.) or geologist (P.G.), respectively, as required by the Occupations Code Chapters [1001](#) and [1002](#).

RRC OPERATOR CLEANUP PROGRAM

The Operator Cleanup Program (OCP) under the Site Remediation Section is tasked with oversight of complex pollution cleanups performed by the oil and gas industry. Complex sites include those that occur in sensitive environmental areas as defined by 16 TAC3.91 (SWR 91) and may require site specific cleanup levels based on risk. Additionally, Operator Cleanup Program staff may be involved in the review of cases where the source of contamination is uncertain.

Sites are referred to the Site Remediation Section by the RRC District Offices, Commission Legal Enforcement Section and directly from industry. A significant number of sites are identified by due diligence assessments on oil and gas properties as a result of corporate mergers, acquisitions or other business activities.

When cleanup activities are successfully completed by the operator, Commission staff may issue a "No Further Action" letter acknowledging completion.

"Reports or documents containing geoscience services or work must be sealed by a professional geoscientist as required by the Texas Geoscience Practice Act. For questions regarding these requirements, please visit the [Texas Board of Professional Geoscientists website](#)."

VOLUNTARY CLEANUP PROGRAM

The Voluntary Cleanup Program (RRC-VCP) provides an incentive to remediate Oil & Gas related pollution by participants as long as they did not cause or contribute to the contamination. Applicants to the program receive a release of liability to the state in exchange for a successful cleanup.

Recommendations Report

TBPG Firm Registration Advisory Committee

The RRC-VCP utilizes an application process with an initial \$1,000 application fee which is applied to the costs associated with staff oversight of the cleanup. Due to changes in state law, a surcharge of \$1,500 will be added to all applications effective 1 May 2012.

When cleanup is completed, the RRC will issue a Certificate of Completion which embodies the release of liability to the state for a participant (and subsequent owners) who did not cause or contribute to the contamination and acquire the certificate by fraud, misrepresentation, or knowing failure to disclose material information.

“NOTICE TO GEOSCIENTISTS: Please be advised that Professional Geoscientists seals are to be provided as required by law on reports submitted to the Site Remediation Section.”

STATE MANAGED CLEANUP PROGRAM

The Site Remediation Section utilizes the Oil & Gas Regulation and Cleanup (OGRC) funds in coordination with the Railroad Commission of Texas District Offices to clean up pollution of abandoned oil and gas sites.

Funding for the program comes from regulatory fees, permit fees and bond fees paid by the Oil and Gas industry.

An abandoned site becomes a candidate for state cleanup when the responsible party fails or refuses to take action or is unknown, deceased or bankrupt. Cleanup prioritization is based on public health, safety and the protection of the environment.

“NOTICE TO GEOSCIENTISTS: Please be advised that Professional Geoscientist seals are to be provided as required by law on reports submitted to the Site Remediation Section.”

Comments from Regulatory Staff, Academic and Governmental Bodies Tasked with Ensuring Public Safety

Given the number of individual municipalities and related governmental agencies with specific guidance that has a direct impact on PG-led work, it is difficult to outline the number of requirements they have within the limited scope of this effort. However, below are a few of these comments that appear overlooked by the SAC in their effort as none appears reflected in their final report. This is unacceptable once you truly realize the pivotal role played by licensed PGs. A few excerpts provided to the Committee or obtained from actual comments submitted to the SAC are provided below. Additionally, the public entities noted below will often require firm registration when soliciting work. Further, Geoscience Firms offer increased risk protection over individual practitioners who will often have a limited professional liability insurance when compared to a firm.

CITY OF DALLAS

“The City of Dallas does not support discontinuing the regulation of Professional Geoscientists (PG). We believe that the PG license has value and does provide meaningful public protection. Having PG licensure is important to the City of Dallas given that we rely on the data generated and opinions provided when making environmental and regulatory decisions on construction, remediation, and protectiveness of our efforts/programs. In addition, the City of Dallas Municipal Setting Designation (MSD) Program ordinance relies on applications being sealed by a licensed Professional Geoscientist. The PG license gives staff, City Management, and City Council comfort that work is being completed ethically and to an acceptable standard and that contaminated soil and groundwater has been accurately and sufficiently evaluated. At MSD public meetings, the requirement of a licensed PG signing off on the data provided has been valuable when the City is supporting that the data we have received is expected to be accurate and thorough. The PG license gives credibility to the MSD applications received, especially when data is challenged by citizens.”

