March 1, 2024

VIA ELECTRONIC MAIL & CERTIFIED MAIL

Michael S. Regan
Administrator
Environmental Protection Agency
1101A EPA Headquarters
William Jefferson Clinton Building
1200 Pennsylvania Avenue, NW
Washington, D.C. 200004
Regan.Michael@epa.gov

Dr. Earthea Nance
Regional Administrator, Region 6
Environmental Protection Agency
1201 Elm Street
Dallas, TX 75270
Nance.Earthea@epa.gov

Re: ***Petition to Determine by Rule that Texas' Class II Injection Well Permitting Program No Longer Represents an Effective Program to Prevent Underground Injection from Endangering Drinking Water Sources and Fails to Comply with the Requirements of the Safe Drinking Water Act***

Dear Administrator Regan and Regional Administrator Nance,

Enclosed is a Petition submitted on behalf of Commission Shift and Clean Water Action ("the Petitioners") and supported by additional signatories asking that the United States Environmental Protection Agency ("EPA") prioritize the protection of groundwater supplies in the State of Texas by exercising its authority under 40 C.F.R. § 145.34 to de-delegate the Texas Class II Underground Injection Control ("UIC") program. The conflict between Texas' failure to protect drinking water resources and the State's focus on the extraction of oil and gas resources is putting millions of acre-feet of drinking water at risk.

Because Texas has failed to protect existing groundwater resources under the Class II program, Texas cannot continue to issue these permits. Texas' underground water resources are important to more than 31 million people in the State, and additional millions of people across the border in Mexico. Texas' oil and gas industry dominates West Texas, and Texas leads the nation in orphaned and unplugged inactive wells, resulting in extensive damage impacting both groundwater and soil through well blowouts, some of which create vast pools of dangerous waters, as well as other leaks, spills, sinkholes, and other seismic events. Through mismanagement and inadequate resourcing, the State of Texas has utterly failed to implement and enforce strong protections to ensure the oil and gas waste from Class II underground injection wells do not contaminate aquifers. EPA has also failed to account for the inadequacy of Texas' Class II program and how that program will interact with Texas' request for primacy over Class VI wells putting groundwater resources further at risk. Moreover, the Railroad Commission of Texas' ("RRC") permitting and enforcement procedures do not provide for adequate public participation, and as a result, permitting decisions continuously put minority and low-income communities at a disproportionate risk of harm. These failures require EPA to initiate procedures to revoke Texas' Class II injection well program and initiate a rulemaking to implement a program that protects the people of Texas and the environment.

Given the seriousness of the deficiencies in Texas' program, including the harm to the environment and existing West Texas communities, EPA must act. The Petitioners ask that the EPA respond to this petition in writing within sixty (60) days. We look forward to your response.

Respectfully submitted,

EARTHJUSTICE

_/s/ Jen Powis_____
Jen Powis, Managing Attorney
Allison Brouk, Senior Attorney
845 Texas Ave., Suite 200
Houston, TX 77002
jpowis@earthjustice.org
abrouk@earthjustice.org
Tel: 281-694-5157

PETITION TO DETERMINE BY RULE THAT TEXAS' CLASS II INJECTION WELL PERMITTING PROGRAM NO LONGER REPRESENTS AN EFFECTIVE PROGRAM TO PREVENT UNDERGROUND INJECTION THAT ENDANGERS DRINKING WATER SOURCES AND FAILS TO COMPLY WITH THE REQUIREMENTS OF THE SAFE DRINKING WATER ACT

TABLE OF CONTENTS

BEFORE THE ADMINISTRATOR OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

PETITION TO DETERMINE BY RULE THAT TEXAS' CLASS II INJECTION WELL PERMITTING PROGRAM NO LONGER REPRESENTS AN EFFECTIVE PROGRAM TO PREVENT UNDERGROUND INJECTION THAT ENDANGERS DRINKING WATER SOURCES AND FAILS TO COMPLY WITH THE REQUIREMENTS OF THE SAFE DRINKING WATER ACT

Commission Shift and Clean Water Action ("the Petitioners") petition the U.S. Environmental Protection Agency ("EPA") pursuant to the Administrative Procedure Act, 5 U.S.C. § 553(e), to determine by rule that Texas' Class II well program fails to comply with the requirements of the Safe Drinking Water Act ("SDWA"), Sections 1425 and 1421(b)(1)(A)-(D),[1] because the administration of the program endangers underground sources of drinking water ("USDW"). Further, the program also fails to allow for adequate public participation. EPA should revoke Texas's primacy to administer its Class II well program until the State cures the deficiencies detailed below and is able to administer a program that satisfies all its legal obligations.

