Rules Coordinator Railroad Commission of Texas Office of General Counsel P.O. Drawer 12967 Austin, TX 78711-2967

Re: Comments on "Amend re: HB 1284 (2021), RRC's sole jurisdiction over carbon sequestration wells"

July 1, 2022

Dear Ms. Savage,

Thank you for your careful consideration of our comments on 16 TAC Chapter 5 and the Railroad Commission's (RRC) Pre-Application for Class VI Primacy from the U.S. Environmental Protection Agency (EPA). Below you will find a summary of our comments by topic, followed by more detailed comments in the order of the rule sections. Our organizations represent Texas communities in oil and gas development regions that are expected to see the brunt of Class VI development and conversion of Class II wells to Class VI wells, whether authorized or not. We respectfully oppose the commission's pre-application for Class VI primacy from the EPA.

Many of our communities in the Texas Gulf Coast, the Eagle Ford Shale, and the Permian Basin regions are predominantly people of color, low income, and/or are already overburdened by heavy industrial activity and poor state oversight. Environmental justice communities in Texas will continue to be disproportionately affected by CCUS strategies, and our communities' concerns and proposals deserve serious consideration.

The RRC has not fulfilled its duty to protect underground sources of drinking water (USDWs) in Texas, its monitoring and enforcement program fails to adequately steward natural resources and the environment or protect personal and community safety, and it is clear that commission leadership lacks the necessary care and understanding of the importance of preventing failures with carbon dioxide infrastructure and mitigating greenhouse gas emissions.

In our comments, we have asked a number of questions and we sincerely request a response from the commission on these questions. As Texans, we are all too familiar with state agencies ignoring our concerns and requests for information, and we are well aware of the unequal leverage that private industry has over state agencies compared to the public. Nonetheless, we submit that it is vital for the commission to participate in dialogue with the public in an effort to resolve potential conflicts posed by Class VI carbon dioxide injection.

Attached, you will find our detailed section-by-section comments on proposed Chapter 5 amendments. Aside from the changes that we are proposing in Chapter 5, we recommend the commission consider undertaking a legitimate and thorough overhaul of its monitoring and enforcement programs for both the oil and gas division and the pipeline safety department. The current annual Oil and Gas Division Monitoring and Enforcement Strategic Plan required by House Bill 1818 has proven to be slow and insufficient in addressing the many serious structural problems with monitoring and enforcement at the

commission.¹ Members of the public who have commented on the last two Draft Monitoring and Enforcement Plans have identified problems with RRC's complaint response,^{2,3} record keeping,⁴ location coordinate records,⁵ emergency response,⁶ well plugging enforcement,⁷ financial assurance requirements,⁸ language accessibility,⁹ and ineffective penalty structure.¹⁰ The final drafts of these plans have made a few formatting or descriptive changes, but did not present legitimate structural reforms to better serve the public.

The sitting Railroad Commissioners have either publicly denied that climate change is human caused or have derided federal efforts to curtail greenhouse gas emissions from the oil and gas supply chain. 11, 12, 13 These statements give us little confidence that the commission will be prepared to improve its monitoring and enforcement function in a manner that prevents leaks and failures on carbon dioxide pipelines, Class VI wells, and Class II wells. We request that the commission respond on whether it will consider passing a resolution to acknowledge the vast body of scientific evidence supporting that climate change is human caused, that significantly reducing emissions of carbon dioxide in the next decade is an essential mitigation tool to curb the worst effects of climate change, and that it is the commission's duty to plan for and make every reasonable effort to prevent harm to communities from climate change and greenhouse gas mitigation infrastructure. Furthermore, we recommend that the commission support federal rulemakings to reduce methane emissions across the natural gas supply chain and significantly limit the reasons it allows for granting flaring and venting rule exceptions.

Further, these proposed rule changes will set the stage for the buildout of additional carbon capture and storage (CCS) or carbon capture, utilization, and storage (CCUS) infrastructure, which the Intergovernmental Panel on Climate Change has stated in its Working Group III report "[has] not been

¹ An act relating to the continuation and functions of the Railroad Commission of Texas; providing for the imposition of fees. 85th R.S. ch. 57, 2017 Tex. Gen. Laws 123.

² Public comments on Railroad Commission's Draft Monitoring and Enforcement Plan for FY 2022. July 6, 2021. Comment from Tara Jones, Chuck Lesniak, Emma Pabst, Commission Shift. Retrieved from: https://commissionshift.org/wp-content/uploads/2021/07/2021.07.06_Public-Comments-on-RRC-OGM E-Plan-Commission-Shift.pdf

³ Public comment on Railroad Commission's Draft Monitoring and Enforcement Plan for FY 2023. April 29, 2022. Comments from Ashley Watt, Sierra Club, Earthworks, Laura Briggs, Neta Rhyne, Tara Jones, Commission Shift. Retrieved from: https://www.rrc.texas.gov/oil-and-gas/compliance-enforcement/enforcement-activities/

⁴ Id. comment from John Conner. Supra note 2, comment from Ty Edwards.

⁵ Supra note 2, comment from Emma Pabst. Supra note 3, comments from John Conner and Sierra Club.

⁶ Supra note 2, comment from Tara Jones.

⁷ Supra note 2, comment from Lower Brazos Riverwatch. Comment from Ty Edwards, Middle Pecos Groundwater Conservation District. Supra note 3, comments from Lower Brazos Riverwatch, Sierra Club, Laura Briggs, Schuyler Wight, Commission Shift.

⁸ Supra note 2, comment from Lower Brazos Riverwatch, Michael Martin, Commission Shift, and Molly Rooke. Supra note 3, comment from Lower Brazos Riverwatch and Schuyler Wight.

⁹ Supra note 2, comments from Cecilia Begham, Lower Brazos Riverwatch, Commission Shift, Sierra Club, Alyssa Garza, Bianca Paz, Camila Abbud, Christian Marquardt, Desiree Miller, Donna Hoffman, Emma Pabst, Fernando Lugo, Gia Martinez, Graciela Blandon, Kiana Limón, Miguel Escoto, Rachel Ortega, Ranjana Bhandari, Renee Guzman, Samantha Cooney, and Virginia Palacios. Supra note 3, comments from Commission Shift, Lower Brazos Riverwatch and Sierra Club.

¹⁰ Supra note 3, comments from Ashley Watt, Dr. Kathryn Masten, Sierra Club, Commission Shift.