Zoe Halfman
Legislative Manager, City of Dallas
August 16, 2018

“At the City of Dallas, we are in charge of many contracts and vendors who provide services ranging from soil, groundwater, air sampling to remediation activities, hydrogeological studies, and groundwater studies. As part of the City's requirements to provide this service, our city ordinances have built in language that a vendor must have a licensed professional geoscientist who adheres to guidelines to provide factual data, protection of human health and the environment, and have professional moral/ethical obligations. By dissolving this board as well as the p.g. requirements, the City is put into an awkward position of utilizing vendors who may not have the educational or professional background in providing the citizens of Dallas reliable factual data with moral and ethical implications.”

Joseph Vu
Environmental Coordinator; City of Dallas Office of Environmental Quality
August 14, 2018

Recommendations Report

TBPG Firm Registration Advisory Committee

CITY OF HOUSTON

Within the City's Municipal Setting Designation Application is the following:

"Please note: The City of Houston will not support a Municipal Setting Designation (MSD) Application unless a Professional Geologist (P.G.) or Professional Engineer (P.E.) has certified that the groundwater plume is stable or decreasing, fully delineated, and the source has been removed.

This statement should be supported with historical groundwater monitoring data showing the plume as stable or declining, and fully delineated."

<https://www.publicworks.houstontx.gov/msd>

STAFF AT TCEQ

While the TCEQ appears to have provided no response to the SAC, multiple project managers within the TCEQ made time to communicate their personal thoughts.

"I review applications and reports for municipal solid waste landfills. The documents include important geoscientific data that are essential for knowing how to properly design, operate, and monitor a facility. Having a requirement that geoscientific work be performed by a licensed geoscientist ensures that the investigator has the necessary geoscience education and experience, and will adhere to ethical standards to do the work competently. Requiring that geoscientists be licensed results in quality applications that help assure facilities will not become sources of future environmental problems and risk to the public."

Arten Avakian

TCEQ Project Manager – Waste Section

August 15, 2018

"The conclusions put forward in the executive summary are either short-sighted or result from an incomplete understanding of the totality of processes which produced them. There has never been a more important time to have state regulatory oversight for the quality of work produced by geoscientists. Regarding health and safety, Texas cannot claim to be a leader among states in the realm of vapor intrusion. However, real estate property transactions and due diligence standards have changed and this very real exposure potential is now and will continue to be a growing concern for both Texas residents and workers.

The detection, transport, and ultimate fate of toxins in the subsurface, potentially migrating into breathing zones, is best performed by geoscientists of demonstrated competence. The public demand for a professional standard and licensure is actually quite high, considering third party liability concerns that owners and operators of contaminated property face. Indeed, if nothing else, the requirement for licensure ethics is critical in this realm, creating a level playing field where one may not have existed previously. Acting with little to no state guidance on this matter, it is even more imperative that a licensing board remain to oversee the quality of work."

Joseph Bell

TCEQ Project Manager – VCP and Corrective Action

August 15, 2018

Recommendations Report

TBPG Firm Registration Advisory Committee

“I oppose the conclusion of the staff report, abolishing the Texas Board of Professional Geoscientists, due to the need for regulation of people doing geoscience work. The board is very thorough in its vetting of new applicants, ensuring that all licensed PGs are qualified (not including the grandfathered licenses that will issued less and less as time goes on). Abolishing the TBPG will also create a need for re-writing the state contracts that include PG qualifications in the pay items. Furthermore, abolishing the TBPG will undo the progress that has been made in standardizing licensing requirements for geoscience across the US.”