I. Introduction

Congress enacted the SDWA in 1974 to establish a regulatory mechanism to ensure the quality of public drinking water.[2] A key component of the SDWA is the Underground Injection Control ("UIC") program.[3] This program is designed to prevent underground injection of fluids or waste from contaminating USDW.[4, 5]

[1] The SDWA is codified at Subchapter XII of Chapter 42 of the U.S. Code, 42. U.S.C. § 300f-300j, *et seq*. Section 1425 is codified at 42 U.S.C. § 300h-4. Section 1421 is codified at 42 U.S.C. § 300h.
[2] *Sierra Club v. Chesapeake Operating, LLC*, 248 F. Supp. 3d 1194, 1199–200 (W.D. Okla. 2017).
[3] 42 U.S.C. § 300h *et seq*.
[4] *Miami-Dade Cty. v. U.S. Envt'l Prot. Agency*, 529 F. 3d 1049, 1052 (11th Cir. 2008).
[5] USDW is broadly defined to include any aquifer or its portion that either currently supplies water for human consumption or contains fewer than 10,000 mg/l of total dissolved solids. 40 C.F.R. § 144.3.

The UIC program recognizes six classes of wells, including Class II wells.[6] Class II wells inject fluids that are brought to the surface due to activities associated with gas storage operations or oil and gas production.[7] There are several types of Class II wells, including disposal wells, enhanced oil and gas recovery ("EOR" or "ER" wells), and hydrocarbon storage wells.[8] There are approximately 180,000 Class II wells across the United States, with the largest proportion of those found in Texas.[9] Nearly three quarters of the Class II wells in Texas are EOR wells.[10]

EPA can delegate regulatory and enforcement responsibility of a UIC program to states that submit a proposal for a program to EPA that satisfies the minimum regulatory requirements set forth in the SDWA and accompanying regulations.[11] In 1982, Texas became the first state to obtain primary enforcement responsibility for the Class II Underground Injection Control ("UIC") well program under the SDWA. Management of the Class II well program is currently administered by the Railroad Commission of Texas ("RRC").

At the close of the 2022 fiscal year, the EPA documented that Texas had permitted 37,851 enhanced oil and gas recovery wells, 13,585 disposal wells, and 515 liquid hydrocarbon storage wells.[12] RRC continues to issue Class II UIC well permits throughout the State each year, most of which are concentrated in West Texas and the Permian Basin.[13]

---

[6] *See* 40 C.F.R. § 144.6; U.S. Env't Prot. Agency, Underground Injection Control Well Classes, https://www.epa.gov/uic/underground-injection-control-well-classes (last visited Jan. 17, 2024).
[7] 40 C.F.R. § 144.6(b)
[8] U.S. EPA, Underground Injection Control (UIC): Class II Oil and Gas Related Injection Wells, https://www.epa.gov/uic/class-ii-oil-and-gas-related-injection-wells.
[9] Fiscal Year 2022, EPA Region 6 End-of-Year Evaluation Railroad Commission of Texas Underground Injection Control Program, at 4, *available at* https://www.rrc.texas.gov/media/mw0nz4d5/trrc-eoy-fy-2022.pdf ("[T]he RRC UIC program remains the nation's largest Class II program by far based on the total number of Class II injection wells reported annually."); *see also* Rob Castillo, *Underground Injection Control (UIC) Permitting*, RRC (Aug. 1, 2023), at 9, *available at* https://www.rrc.texas.gov/media/3tmjrkrj/underground-injection-control-uic-permitting-powerpoint-slides.pdf.
[10] *Id.*
[11] 42 U.S.C. § 300h.
[12] Fiscal Year 2022, EPA Region 6 End-of-Year Evaluation Railroad Commission of Texas Underground Injection Control Program, at 4, *available at* https://www.rrc.texas.gov/media/mw0nz4d5/trrc-eoy-fy-2022.pdf.
[13] *Id.*