¹¹ Christian, W. (2018, April 24). ICYMI: Commissioner Christian Column - "The science on climate change is not settled." Railroad Commission of Texas. https://www.rrc.texas.gov/news/042418a/

¹² WFAA. (2020, October 17). Inside Texas Politics: How environmental protections factor into Texas Railroad Commission race. [Timestamp: 7:30] https://www.youtube.com/watch?v=Ddey-4_sZAI

¹³ Twitter. Oct. 2, 2021. @ChristiCraddick. https://twitter.com/ChristiCraddick/status/1444389975148085248

tested at a large scale," and entails many uncertainties and risks, including "significant land and water tradeoffs (high confidence)...In addition, high-salinity brines are produced from geologic carbon storage..."

14, 15 or displaced, if already in the well, with pressure inducing seismic activity or invading aquifers not necessarily within the carbon injection site. Moreover, "CO2 capture costs present a key challenge... The capital cost of a coal or gas electricity generation facility with CCS is almost double one without CCS. Additionally, the energy penalty increases the fuel requirement for electricity generation by 13–44%, leading to further cost increases."

17 The additional fuel requirement will mean additional carbon emissions. Therefore, installation of CCS/CCUS infrastructure, which requires the use of Class VI wells, or Class II wells that may be converted to Class VI wells, will run counter to any effort to decarbonize the state of Texas. Considering the poor economics of CCS, it seems as though the only way to get these projects off the ground will be for significant federal taxpayer dollars to be invested for the benefit of the private companies involved, with potentially low decarbonization benefit to the public.

Additionally, we warn against the approval of any infrastructure under the commission's jurisdiction by commissioners who have financial interests related to operators who appear on the Personal Financial Statements that the commissioners submit to the Texas Ethics Commission. Such financial ties should be considered "personal and private interests" and commissioners must recuse themselves from making decisions involving those companies. Although not yet required by state law, we also encourage the commissioners to affirm that they will not make decisions about companies related to campaign donors from which the commissioners have accepted more than \$1,000.

Summary of comments by topic

Class II Wells

We are concerned that the rule and weak processes at the RRC make it far too easy for operators to use a Class II well primarily for CO₂ storage, without the same level of scrutiny and standards for Class VI construction. This creates an incentive for operators to apply for Class II permits in order to save money, regardless of the safety of such practices. The commission has failed to review regular reports submitted by at least one oil and gas waste disposal company, and to issue violations for noncompliance in a timely manner, resulting in health impacts experienced by neighbors. ^{19, 20} Last year, for example, the commission

¹⁴ Riahi, K., R. Schaeffer, J. Arango, K. Calvin, C. Guivarch, T. Hasegawa, K. Jiang, E. Kriegler, R. Matthews, G.P. Peters, A. Rao, S. Robertson, A.M. Sebbit, J. Steinberger, M. Tavoni, D.P. van Vuuren, 2022: Mitigation pathways compatible with long-term goals at 3-36. In IPCC, 2022.

¹⁵ Clarke, L., Y.-M. Wei, A. De La Vega Navarro, A. Garg, A.N. Hahmann, S. Khennas, I.M.L. Azevedo, A. Löschel, A.K. Singh, L. Steg, G. Strbac, K. Wada, 2022: Energy Systems at 6-126. In IPCC, 2022. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926.008

¹⁶ Quinones, L., DeShon, H.R., Jeong, S., Ogwari, P., Sufri, O., Holt, M.M., Kwong, K.B., 2019: Tracking Induced Seismicity in the Fort WOrth Basin: A Summary of the 2008-2018 North Texas Earthquake Study Catalog. Bulletin of Seismological Society of America, Vol XX, No. XX. doi: 10.1785/0120190057

¹⁷ Clarke, L., Y.-M. Wei, A. De La Vega Navarro, A. Garg, A.N. Hahmann, S. Khennas, I.M.L. Azevedo, A. Löschel, A.K. Singh, L. Steg, G. Strbac, K. Wada, 2022: Energy Systems at 6-38. In IPCC, 2022. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926.008

¹⁸ 16 Tex. Admin. Code §1.10 (2017). Commissioner Private Interest in Decision.16 TAC §1.10. and Texas Government Code Sec. 572.058. Private interest in measure or decision; disclosure; removal from office for violation.

¹⁹ Blackhorn did not file its quarterly waste report in the third quarter of 2019. In the last quarter of 2020, its waste report did not include a summary total by waste "product type."

²⁰ TCEQ Investigation Report No. 1706873, for example, covering March 24 through April, 5, 2021. Also see "Residents near waste disposal facility fight permit renewal, company says it follows strict rules," KRIS 6 News, February 18, 2021,

waited until after it had renewed Blackhorn Enviornmental's permit to issue a notice of violation for accepting impermissible wastes -even though it had inspected a related site three weeks before the permit renewal decision and had pending complaints against Blackhorn's facility.^{21, 22, 23} After a notice of suspension was issued, the company only had to submit a letter requesting a hearing to be allowed to operate again. If the same level of scrutiny and weak enforcement is applied to Class II EOR wells that are injecting more CO₂ than they produce hydrocarbons, companies that are primarily injecting CO₂ may easily avoid Class VI permitting requirements. This could lead to hazardous leaks that both operators and the commission are not prepared to handle.

Area of Review

Considering the quality of abandoned well plugs within the Area of Review (AOR) will not be possible because there are hundreds of orphaned wells and thousands of inactive unplugged wells in the state for which the RRC does not have latitude or longitude coordinates. Similarly, this will affect the TCEQ's ability to determine that a Class VI well will not impact or interfere with a Class I injection well or waste plume.

Environmental Justice

In its pre-application, the RRC only mentions environmental justice briefly in its proposed rules about public notice (§5.204). The omission of a substantive review of the environmental justice impacts of Class VI injection wells constitutes a failure of the RRC to understand and carry out its legal obligation to ensure environmental justice through compliance with Title VI of the Civil Rights Act of 1964. The RRC's rules must include a robust substantive environmental justice review, including evaluating the impacts of proposed Class VI wells on already overburdened environmental justice communities, and not merely providing improved outreach and language interpretation.

Notice requirements

It is time for methods of notice to modernize and include posts on social media, and not only newspapers. We also recommend the commission consider setting up email lists that will enable the public to more easily opt in to regional notices that may be relevant to them.