Elizabeth McConnell
TCEQ project Manager
AUGUST 14, 2018

GROUNDWATER CONSERVATION DISTRICTS AND AQUIFER AUTHORITIES

The Texas Alliance of Groundwater Districts (TAGD) was established in 1988 to provide a means for Groundwater Conservation Districts (GCDs), the regulatory arm of groundwater management in Texas, to stay current in groundwater science, policy and management. TAGD currently represents 85 GCDs, and 43 associate members comprised of groundwater lawyers, geoscientists and consultants. Decisions made by GCDs rely significantly on reports produced by geoscientists. Every day permitting decisions are premised in a mandate to balance the protection of landowners’ rights with the management of the resource.

“Regional permitting decisions, that ultimately affect water availability in the State Water Plan, are fundamentally premised in long term planning decisions to protect the public and ensure that there is sufficient water for quickly growing future needs. As such, demands on geology and geoscience in groundwater regulation are much greater today than they were in the past, and have much greater impacts on public protection. Credible geoscience is essential to groundwater management in order to ensure the protection of both landowners and the resource.”

Sarah Rountree Schlessinger
Executive Director
Texas Alliance of Groundwater Districts
August 16, 2018

“The removal of the TBPG would lead to the probable deterioration of the quality of reports and encourage the District’s and other State agencies to hire professional geologists from other states. Professional geoscientists clearly provide for the protection of life and property of the state's citizens. The District opposes the closing of the TBPG.”

James Smith
Mesquite Groundwater Conservation District

“On behalf of the Prairie lands Groundwater Conservation District, I want to express my appreciation for this opportunity to provide comments and my strong opposition to the Texas Sunset Advisory

Recommendations Report

TBPG Firm Registration Advisory Committee

Commission Staff Report (the Staff Report) on the Texas Board of Professional Geoscientists (the Board) recommendation that the Board be abolished, as well as the recommendation that the requirement for geoscientists to be licensed also be abolished. The Prairielands Groundwater Conservation District routinely engages the services of Professional Geoscientists to perform technical work in multiple areas that is clearly necessary for the protection of public health and safety.”

Jim Conkwright, General Manager
Prairielands Groundwater Conservation District
August 15, 2018

“The Texas Board of Professional Geoscientists (TBPG) is vital to upholding ethical and professional standards within the geoscientist community. I believe that abolishing the TBPG is not a sensible solution to the issues observed by the SAC, and that the TBPG is necessary to uphold professional geoscience practices and protect public health. As an analogy: low crime in an area doesn’t negate the need of policemen to uphold the law and protect the public.”

Laurel Galm
Project Manager – Edwards Aquifer Authority

The North Plains Groundwater Conservation District opposes the Sunset staff recommendation to abolish the Texas Board of Professional Geoscientists and repeal the Texas Geoscience Practice Act. The district opposes the recommendation because abolishment of the Act would represent a clear threat to the health, safety, and welfare of the public.

Harold Grall
President of the Board
North Plains Groundwater Conservation District

The Staff Report recommends that the Texas Board of Professional Geoscientist be abolished because it serves no “public protection”. This conclusion is downright false. At PGCD, our professional geoscientists have the primary responsibility for a wide range of issues that would be included in the goal of “public protection”.

C. E. Williams
General Manager and Region A Water Planning Chairman
Panhandle Groundwater Conservation District
August 15, 2018

HIGHER EDUCATION

“According to the Texas Sunset Advisory Commission's (Commission) review of the TBPG, it has been recommended by the commission to abolish the TBPG. A key reason for that recommendation, based on the review, is that the "state regulation of geoscience is unnecessary to protect the public. "Unfortunately, such a recommendation is based on misinformed information. My experience

Recommendations Report

TBPG Firm Registration Advisory Committee

working for the State of Texas in a technical regulatory capacity (TCEQ); educator to the regulated community (Texas A&M); and licensed Professional Geoscientist (Geology), has garnered enough case examples to prove otherwise.”

Michael Kuitu
Texas A&M Extension

“As a practicing geoscientist for almost 20 years, I am writing to register my objection to the proposed discontinuation of the Texas Board of Professional Geoscientists (TBPG). Licensing of professional geoscientist within the state serves as the gold standard by which professionals are measured. The finding of the review panel that “history shows no catastrophic event or public harm as the impetus for creating this regulation, nor any documented demand from the public or consumer protection groups for it” is classic retrospection.