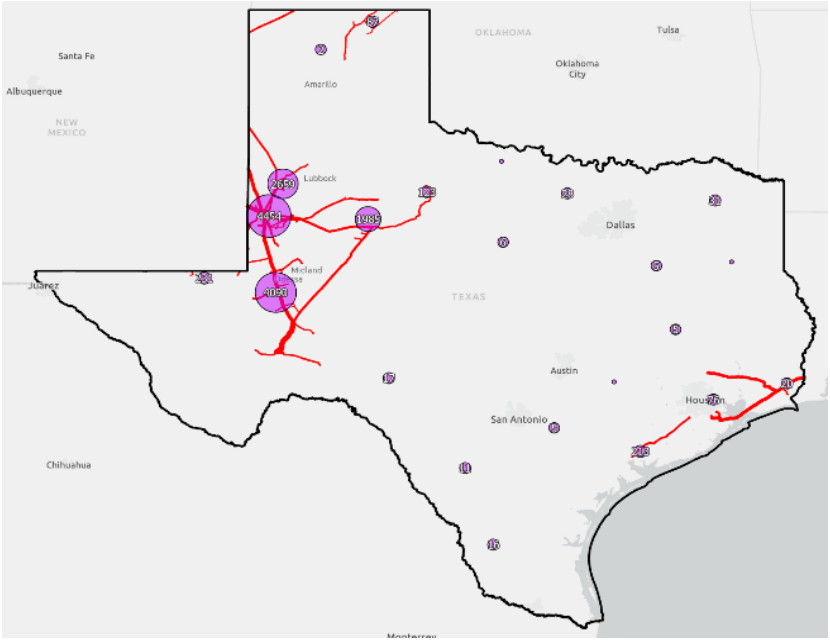


Figure 1. Map of Class II Wells for Enhanced Oil Recovery and CO_2 Pipelines

While Texas has the biggest number of Class II wells in the country, biggest is not always best. Due to the vast number of injection wells that scatter the State, Texas frequently experiences significant events related to well operations, including uncontrolled well blowouts, larger and more frequent earthquakes, growing sinkholes, and, most importantly here, contaminated USDW.

Despite its obligation under the SDWA to do so, the RRC has failed to adequately respond to these threats, instead continuing to issue Class II well permits at an alarming rate. This failure is even more alarming given that Texas faces serious water challenges due to continued population growth, frequent droughts, and the impacts of climate change. It is the most vulnerable communities in Texas that face the greatest risks from these wells, as the majority of Texas residents in West Texas rely on groundwater supplies, including the cities of Midland, Odessa, Ft. Stockton, and others. Residents are left to clean up the mess left behind by well operators, with negligible oversight or assistance from the RRC to hold the proper parties financially responsible.

Not only does RRC not provide protection to these communities, it also fails to include them in the permitting decisions that have significant implications in their lives and wellbeing.

Because Texas has not managed the Class II UIC program in accordance with the SDWA and other applicable laws, EPA should require corrective action or withdraw Texas' primacy and implement an effective and legally compliant program.

II. Impacts of Poorly Managed Class II Well Operations in Texas

Throughout Texas, water is spewing, dangerous gasses are leaking, the ground is falling, and the earth is shaking.[14] These nightmare occurrences are each exacerbated by Class II well operators that are permitted to destroy the land and waters of the region without any restraint from the overseeing agency. People's lives are at risk and the USDW that RRC is tasked with protecting are being threatened at a time when preserving those resources are of the utmost importance. The examples below demonstrate what Texans face on a daily basis because of RRC's failure to manage a Class II well program that is consistent with the terms of the SWDA.

A. Uncontrolled Leaks, Spills, and Blowouts

Risks presented by Class II wells include increased blowouts, leaks, and spills. Blowouts are the uncontrolled release of oil or natural gas from an oil well into the atmosphere or underground formation, which can result in "air, noise, surface, and/or groundwater pollution."[15] While blowouts related to Class II wells lack comprehensive data, *many* blowouts have been

[14] *See* Sections II.A-C, *infra*.