It is not clear whether the applicants will be required to notify new individuals if the outermost boundary of the facility changes with a permit modification. Similarly, there is incongruence in the rule with considering communities in the Area of Review vs. the outermost boundary of the facility. People who own land or inhabit an area within a certain radius of the expected injection plume should be included in notice requirements.

Notice should be provided in Spanish without request, and instructions on how to obtain language accommodation should be provided in other languages.

Public Participation

https://www.kristv.com/news/6-investigates/residents-near-waste-disposal-facility-fight-permit-renewal-company-says-it-follows-strict-rules

²¹ Admin Monitor. April 13, 2021 Railroad Commission of Texas Open Meeting. Admin Monitor. http://www.adminmonitor.com/tx/rrc/open meeting/20210413/

²² Michael Marks, April 14, 2021, Railroad Commission Renews Permit For South Texas Oil And Gas Waste Facility Despite Locals' Complaints, Texas Standard,

https://www.texasstandard.org/stories/railroad-commission-renews-permit-for-south-texas-oil-and-gas-waste-facility-despite-locals-complaints/

²³ Railroad Commission "Permit Suspension, Notice of Violation (NOV) 3," signed by Technical Permitting Section Assistant Director Paul Dubois, June 4, 2021.

The threshold for participation by the public in permit processes should be inclusive of all who may be potentially impacted, rather than overly narrow and restrictive. Permit review should seek to prevent impacts and aim for equitable outcomes. Requiring a burden of proof on poorly-resourced individuals to prove that they "will" be impacted in order to qualify as an "interested person" is unreasonable.

We strongly disagree with the commission's proposal to allow the director to modify a permit with such changes with only the permittee's consent, but not other interested parties including members of the public who may be impacted by the modifications or lack of modifications.

When language accommodation is requested, we recommend the commission contract with professional language interpreters and translators who are familiar with jargon and key terms relevant to the application and the commission's procedures.

Consider that while permitting is the RRC's responsibility, the permitting process should include a sincere and comprehensive assessment of the protection of Texans, our health, and our land, and a clear process of how permits will be monitored and enforced. Texans should be secure in the commission's ability to fulfill their mission and legislative mandate. For this reason, a clear grievance process should be established when the agency's monitoring and enforcement is in question. Where and how the public can voice concerns after a permit has been issued should be included in the permit. Texans in their authority, should have this information readily available.

Permit preparation and facility operation

We are concerned with the RRC's ongoing practice of allowing facilities whose permits have been revoked to continue operating until a new final permit is reissued. Facilities that have acted so badly as to cause harm to their neighbors, groundwater, or air quality should not be allowed to continue operating under a revoked permit. If those facilities were already operating in non-compliance with the existing permit, there is no reason why the RRC should expect the facilities to act in compliance while waiting for a new permit to be issued. This structure disincentivizes compliance because facilities know that they will be allowed to operate even if their permit is revoked.

The application section requires applicants to submit "baseline geochemical data," but no details are provided to explain what qualifies as "baseline" data. We recommend the commission include details such as which mediums must be tested (i.e. soil, water), what chemicals and attributes must be tested for, and other considerations related to seasonality and topography.²⁴

Well plugging and financial assurance

The commission appears to be holding Class VI wells to the same failed plugging and financial assurance standards that oil, gas, and injection wells are held to in Texas. These standards have allowed the state to accumulate approximately 140,000 inactive unplugged wells and nearly 8,000 orphaned wells.²⁵ The commission does not collect sufficient amounts of financial assurance to be able to plug all of the orphaned wells the agency takes on in a reasonable timeframe, and these delays have resulted in leaks and

²⁴ Consider Wyoming's Groundwater Baseline Sampling, Analysis, and Monitoring rule. 055-3 Wyo. Code R. § 3-46. Or Colorado's Rule 609 - Statewide Groundwater Sampling and Monitoring and Rule 318A.e(4) – Groundwater Baseline Sampling and Monitoring in the Greater Wattenberg Area (GWA).

²⁵ Railroad Commission of Texas. (May, 2022). Well Distribution Tables - Wells Monitored by the Railroad Commission. Retrieved from:

https://www.rrc.texas.gov/oil-and-gas/research-and-statistics/well-information/well-distribution-tables/

blowouts. ^{26, 27, 28} Holding Class VI wells to the same failed standards will be unacceptable and will eventually result in some hazardous leaks that can cause fatal asphyxiation or brain damage. The rule needs to address hazards posed by CO₂ leakage, considering severe impacts after a pipeline rupture in Satartia, Mississippi.

We would appreciate clarification from the RRC on operators liability upon transfer of facilities, whether asset retirement obligations can be transferred in whole or in part, and whether the RRC will be reviewing whether facility transfers are being made to financially solvent operators.

Fees, Financial Responsibility, and Financial Assurance

The commission should consider the actual cost to the state of monitoring Class VI wells over the active life, inactive life, post-injection care period, and after the post-injection care period, and whether the proposed fees are sufficient to cover the lifetime costs of state monitoring at a level that is protective of groundwater quality, human life, and natural resources.

The financial security requirements currently required by commission rules are far too low to cover well plugging and site cleanup in the event of facility orphaning. The Railroad Commission needs to overhaul its current financial responsibility and financial assurance requirements, and applying the current insufficient requirements to Class VI wells is dangerous. Moreover, we were disturbed to see that Chapter 5 explicitly requires the director to exclude well plugging costs from estimates of cost of closure when considering approving the dollar amount of financial assurance.

Additionally, the commission offers an incentive to operators that would lower financial assurance based on post-injection monitoring and/or corrective action. An incentive that lowers financial assurance requirements is misguided and prematurely shifts the cost burden of state monitoring to the public. Costs of facility care and monitoring will likely increase over the life of the well, not decrease -even after the post-injection care period.

Post-injection storage facility care and closure plan

Under no circumstances should the Commission allow alternative timeframes for monitoring that are less than 50 years. Carbon dioxide is a greenhouse gas that lasts tens of thousands of years in the atmosphere, resulting in climate-altering warming. Additionally, wells get more dangerous as they age, not less dangerous. The state should not prematurely take on responsibility for inactive assets that are likely to eventually fail.

Permit standards

We recommend the commission consider requiring operators to share real-time data with the commission from the required continuous recording devices that will monitor injection pressure, rate, volume, and temperature of the CO2 stream. This information can help the commission to better manage injection at the regional level.