Ask yourself “moving forward, will the world have more or less demand for use of healthy soils for food production? Does the world face more or fewer instances of pollution of soil resources? Is there more or less likelihood of legal recourse in settling soil-related land disputes?” Who is qualified to address those soil related concerns?

I find the proposed disbanding to the TBPG distasteful and a disservice to the citizens of the State of Texas. This is not an agency that consumes large portions of the state budget. Rather, it is a small agency that licenses professionals who oversee the proper use, management, and conservation of one of our most critical natural resources. I earnestly encourage the Sunset Advisory Commission to rescind its recommendation of abolishment of the TBPG.”

David Weindorf
Professor and BL Allen Endowed Chair of Pedology
Texas Tech University
August 9, 2018

“The Texas Board of Professional Geoscientists should not be sunset because it maintains public safety by assuring that geoscientists are held to a high level of professional skill, experience, and ethics and that their actions advance the public interest. Without the Professional Geoscientist licensure being overseen by the Board, fly-by-night “geologists” could masquerade as professionals without being held accountable to minimum accepted professional standards.”

Brad Wolaver
Professor – University of Texas at Austin
August 12, 2018

Recommendations Report

TBPG Firm Registration Advisory Committee

Attachment 1: Witness Lists During Senate and House Hearings on Sunset of TBPG

WITNESS LIST

HB 1311

HOUSE COMMITTEE REPORT

Licensing & Administrative Procedures Committee

March 12, 2019 - 8:00 AM

For :

Howe, Richard G. (Self)
Mace, Robert (Self)
May, Carolyn (Self)
Tintera, John (Self; Texas Alliance of Energy Producers)

Against :

Ginn, Vance (Texas Public Policy Foundation)
Panju, Arif (Institute for Justice)

Registering, but not testifying:

Against :

Dumoit, Jeremy (Self)
Waldrop, David (Self)

On :

Constantino, Morgan (Sunset Advisory Commission)
McCoy, Wesley (Texas Board of Professional Geoscientists)
Truan, Rene David (Tx Board of Professional Geoscientists)

WITNESS LIST

HB 1311
Senate Committee Report
Business & Commerce

April 16, 2019 - 8:00 AM

FOR:

Coleman, Kevin (also providing written testimony) (Self; AEG, Texas Geoscience Council), Cedar hill, TX
Lee-Brand, Beronica (Self) , Leander, TX
Mace, Robert (Self) , Austin, TX
Oliver, Wade Professional Geoscientist (Self) , Sugar Land, TX

AGAINST:

Ginn, Vance PhD Senior Economist (Texas Public Policy Foundation), Austin, TX
Linton, Keith (also providing written testimony) (Self) , The Woodlands, TX
Panju, Arif Managing Attorney (Institute for Justice), Austin, TX

Registering, but not testifying:

FOR:

MacDougal, Vanessa Ms (Self) , Austin, TX
McCoy, Wesley Enforcement Coordinator (Self; Texas Board of Professional Geoscientists), Austin, TX
Webb, Dale (Self) , Austin, TX

AGAINST:

Vaughan, Ashley (Self) , Austin, TX

ON:

Constantino, Morgan Staff Attorney (Sunset Advisory Commission), Austin, TX
Truan, Rene David Mr. (Tx Board of Professional Geoscientists), Austin, TX

Providing written testimony:

FOR:

Stevens, Bill Consultant (Texas Alliance of Energy Producers), Austin, TX

Recommendations Report

TBPG Firm Registration Advisory Committee

Attachment 2: Selected Communication

From: [Leslie Bruce](#)
To: [Kenneth Tramm](#); [James Harcourt](#)
Cc: [Peter Pope](#)
Subject: RE: TBPG Firm Registration Advisory Committee
Date: Thursday, December 3, 2020 9:48:46 AM

Of all of the sites I have worked on, I have only received two reports from someone who is only a PE. This PE was also not the principal geologist for the site and was rather submitting a design plan for a remediation system they had designed. There is one PG that I work on many sites with (mostly VCP and Brownfields) that is also a PE.

In short, I'd estimate that 95% of reports that I have received are from PGs and not PEs. My colleagues in OCP may have a different estimate for that though.