[15] Clean Water Action | Clean Water Fund, The Environmental Risks and Oversight of Enhanced Oil Recovery in the United States: An Overview of Class II Wells Trends and Regulations in EPA's Underground Injection Control Program, (Aug. 2017), at 13, *available at* https://www.cleanwateraction.org/sites/default/files/docs/publications/Environmental%20Risks%20and%20Oversight%20of%20Enhanced%20Oil%20Recovery%2011.08.17a.pdf.

recorded in the last 30 years in Texas.[16] The risk of blowouts is amplified when carbon dioxide ("CO_2") reacts with water in oil-producing formations because carbonic acid is produced. This acidic environment is especially destructive because it can both mobilize and dissolve elements like boron, barium, calcium, chromium, or strontium, which can negatively impact drinking water supplies.[17] Boron can cause organ problems,[18] while barium is known to affect heart rhythm.[19] Chromium and strontium are radionuclides that can be carcinogenic and cause other health problems.[20, 21] Dissolution of calcium in karst or limestone aquifers can erode the aquifer and allow contaminants to travel more readily throughout the aquifer.[22] Blowouts additionally can cause multiple other types of pollution: air, noise, soil, and/or groundwater.[23]

Many spills and blowouts occur at locations of unplugged inactive or orphaned wells throughout the State. A geyser-like blowout bursting over 100 feet into the air sprayed saltwater all over the surrounding land in January 2022. ***[24]***

---

[16] Clean Water Fund, Carbon Dioxide Enhanced Oil Recovery (CO_2-EOR): A Threat to Drinking Water and the Environment (Nov. 2017), https://cleanwaterfund.org/sites/default/files/docs/publications/Carbon%20Dioxide%20EOR%20-%20A%20Threat%20To%20Water%20and%20the%20Environment%20-%20Nov%202017.pdf.

[17] Guohui Wang et al., "Geochemical Impacts of Leaking CO2 from Subsurface Storage Reservoirs to an Unconfined Oxidizing Carbonate Aquifer," *International Journal of Greenhouse Gas Control* 44 (January 1, 2016): 310–22, https://doi.org/10.1016/j.ijggc.2015.07.002.

[18] Agency for Toxic Substances and Disease Registry (ATSDR), Boron Public Health Statement, *available at* www.atsdr.cdc.gov/toxprofiles/tp26-c1.pdf.

[19] ATSDR, Public Health Statement: Barium (Aug. 2007), *available at* https://www.atsdr.cdc.gov/ToxProfiles/tp24-c1-b.pdf.

[20] ATSDR, Public Health Statement: Strontium (Apr. 2004), *available at* https://wwwn.cdc.gov/TSP/PHS/PHS.aspx?phsid=654&toxid=120.

[21] ATSDR, What Are the Physiologic Effects of Chromium Exposure? May 24, 2023. https://www.atsdr.cdc.gov/csem/chromium/physiologic_effects_of_chromium_exposure.html.

[22] Amanda R. Lawter et al., *Risk of Geologic Sequestration of CO2 to Groundwater Aquifers: Current Knowledge and Remaining Questions*, 114 Energy Procedia 3052–3059 (2017), *available at* https://doi.org/10.1016/j.egypro.2017.03.1433.

[23] Clean Water Action | Clean Water Fund, The Environmental Risks and Oversight of Enhanced Oil Recovery in the United States: an Overview of Class II Wells Trends and Regulations in EPA's Underground Injection Control Program, (Aug. 2017), at 13, *available at* https://www.cleanwateraction.org/sites/default/files/docs/publications/Environmental%20Risks%20and%20Oversight%20of%20Enhanced%20Oil%20Recovery%2011.08.17a.pdf.

[24] Russell Gold, *A Forgotten Oil Well Births a 100-Foot Geiser in West Texas*, Texas Monthly (Jan. 12, 2022), https://www.texasmonthly.com/news-politics/west-texas-geyser-oil-well-chevron/.

Figure 2. Briny Water Spews High into the Air from a Former Oil Well in Crane County on January 4, 2022.[25]

The saltwater had chloride levels with a concentration of 174,000 ppm.[26] The RRC stated the closest injection wells were approximately 1.2 miles away from the blowout.[27] The well was not documented in Railroad Commission databases.[28] Although the well was eventually capped, it has not been plugged.[29] Most recently, less than one quarter of a mile away, salt water began spewing out of the ground on December 7, 2023,[30] when brine burst from the ground "creating a marsh-like scene filled with pools ranging in size and color."[31]