²⁶ Railroad Commission of Texas. (2022, June). *Current Emergency Purchase Orders (EPO)*. RRC Current Contracts. https://www.rrc.texas.gov/about-us/contract-management/current-contracts/

²⁷ Antina ranch well blowouts and geyser well blowout in Ward and Crane Counties. See Admin Monitor. (2022, January 25). *January 25, 2022 Railroad Commission Of Texas Open Meeting*. https://www.adminmonitor.com/tx/rrc/open meeting/20220125/

²⁸ Public Citizen, Inc., High Fitzsimons, and Molly K. Rooke, Plaintiff, v. Railroad Commission of Texas, Chairman Wayne Christian, and Commissioners Christi Craddick and Ryan Sitton, Defendants. (2020) District Court of Travis County. CAUSE NO. D-1-GN-20-003795.

In the event of an emergency, the commission should explicitly require operators to notify neighbors, and should require operators to educate neighbors on appropriate safety procedures in response to an emergency.

The rules would allow Class VI well operators to coordinate with any other operators planning to drill through the AOR. We are concerned that this presents the opportunity for the injection zone to be compromised, and may not include opportunities for the public to comment when these new facilities are proposed.

Additionally, operators of Class VI wells should be required to have a certification or license with the state of Texas.

Recordkeeping

The draft rule amendments would only require operators to retain records for 10 years following storage facility closure. In the past two years, several high-profile contamination and blowout incidents have occurred from wells that are more than 50 years old with little to no records on file at the Railroad Commission.²⁹ We recommend the commission require record retention for the entire life of the facility including the post-injection storage facility care period.

Conclusion

Considering the commission's decades of poor record keeping and oversight, and recent severe contamination events across the state of Texas related to abandoned wells and injection wells, we cannot support the RRC's pre-application for Class VI primacy from the EPA. We respectfully request that the commission thoughtfully respond to our questions and make a sincere effort to adopt our recommendations for changes to Chapter 5. Furthermore, we request that the commission undertake a legitimate and thorough overhaul of its monitoring and enforcement programs for both the oil and gas division and the pipeline safety department. Under the current levels of oversight and enforcement from the commission, we believe that the EPA would have reason to rescind its delegation of authority to the RRC to implement and enforce the Underground Injection Control (UIC) program under the Safe Drinking Water Act (SDWA).

²⁹ Rooke family wells in Refugio County; Antina Ranch wells in Ward and Crane Counties; geyser blowout in Crane County.

Detailed Section-by-Section Comments

§5.101. Purpose.

The purpose of the rule refers to "protection of underground sources of drinking water," but no reference is made to public protection in the event of leakage. A CO₂ pipeline rupture near Satartia, Mississippi revealed that CO₂ sinks when it is released and can cause asphyxiation. The purpose of these rules should be not only to protect underground drinking water, but also to protect the public in case of a facility failure.

§5.102. Definitions.

- "(26)Geologic storage--The long-term containment of anthropogenic CO₂ in a
- Reservoir." What does "long-term" mean in this definition? Will the commission consider defining "long-term in the rule?"
- The definition of "Mechanical integrity" relies on whether "significant leaks" or "significant fluid movement" can be detected. How does the commission define "significant" leaks or fluid movement? Part B of the "Mechanical integrity" definition explains that the commission will consider test deviations that cannot be explained by the standard of error for the test. Will this be the only way of defining "significant" leaks, or could the commission also consider a leak to be "nonsignificant" despite test deviations that are not within the test's normal standard of error?
- "(38) Plugging--The act or process of stopping the flow of water, oil or gas into or out of a formation through a borehole or well penetrating that formation." If the CO₂ is injected into the formation in a supercritical state, then shouldn't the definition be inclusive of this type of material, rather than solely related to stopping the flow of "water, oil, or gas?"
- Grammatical:
 - "Operator--A person, acting for itself..." should be changed to "themselves."
 - "(36) Permit--An authorization, license, or equivalent control document issued by the Commission to implement the requirements of chapter." should be changed to "(36) Permit--An authorization, license, or equivalent control document issued by the Commission to implement the requirements of this chapter."

§5.201. Applicability and Compliance.

(b) Injection of CO₂ for enhanced recovery.

• How will the commission monitor Class II wells to verify that operators are not simply applying for Class II permits, which are presumably easier to obtain, while they are primarily operating a geologic storage facility for anthropogenic carbon dioxide?

This possibility is extremely concerning, based on operators' past performance and the commission's failure to prevent similar non-compliance. For example, past Sunset Reviews of the Railroad Commission have revealed that operators have falsified production reports to appear as though their wells meet the definition of active status, or conversely, have continued to produce after receiving a seal and sever order. Collecting real-time production and injection data from well operators would assist the RRC in more accurately monitoring Class II operators.

In addition, neighbors of oil and gas waste pit and disposal well facilities have documented cases of the facility operators taking loads of waste the facilities were not permitted to take.³⁰ This suggests that RRC staff have no process in place to review quarterly reports submitted by facility

³⁰ Blackhorn Environmental waste facility in Jim Wells County.

- operators to ensure compliance. If this is the same level of attention the RRC plans to bring for Class II and Class VI wells, then we can expect that some operators will be willing to take the risk of cheating the system.
- It is extremely important to keep careful watch over the possibility of unscrupulous operators in the case of CO₂ injection. CO₂ is a colorless, odorless gas. Unlike natural gas (CH₄), there is currently no chemical additive that can make CO₂ odorous, such as mercaptan. Moreover, CO₂ has a tendency to sink into low-lying areas after its release, causing risk of asphyxiation and death.³¹ CO₂ injection facilities and pipelines require more careful regulatory scrutiny than other materials the RRC and oil and gas operators are accustomed to working with. The RRC must consider that some operators will not take these risks seriously and take advantage of the lack of capacity and oversight at the commission to simply apply for a Class II permit while intending to take part in Class VI operations.
- One of the criteria the director may use to determine if a Class II well poses an increased risk to USDWs includes the "quality of abandoned well plugs within the AOR." Currently, the RRC's orphaned well list contains over 350 wells with no latitude or longitude coordinates, and there are over 1,700 inactive unplugged wells with active operators and no latitude or longitude coordinates. Some landowners have reported undocumented wells on their properties that are unplugged and show evidence of having been drilled as oil and gas wells. Moreover, recent work indicates that wells in the RRC's database that do include latitude and longitude are sometimes off by over 60 feet. This lack of data and inaccuracies indicates that AORs will be incomplete and not tell the full story of potential risks to USDWs. Will the commission consider taking on an effort to better locate existing wells of all types so that AORs can be developed that fully account for potential risks?