Leslie (Bruce) Etzel
VCP/Brownfields Program Coordinator
Railroad Commission of Texas
512-463-3384
Take our Customer Service Survey

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

From: Kenneth Tramm <ktamm@moderngeosciences.com>
Sent: Thursday, December 3, 2020 9:37 AM
To: James Harcourt <James.Harcourt@rrc.texas.gov>
Cc: Leslie Bruce <leslie.bruce@rrc.texas.gov>; Peter Pope <Peter.Pope@rrc.texas.gov>
Subject: Re: TBPG Firm Registration Advisory Committee

CAUTION: This email originated from outside of the Railroad Commission of Texas. Do NOT click links or open attachments from unknown sources without first confirming the message is legitimate. If you believe this to be a malicious and/or phishing email, please contact the ITS Help Desk at 512-463-7229. Do not respond to or forward the email, click on any links or open any attachments without guidance from the Help Desk

Leslie,

Is it possible to get any stats (even anecdotal) on the number and/or percentage of submissions requiring a professional seal that are done by a PG rather than PE?

For example, on VCP or OCP submissions do you see 90% prepared by a PG vs PE?

My experience suggests PGs represent the overwhelming majority, but any information you might be able to provide would be great. Even a general poll around the office may help.

If you have any other suggested data or information to aid my effort please let me know.

All the best! kt

Kenneth S. Tramm, PhD, PG, CHMM
Modern Geosciences
Sent from the field.
Have a great day!

> On Dec 1, 2020, at 1:17 PM, Kenneth Tramm <ktamm@moderngeosciences.com> wrote:
>

From: [Abiy Berehe](#)
To: [Kenneth Tramm](#)
Cc: [April Hoh](#); [Lorrie Council](#); [Maria Lebron](#)
Subject: RE: PG Working Group
Date: Wednesday, December 16, 2020 8:10:39 AM
Attachments: [image006.png](#)

Hi Ken –

The short answer to your question is “Yes”. In our quick search, it was difficult to provide you hard numbers but those mixed seals can be interpreted as 50/50.

We appreciate your work on this, and do not hesitate to contact us for any question you may have.

Thanks,

Abiy

From: Kenneth Tramm <ktramm@moderngeosciences.com>
Sent: Tuesday, December 15, 2020 5:28 PM
To: Abiy Berehe <abiy.berehe@tceq.texas.gov>
Cc: April Hoh <april.hoh@tceq.texas.gov>; Lorrie Council <lorrie.council@tceq.texas.gov>; Maria Lebron <maria.lebron@tceq.texas.gov>
Subject: RE: PG Working Group

Thank you so much Abiy.

Where you have both is it mixed on who seals? Like 50/50?

Very helpful. kt

Kenneth S. Tramm, PhD, PG, CHMM

5100 Thompson Terrace

Colleyville, Texas 76034

(o) 682.223.1322 ext 204

(m) 817.371.5520

(e) ktramm@moderngeosciences.com

[www. moderngeosciences.com](http://www.moderngeosciences.com)



This message and all attachments contain information that is confidential and/or privileged, or may contain attorney work product. If you are not the intended recipient, you are hereby requested to please delete all copies immediately and notify the sender.



From: Abiy Berehe <abiy.berehe@tceq.texas.gov>
Sent: Tuesday, December 15, 2020 2:27 PM
To: Kenneth Tramm <ktramm@moderngeosciences.com>
Cc: April Hoh <april.hoh@tceq.texas.gov>; Lorrie Council <lorrie.council@tceq.texas.gov>; Maria Lebron <maria.lebron@tceq.texas.gov>
Subject: RE: PG Working Group

Hello Mr. Tramm –

Please find the table below that shows an overall picture of the stats you were looking for in terms of PG and PE seals. Hope, this information would be helpful to you and let's know if you need any other information.