---

[25] *Id.*
[26] Skinner, J., RRC Reports Heavy Contamination at Crane County Blowout, Source of Water Pressure Still Unknown, CBS 7 (Jan. 28, 2022), https://www.cbs7.com/2022/01/28/rrc-reports-heavy-contamination-crane-county-blowout-source-water-pressure-still-unknown/.
[27] RRC Open Meeting (Jan. 25, 2022), Timestamp 23:55, https://www.adminmonitor.com/tx/rrc/open_meeting/20220125/.
[28] Skinner, *supra* note 26.
[29] A well control expert gave public input at the Railroad Commission Open Meeting on December 13, 2023 and remarked that every global technology has been researched and has been unable to be used to plug the well. *See* RRC Open Meeting (Dec. 13, 2023), Timestamp: 42:30, https://www.adminmonitor.com/tx/rrc/open_meeting/20231213/.
[30] Hannah Brock, *'We Need to Figure Out What's Going On:' Crane Co. Water Flow Halts, Leaves Questions in Wake*, CBS7.com (Jan. 23, 2024), https://www.cbs7.com/2024/01/24/we-need-figure-out-whats-going-crane-co-water-flow-halts-leaves-questions-wake/.
[31] Mitch Borden, *State Regulators Struggle to Contain a Leak that's Drenching West Texas Rand Land with Potentially Toxic Water*, Marfa Public Radio (Jan. 12, 2024), https://www.marfapublicradio.org/2024-01-12/state-regulators-struggle-to-contain-a-leak-thats-drenching-west-texas-ranch-land-with-potentially-toxic-water.

Figure 3. Aerial Photo Taken January 9, 2024 of Leak in Crane County[32]

The uncontrolled flow of water at one point amounted to 33 barrels of water being released per hour (the equivalent of 13,806 gallons).[33] The flow was finally stopped on January 21, 2024,[34] and the state expended more than $2.5 million to control the well.[35] The salt in the water killed vegetation across 30 acres of land. The extent of the impacts to groundwater are not yet known.[36] In response, the RRC requested a no-fly zone over the flow, which has been extended until June.[37] This comes just two years after the geyser-like blowout at a nearby ranch in the same county referenced above.[38]

---

[32] *Id.*
[33] *Id.*
[34] RRC, RRC Successfully Plugs Uncontrolled Water Flow in Crane County (Jan. 31, 2024), https://www.rrc.texas.gov/news/013124-rrc-successfully-plugs-uncontrolled-water-flow-in-crane-county/.
[35] RRC Open Meeting (Jan. 30, 2024), Timestamp: 58:20, https://www.adminmonitor.com/tx/rrc/open_meeting/20240130/.
[36] Brock, *supra* note 30.
[37] Federal Aviation Administration, NOTAM Number: FDC 4/1756 (Jan. 8, 2024) at 2135 UTC, https://tfr.faa.gov/save_pages/detail_4_1756.html; *see also* Drane, A., *Railroad Commission's No Fly Zone IN West Texas Extended Through June*, Houston Chronicle (Jan. 9, 2024), https://www.houstonchronicle.com/business/energy/article/texas-railroad-commission-no-fly-zone-extended-18598509.php.
[38] Brock, *supra* note 30.

At nearby Antina Ranch, on the border of Ward and Crane Counties, abandoned wells are leaking dangerous chemicals that are seeping into the groundwater beneath the ranch. In recent years, the ranch owner has found crude oil bubbling from an abandoned well and pools of salty produced water seeping from others.

Figure 4. Various Leaks from Wells on Antina Ranch[39]

Traces of benzene, also known to leak from abandoned wells, have been detected in wells used to supply cattle's drinking water. [40] The wells are also releasing methane, contributing to the acceleration of global warming.[41] Geologists and well control experts have noted that an evaluation and assessment of half a million acres of ground in West Texas is imminently needed,

[39] Photograph by Pu Ying Huang, in *Landowners Fear Injection of Fracking Waste Threatens West Texas Aquifers*, KSAT.com (last updated March 16, 2023 at 3:00 pm), https://www.ksat.com/news/texas/2023/03/10/landowners-fear-injection-of-fracking-waste-threatens-west-texas-aquifers/.

[40] C. Bussewitz & M. Irvine, *Forgotten Oil and Gas Wells Linger, Leaking Toxic Chemicals*, Phys Org (July 29, 2021), https://phys.org/news/2021-07-forgotten-oil-gas-wells-linger.html.