§5.202. Permit Required, and Draft Permit and Fact Sheet

• (b) Permit Amendment.

O An operator must file an application to amend a permit prior to adding injection wells. How many injection wells does the RRC anticipate approving per facility on average? Is there a maximum number of wells the RRC anticipates would be located at any given facility? Will operators report on a per well or a per facility basis?

• (c) Permit Transfer.

- Will operators transferring permits maintain any liability for facilities they transfer? How much of the asset retirement obligation will stay with transferring operators and prior operators?
- What steps will the RRC take to determine whether the permit to be transferred is valid?
- Will the RRC review or consider financial solvency of the new operator before allowing permits to be transferred?
- <u>(1) Notice.</u>
 - What remedies are available to the commission to allow for agency review of an applicant's notice of intended permit transfer in the case where the director has

³¹ Kuprewicz, R. B. (2022). Accufacts' Perspectives on the State of Federal Carbon Dioxide Transmission Pipeline Safety Regulations as it Relates to Carbon Capture, Utilization, and Sequestration within the U.S. https://pstrust.org/wp-content/uploads/2022/03/3-23-22-Final-Accufacts-CO2-Pipeline-Report2.pdf

³² Commission Shift analysis joining the RRC's well data to the Inactive Well Aging Report and the Orphan Wells list. Feb. 18, 2022.

³³ Admin Monitor. (2022, April 12). *April 12, 2022 Railroad Commission of Texas Open Meeting*. See Public Input. https://www.adminmonitor.com/tx/rrc/open_meeting/20220412/

³⁴ Public comment by John Conner on Railroad Commission's Draft Monitoring and Enforcement Plan for FY 2023. Retrieved from: https://www.rrc.texas.gov/oil-and-gas/compliance-enforcement/enforcement-activities/

financial interest in the companies involved and review of such notice would trigger U.S. Securities and Exchange Commission fiduciary and insider trading restrictions and/or rules?

• (d) Modification, revocation and reissuance, or termination of a geologic storage facility permit.

(1) Permit Review.

- Paragraph B should be inclusive of any agencies that have jurisdiction over groundwater research or policies at the state or local level.
- Paragraph C should include any person who "may" suffer injury or economic damage. The threshold for participation by the public should be inclusive of all who may be potentially impacted, rather than overly narrow and restrictive. Permit review should seek to prevent impacts and aim for equitable outcomes. Requiring a burden of proof on poorly-resourced individuals to prove that they "will" be impacted in order to qualify as an "interested person" is unreasonable. Too high a threshold for public participation and permit review increases the likelihood that individuals will experience actual injury or economic damage. This, in turn, results in more incidents that the RRC must respond to with its extraordinarily limited capacity.

• (2) Action by Commission.

- (A)(vii) states "During any revocation and reissuance proceeding the permittee shall comply with all conditions of the existing permit until a new final permit is reissued." This implies that when a facility permit is revoked, the facility may be allowed to continue operating while a new permit application is being processed. If a facility has operated in a manner that justifies revoking the permit and which causes risk of injury or actual injury to its neighbors or the surrounding community, in which cases would the RRC stop the facility from continuing to operate?
- (A)(viii) indicates that the director may modify a permit without following Notice and Public Comment Period requirements for many reasons that the public would ordinarily need to provide feedback on. We strongly disagree with the commission's proposal to allow the director to modify a permit with such changes with only the permittee's consent, but not other interested parties including members of the public who may be impacted by the modifications or lack of modifications.

§5.203. Application Requirements.

(a) (2)General Information

• Paragraph D requires the TCEQ to prepare a letter of determination concluding that a class VI well will not impact or interfere with a class I injection well or its waste plume. What kind of geospatial information will applicants be required to provide the TCEQ so that the TCEQ can make such a determination? Will the geographic coordinates of such data be required to be accurate within a certain measurement (for example, 5 feet)? Data is available indicating that coordinates available in the RRC's database for oil, gas, and injection wells are incorrect and are sometimes off by hundreds of feet. Therefore, it is important to determine the accuracy of geospatial data that TCEQ will be using to determine the locations of both proposed Class VI wells and previous or existing Class I injection wells and their plumes.

(b)Surface map and information.

• We recommend the commission include language that specifies the geographic coordinate system the map should use. The coordinate system chosen should provide sufficient accuracy for the geographic region in question and should be compatible with coordinate systems the RRC uses

for its own purposes. Additionally, the rule language should specify how accurate the location data should be, within a specified margin of error for coordinates depicted compared to actual (e.g. number of feet).

(c) Geologic, geochemical, and hydrologic information.

• Paragraph (2)(G) requires applicants to submit "baseline geochemical data" for subsurface formations. Does such data include baseline groundwater quality data? If so, which types of chemicals or analytes must be included in the baseline data? For example, should applicants submit test results for salts, radionuclides, metals, volatile organic compounds (VOCs), and Polycyclic Aromatic Hydrocarbons (PAHs)? Which constituents of each category should applicants test for? Other considerations include how often and how many tests should be taken in advance of well construction to establish baseline conditions -for example baseline conditions may be different in wet months compared to dry months. Similarly, it is advisable to take samples both upgradient and downgradient of the proposed injection well location. If baseline testing is to take place, it would make sense to require follow-up testing throughout the life of the injection well at regular intervals from upgradient and downgradient wells.

(d) AOR and corrective action.

• (B) Identification and table of penetrations.

(e) Injection well construction.

Paragraph (1)(B) (vii) "Casing and cementing of anthropogenic CO2 injection wells" allows the
director to exempt existing Class II EOR wells from many of the casing and cementing
requirements that Class VI wells will have to comply with. This creates an incentive for operators
to apply for Class II permits, then convert Class II EOR wells to Class VI wells, because the
stringency of casing and cementing requirements may be lower for Class II wells. This is
inappropriate and may expose neighboring communities to unintended risks.

(j) Plan for monitoring, sampling, and testing after initiation of operation.

• What internal processes will the Railroad Commission follow to verify that operators are conducting their plan for monitoring, sampling, and testing, as approved?