Thanks,

Abiy

Program Area	PE Seal	PG Seal
Radioactive Materials Division		
UIC rules and applications require P.E.s to stamp/seal well designs/well completion diagrams and well plugging reports	Mainly by PE	
UIC Class I application and the Class V Aquifer Storage and Recovery (ASR) application - Specific geology report		Always by PG
For modeling associated with Class I wells (e.g., pressure buildup evaluations), both P.E.s and P.G.s have stamped/sealed, just based on the knowledge/availability of the specific applicant/consultant	PE	PG
For UIC Class III in-situ uranium mining and for Class V remediation related injection	PE	PG

well submittals,		
UIC Class III in-situ uranium mining and for Class V well construction diagrams	Mainly by PE	
Edwards Aquifer Protection Program		
Edwards Aquifer Rules require a PE seal for submittal of an (most) application.	Mainly by PE	
Edwards Aquifer Rules - applications that require a Geologic Assessment		Always by PG
Remediation Division		
Affected Property Assessment Reports (APARs) per rule requirement Title 30 Chapter 350 - Most of these reports include information that would need a PG seal (unless a PE would be qualify to sign them).		Mainly PG
Ground water monitoring reports		Mainly PG
Leaking PST sites must also be signed (seal not required) by a registered Corrective Action Specialist (RCAS) and Corrective Action Project Manager (CAPM). Note that the RCAS/CAPM signatures are required only for LPST sites, and the Professional Geoscientist and RCAS/CAPMs can be the same person. Professional Engineers and Professional Geoscientists may sign in place of RCAS/CAPMs if they have applied for this reciprocal arrangement and have been approved by the TCEQ."	PE	PG
Water Quality Division		
Concentrated Animal Feeding Operations (CAFOs) and	Mainly PE	PG

Subsurface Area Drip Dispersal System (SADDs) program applications		
Groundwater monitoring plans/data reports	PE	Mainly PG

From: Kenneth Tramm <ktamm@moderngeosciences.com>

Sent: Thursday, December 3, 2020 9:35 AM

To: Maria Lebron <maria.lebron@tceq.texas.gov>

Cc: Abiy Berehe <abiy.berehe@tceq.texas.gov>; April Hoh <april.hoh@tceq.texas.gov>; Lorrie Council <lorrie.council@tceq.texas.gov>

Subject: Re: PG Working Group

Hi Abiy,

Is it possible to get any stats (even anecdotal) on the number and/or percentage of submissions requiring a professional seal that are done by a PG rather than PE?

For example, on TRRP submissions do you see 90% prepared by a PG vs PE?

Similar for PST submissions?

My experience and visits with TCEQ staff suggest PGs represent the overwhelming majority, but any information you might be able to provide would be great. Even a general poll around the VCP section or PST group may help.

If you have any other suggested data or information to aid my effort please let me know.

All the best! kt

Kenneth S. Tramm, PhD, PG, CHMM

Modern Geosciences

Sent from the field.

Have a great day!

On Nov 23, 2020, at 4:05 PM, Maria Lebron <maria.lebron@tceq.texas.gov> wrote:

Good afternoon Kenneth-

Attached are several documents that we hope will assist in answering your inquiry

concerning specific references within "TCEQ guidance, IOMs, and rules where a licensed professional geoscientist (or "geologist")" is noted. The attached word document entitled "PG Submittal List" was provided by our PG workgroup during the TBPG sunset review. We are also attaching additional rule references, application forms, etc. that reference PGs.

The new point of contact for the TCEQ PG workgroup is Abiy Berehe (who I have cc on this email). Feel free to contact him should you need additional information or questions.

Regards - Maria

<F-0585_geologic_assessment_form.pdf>

<F-0585_geologic_assessment_instructions.pdf>

<F-0585_geologic_assessment_instructions.pdf>

<PG Submittal List_TCEQ.docx>

<rule references for PG work.docx>

<TCEQ UIC Rules 30 TAC 331 Subch A PG Rules 331.21.pdf>

<TCEQ UIC Rules 30 TAC 331 Subch D PG Rules 331.62a9 331.65b1.pdf>

<TCEQ UIC Class V ASR Application Form PG Requirements.pdf>

<TCEQ Radioactive Materials Licensing Description 11-18-20.pdf>

<RM LicenseTechnicalReviewSOP.pdf>

<RM License GeotechnicalReviewSOP.pdf>

<TCEQ - UIC Class I Injection Well Permit Application PG Requirements Highlighted.pdf>