(k) Well plugging plan.

- Paragraph (1) holds operators to the same plugging requirements as 16 TAC 3.14, which references plugging extensions in section 3.15. Will the commission allow an indefinite number of years of plugging extensions for Class VI wells, as long as they remain in compliance with section 3.15? Is there any limit to the number of years the commission would deem acceptable for approving a well plugging extension, assuming operators are compliant with all commission rules?
- How will the commission pay for future well plugging and cleanup of orphaned Class VI wells that exhibit casing failures typical of unplugged wells that have been inactive for 20 years? What sources of revenue will the commission use to pay for such activities?
- Will the commission conduct orphaned well plugging and cleanup on Class VI wells any faster than it currently does for orphaned wells -or will Class VI wells be allowed to persist on RRC orphaned well queues unplugged for decades?

(m) Post-injection storage facility care and closure plan.

- In the preamble to the proposed rule amendments, the commission requested comments on whether the Commission should finalize the rules as proposed or adopt the federal 50-year default timeframe with the option for an alternative timeframe. In addition, the Commission requested comment on whether the Commission should consider a minimum post injection site care monitoring period.
- Under no circumstances should the Commission allow alternative timeframes for monitoring that are less than 50 years. Carbon dioxide is a greenhouse gas that lasts tens of thousands of years in

the atmosphere, resulting in climate-altering warming. Additionally, wells get more dangerous as they age, not less dangerous. The state should not prematurely take on responsibility for inactive assets that are likely to eventually fail.

(n) Fees, financial responsibility and financial assurance.

• Paragraph (2) requires the director to rely on the applicant's most recent audited annual report and quarterly report filed with the U.S. SEC or the person's most recent audited financial statement. Additionally, "the date of the audit must be not more than one year before the date of submission of the application." If the application approval process takes longer than one year, will the director have the authority to request updated audited annual reports, quarterly reports, or financial statements?

§5.204. Notice of permit actions and public comment period

(a) Notice requirements.

- Paragraph (2) "General notice by publication" requires the commission to publish notice of a draft permit in a newspaper. We recommend this section also require issuing web based media posts to the same media outlets and publishing the posts on the commission's social media account including hashtags for the appropriate counties and nearby population centers.
 - Additionally, notice should be provided in Spanish without request, and instructions on how to obtain language accommodation should be provided in other languages.
- Paragraph (3) "Methods of notification" requires notification to potential interested persons based on the "outermost boundary of the proposed geologic storage facility." If the permit is modified, will a new notice be issued based on potential new outermost boundaries of the facility?
 - o (viii) "where the proposed storage facility is located;" should read "is or is proposed to be located for public announcement to county residents"
 - (ix) "where the proposed storage facility is located within city limits," should read should read "is or is proposed to be located for public announcement to municipal or city residents"
 - "(xi) persons on the mailing list developed by the Commission, including those who request in writing to be on the list and by soliciting participants in public hearings in that area for their interest in being included on area mailing lists;" Will the commission make a web-based form available for submitting a request to be on the list? The commission could make a link for the form available on its social media channels and in social media posts submitted to media outlets.
 - "(xii) any other class of persons that the director determines should receive notice of the application."
- Paragraph (4)(E)(iii) states that "protests must be received by the director within 30 days of the date of receipt of the application by the division, receipt of individual notice, or last publication of notice, whichever is later;" We recommend the commission allow at least 60 days for protests to be received. Non-experts who may be impacted will likely need more time to understand the process and determine whether they may be impacted. Many individuals lack the economic means to hire lawyers and may not have immediate access to educational resources needed to understand notice letters.
- Paragraph (5) notes that the applicant must make "diligent efforts" to identify those that will require notice. This is based on county records. We recommend the commission also require applicants to notify city councils, county commissioners courts, and groundwater conservation districts (if applicable) in the affected counties, and that an announcement be made at the regular meeting of each body.
- Paragraph (6) indicates that the applicant must examine whether the AOR includes an Environmental Justice (EJ) and Limited English Proficiency (LEP) area. The omission of a

substantive review of the environmental justice impacts of Class VI injection wells constitutes a failure of the RRC to understand and carry out its legal obligation to ensure environmental justice through compliance with Title VI of the Civil Rights Act of 1964. Title VI prohibits the use of federal funds in a manner that is discriminatory on the basis of race, color or national origin. EPA requires state governmental entities, as recipients of federal financial assistance, to ensure environmental justice through compliance with civil rights law that prohibits discrimination. EPA's implementing regulations set forth general and specific prohibitions against discrimination that have direct application to regulatory activities under the Class VI UIC Program, si such as siting. Therefore, the RRC's rules must include a robust substantive environmental justice review, including evaluating the impacts of proposed Class VI wells on already overburdened environmental justice communities, not merely providing notice and language interpretation.

- Does the AOR include all parts of the outermost boundary of the proposed geologic storage facility? Does the outermost boundary of the proposed facility include all parts of the AOR?
- The rule requires applicants to use the U.S. Census Bureau 2018 American Community Survey (ACS) data to identify EJ and LEP areas. In order to avoid frequently updating Chapter 5 rules and to ensure the most up to date information, we recommend changing the rule language to require use of the most recent ACS data available at the time of the permit application.
- Do "efforts to include EJ and LEP communities in public involvement activities" include public hearings described in paragraph (b)(2)?
- o Paragraph (6)(C) requires that interpretation services be accommodated upon request. In addition the rule should specify that meetings and/or hearing should be conducted in English and the identified language (e.g. Spanish). Additionally, the rule should specify that a professional interpreter must be available to provide such services. For example, RRC staff whose job description does not include interpretation should not be relied upon to provide such services for planned public meetings and hearings. We recommend the RRC consider contracting with a firm that can train hearings staff and public outreach staff on procedures for conducting and coordinating multi-lingual meetings in a fair and equitable manner that encourages participation from LEP groups. It is important for the commission to seek out professional interpreters who have knowledge of how to translate jargon and key terms relevant to the subject matter.
- (7) "Comment period for a draft permit." Public notice of a draft permit, including a notice of intent to deny a permit application, shall allow at least 30 days for public comment. We recommend the commission extend the comment period to 90 days. These permit applications are likely to be highly technical and complex, and potentially affected individuals deserve to have a reasonable period of time to understand the technical details and complexities of the applications, consult with experts and lawyers, collect evidence, and draft comments.

(b) Public Comment and hearing requirements.

• Paragraph (1)(B) states that "Reasonable limits may be set upon the time allowed for oral statements, and the submission of statements in writing may be required." What amount of time is considered "reasonable" for oral statements?

§5.205. Fees, Financial Responsibility, and Financial Assurance

(a) Fees.

^{35 42} U.S.C. § 2000d

^{36 40} CFR §§ 7.30 and 7.35

³⁷ 40 CFR § 7.35(d)

• Paragraph (a) requires operators to pay \$50,000 for each permit application, \$25,000 for each application to amend a permit, \$0.025 per metric ton of CO₂ injected, and \$50,000 per year for post-injection care each year the operator does not inject. How much does the commission estimate spending on inspections for Class VI facilities during the active life of each facility, inactive life, post-injection care period, and after the post-injection care period? How much does the commission estimate it will spend to plug and cleanup orphaned Class VI wells? What commission activities (e.g. inspection visits, cementing contractors) are included in these estimates?

(c) Financial assurance.

• Paragraph (1) states that the operator must comply with the requirements of §3.78 for all monitoring wells and injection wells. Rule 3.78(g) only requires financial security in the amount of \$2.00 per foot of well depth for individual wells, but allows blanket bonding that comes out to amounts of bonding at potentially \$2,500 or less per well. This is in spite of the Railroad Commission's published cost calculation for well plugging, which documents that the Railroad Commission spent an average of \$8.48 per foot to plug wells across the state from FY 2015 - FY 2020.³⁸ In the same time period, 90% of the wells plugged by the Railroad Commission were less than 4,500 feet deep.³⁹ Deeper wells may cost more to plug, and older wells typically present more complications that add to plugging and cleanup costs. In Q1 and Q2 alone in FY 2022, the RRC spent nearly \$2.3 million on Emergency Purchase Orders related to orphaned wells.⁴⁰

Additionally, community members with orphaned wells on their land have reported that the Railroad Commission often leaves behind orphaned equipment like well casings and pump jacks after it completes well plugging - indicating that the commission is not spending as much on well plugging and site cleanup as well operators would. The Sunset Advisory Commission has previously documented that the Railroad Commission's financial security requirements cover less than 16% of the commission's well plugging costs.⁴¹

The financial security requirements in §3.78 are so low that thousands of orphaned wells and sites have been on the RRC's orphaned wells list for decades while generations of families have waited for the commission to plug them. Landowners from the Permian Basin to the Eagle Ford Shale have faced the safety and pollution consequences of the Railroad Commission's grossly inadequate financial security requirements. The commission must increase its financial security requirements in order to prevent pollution and safety hazards to the public from inactive, unmonitored, and orphaned wells.

• Paragraph (2)(C)(i) requires the director to approve the amount of financial assurance for a geologic storage facility, but specifically excludes plugging costs from being included in the

³⁸ Railroad Commission of Texas. (2022). *Cost Calculation - Plugging Cost Estimates*. HB 2259/HB3134 - Inactive Well Requirements.

https://rrc.texas.gov/oil-and-gas/compliance-enforcement/hb-2259-hb-3134-inactive-well-requirements/cost-calculation/

³⁹ RRC well plugging data obtained through open records request.

⁴⁰ Railroad Commission of Texas. (2022, June). *Current Emergency Purchase Orders (EPO)*. RRC Current Contracts. https://www.rrc.texas.gov/about-us/contract-management/current-contracts/

⁴¹ "Railroad Commission of Texas," Staff Report, Sunset Advisory Commission of the 85th Texas Legislature, 2016-2017, 4,

https://www.sunset.texas.gov/public/uploads/files/reports/Railroad%20Commissio%20of%20Texas%20Staff%20Report%20with%20Final%20Results 6-21-17.pdf

- estimate of costs of closure.
- Furthermore, paragraph (2)(C)(i) indicates that a qualified professional engineer does not need to prepare a written estimate of the "highest likely dollar amount necessary to perform post-injection monitoring and closure of the facility," but instead that the engineer may supervise preparation of the estimate. We recommend that the estimate should be directly prepared by a qualified professional engineer, and not merely supervised.
- "(3) The director may consider allowing the phasing in of financial assurance for only corrective action based on project-specific factors." What will these factors be? Please specify corrective action, and possible project-specific factors.
- "(4) The director may approve a reduction in the amount of financial assurance required for post-injection monitoring and/or corrective action based on project-specific monitoring results." The commission should not, under any circumstances, approve a reduction in the amount of financial assurance required, because the commission will always be liable for post-injection monitoring after the monitoring period is over. The commission should not take on the public burden of facility risks before the end of the post-injection storage facility care period.

(d) Notice of adverse financial conditions.

- Paragraph (1) requires such notice to be submitted by certified mail. The commission should allow notice to be submitted by electronic mail, as well.
- Paragraph (3) gives operators 90 days to replace the bond. This should be reduced to 30 days.

§5.206. Permit Standards

(b) General Criteria.

- "(9) the applicant has provided a signed statement that the applicant has a good faith claim to the necessary and sufficient property rights for construction and operation of the geologic storage facility for at least the first five years after initiation of injection in accordance with §5.203(d)(1)(A) of this title;" Why is the commission only requiring a good faith claim to operate in the first five years after initiation of injection? The facility's storage is required to be permanent.
- "(7) the applicant has provided a letter from the Groundwater Advisory Unit of the Oil and Gas Division in accordance with §5.203(o) of this title (relating to Application Requirements);" The GAU is ambiguous on the location or area of a facility that the letter must be based on. Can the commission clarify whether the GAU letter must be applicable to the entire Area of Review? Additionally, GAU gives district offices broad authority to allow letters that are more than five years old. Will the RRC allow applicants to provide GAU letters older than five years for application purposes?
- (8) the applicant has provided a letter of determination from TCEQ concluding that drilling and operating an anthropogenic CO₂ injection well for geologic storage or constructing or operating a geologic storage facility will not impact or interfere with any previous or existing Class I injection well, including any associated waste plume, or any other injection well authorized or permitted by TCEQ." The commission should also require TCEQ's letter to verify that the Class VI well will not impact or interfere with wells "required to be authorized" by TCEQ, whether or not such wells are authorized.

(c) Injection Well Construction

• "(2) Within 30 days after the completion or conversion of an injection well subject to this subchapter, the operator must file with the division a complete record of the well on the appropriate form showing the current completion." The record should also include the latitude and longitude coordinates of the wellbore within a specified accuracy.

(d) Operating a Geological Storage Facility

• (B) Can we add measurement by mass not just volume? (C) is 90% of fracture pressure safe to really prevent initiation of new fractures or propagate existing fractures endangering USDWs?

- How will this be monitored? This section also gives the director the ability to approve a plan "for controlled artificial fracturing." Isn't fracturing random and Isn't this what this same paragraph is trying to prevent?
- Paragraph (2)(E) requires the operator to install and use continuous recording devices to monitor injection pressure, rate, volume, and temperature of the CO₂ stream. This information should be shared with the commission in real time.

(e) Monitoring, Sampling, and testing requirements.

• "(B) monitoring including type, intervals, and frequency sufficient to yield data that are representative of the monitored activity including, when required, continuous monitoring." This language is overly broad. What type and frequency of monitoring does the commission consider to be "sufficient," monthly, quarterly, or annually?

(h) Emergency, Mitigation, and Remedial Response

- (2)"(C) The operator must provide training schedules, training dates, and course outlines to Commission personnel upon request for the purpose of Commission review to determine compliance with this paragraph." The commission should require this information to be submitted with every annual report. Will the commission consider establishing an automated system that could identify non-compliance with these requirements to effectively mitigate emergency response because of possible systematic failures due to lack of training or absence of necessary expertise?
- "(3) Action. If an operator obtains evidence that the injected CO2 stream and associated pressure front may cause an endangerment to USDWs, the operator must:..." This list should include notifying the facility's neighbors and individuals in the Area of Review. The operator should identify types of potential endangerment or emergencies and educate facility neighbors about appropriate responses to such events on an annual basis so that affected persons are prepared.

(k) Post Injection Storage care and closure

- "(6) Storage facility closure report. Once the director has authorized storage facility closure, the operator must submit a storage facility closure report within 90 days that must thereafter be retained by the Commission in Austin. The report must include the following information:"
- "(A) documentation of appropriate injection and monitoring well plugging. The operator must provide a copy of a survey plat that has been submitted to the Regional Administrator of Region 6 of the United States Environmental Protection Agency. The plat must indicate the location of the injection well relative to permanently surveyed benchmarks;" Will such surveyed benchmarks include latitude and longitude coordinates of the well?

(m) Retention of records

• "The operator must retain for 10 years following storage facility closure records collected during the post-injection storage facility care period. The operator must deliver the records to the director at the conclusion of the retention period, and the records must thereafter be retained at the Austin headquarters of the Commission." We recommend the commission require record retention for the entire life of the facility including the post-injection storage facility care period. Will the commission consider the costs of maintaining these records in perpetuity in the financial security requirements?

(o) Other permits and conditions

• "(C) Duty to mitigate. The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit." This should also include mitigation resulting from actions that are considered to be compliant.

• "(G) Coordination with exploration. The permittee of a geologic storage well shall coordinate with any operator planning to drill through the AOR to explore for oil and gas or geothermal resources." How does the RRC define "coordinate?" Why is the commission planning to allow drilling through the AOR? With what level of scrutiny will the RRC examine drilling permits for wells that are within the AOR? Will the public receive notice and have an opportunity to comment?

§5.207. Reporting and Record-Keeping

(a) Reporting and Record Retention

- "(1) Test records. The operator must file a complete record of all tests in duplicate with the district office within 30 days after the testing. In conducting and evaluating the tests enumerated in this subchapter or others to be allowed by the director, the operator and the director must apply methods and standards generally accepted in the industry. When the operator reports the results of mechanical integrity tests to the director, the operator must include a description of any tests and methods used. In making this evaluation, the director must review monitoring and other test data submitted since the previous evaluation" The commission should require operators to apply "best practices" not only "generally accepted" methods and standards for test evaluation.
- The responsibilities of an operator include the operator reviewing the monitoring and operational data relevant to decision-making amongst many important responsibilities having to do with the safe management of the facility. However, the commission notably does not require operators to be certified or licensed. Please explain why no certifications or licenses are required for operators of Class VI injection wells.

(e) Record retention.

• "The operator must retain all wellhead pressure records, metering records, and integrity test results for at least 10 years. The operator must retain all documentation of good faith claim to necessary and sufficient property rights to operate the geologic storage facility until the director issues the final certificate of closure in accordance with §5.206(k)(7) of this title." We recommend the commission require records to be retained for the entire life of the well and the post-injection site care period.

Sincerely,

Texas-based Organizations & Individuals:

Air Alliance Houston | Houston, TX

Bayou City Waterkeeper | Houston, TX

Chispa TX | Corpus Christi, TX

Clean Economy Coalition | Corpus Christi, TX

Clean Energy Now Texas | Driftwood, TX

Clean Water Action | Houston, TX

Coalition for Environment, Equity, & Resilience | Houston, TX

Coalition of Community Organizations | Houston, TX

Coastal Bend Sierra Club | Corpus Christi, TX

Commission Shift | Laredo, TX

Environment Texas Research & Policy Center | Austin, TX

Fenceline Watch | Houston, TX

For The Greater Good | Corpus Christi, TX

G-Forensic | Dallas, TX

Greater Edwards Aquifer Alliance | Austin, TX

Healthy Gulf | Houston, TX

Indivisible TXLege | Texas

Ira Yates | Iraan, TX

K.A.R.E., Karnes Area Residents for the Environment | Karnes Co., TX

Liveable Arlington | Arlington, TX

MOVE Texas Action Fund | San Antonio, TX

Marlene G. Plua | Lago Vista, TX

Northeast Action Collective | Houston, TX

Port Arthur Community Action Network | Port Arthur, TX

Property Rights & Pipeline Center | National

Public Citizen | Austin, TX

Rio Grande International Study Center | Laredo, TX

Sanbit, Inc. | Anson, TX

Sierra Club Lone Star Chapter | Austin, TX

Sister Elizabeth Riebschlaeger, ccvi | Victoria, TX

Texas Campaign for the Environment | Austin, TX

Texas Energy Democracy Coalition | Austin, TX

Texas Freedom Network | Austin, TX

Texas Rising | Austin, TX

Trans-Pecos Productions | Fort Stockton, TX

Turtle Island Restoration Network | Galveston, TX

Yolpaki Institute | San Antonio, TX