[41] Unplugged, abandoned wells in the U.S. leaked 5,000 times more methane than plugged wells did, according to a 2015 study cited by the EPA. Unplugged wells leak 280,000 metric tons of methane into the atmosphere each year, according to an estimate by EPA, though experts have estimated far higher totals. *Id.*

and that high risk of crossflow and well control issues exist in the area, posing catastrophic risks to groundwater tables.[42]

An abandoned well called the Sloan Blair No. 1 has been spewing so much briny water that it has formed a body of water that has been nicknamed "Lake Boehmer." As of 2022, Lake Boehmer was 60-acres and growing with a flow rate of hundreds of gallons per minute, and had sulfate levels twenty-five times greater than the legal threshold for drinking water.[43]

***Figure 5. Lake Boehmer in Pecos County, Texas*[44]**

According to an analysis commissioned by the Middle Pecos Groundwater Conservation District, and as reported by The Texas Tribune, the Sloan Blair No. 1 well was originally drilled in the San Andres formation as an oil test well and was then abandoned.[45] In a 2020 article, the

[42] RRC Open Meeting (Dec. 13, 2023), Timestamp: 42:15, https://www.adminmonitor.com/tx/rrc/open_meeting/20231213/.
[43] Raymond L Straub Jr., P.G. Straub Corporation, Groundwater and Air Sampling of the Sloan Blair No. 1 Flowing Well in Lake Boehmer Pecos County, Texas, at 11 (2022), *available at* MPGCD Boehmer Lake-Sloan Blair No. 1 Groundwater and Air Sampling Report 4-11-2022 sealed - DocumentCloud.
[44] Photo taken by Robert Mace, published in *The Dead Sea of West Texas*, Texas Monthly (Dec. 8, 2021), https://www.texasmonthly.com/news-politics/lake-boehmer-dead-sea-west-texas/.
[45] *Id.*

Texas Tribune reported: "now, underground pressure is causing the salty water to spew to the surface, bringing with it contaminants such as benzene and xylene, both carcinogens. The well is also leaking hydrogen sulfide gas at potentially lethal levels for humans, and heat trapping gasses including methane and carbon dioxide. To survey the site, researchers must wear hazmat suits."[46] RRC refuses to take responsibility for the well,[47] even though the well clearly falls within the statutory definition of an orphaned well.[48] Furthermore, the agency has not acted with any hesitation to approve injection into the San Andres formation. At the October 2023 Open Meeting, the RRC approved permits for four proposed disposal wells injecting into the San Andres formation.[49]

On one 20,000-acre ranch near Imperial, Texas, there are more than 100 abandoned oil and gas wells. These wells are leaking contaminated water, hydrogen sulfide, and radioactive materials, causing significant harm to the longhorn cattle raised on the ranch.[50] At La Rosa Ranch near Corpus Christi, Texas, an orphaned well blew in 2019, spewing a mixture of gas and liquid near wetlands, killing nearby vegetation.[51]

---

[46] Amal Ahmed, *Abandoned "Dry Hole" Oil Wells are Polluting Texas Farms, Ranches and Groundwater. The State won't Fix Them,* The Texas Tribune (Oct. 13, 2020), https://www.texastribune.org/2022/10/13/texas-abandoned-oil-wells-railroad-commission/.

[47] *See, e.g.,* Wayne Chrisitan, RRC, *Opinion: Media Reports on Abandoned Wells Requires Correction* (July 25, 2023), https://www.mrt.com/opinion/article/wayne-christian-media-reports-abandoned-wells-18260036.php.

[48] Tex. Nat. Res. Code Sec. 89.047; *see also* V. Palacios, *The Trust About P-13 Wells and the Railroad Commission's Responsibility to Protect Our Communities*, Commission Shift, https://commissionshift.org/news/the-truth-about-p-13-wells-and-the-railroad-commissions-responsibility-to-protect-our-communities/.

[49] RRC, Opening Meeting Agency Items No. 7-10, timestamp 20:15 (Oct. 24, 2023), https://www.adminmonitor.com/tx/rrc/open_meeting/20231024/.

[50] Amal Ahmed, *Abandoned "Dry Hole" Oil Wells are Polluting Texas Farms, Ranches and Groundwater. The State won't Fix Them,* The Texas Tribune (Oct. 13, 2020), https://www.texastribune.org/2022/10/13/texas-abandoned-oil-wells-railroad-commission/.

[51] *See* Original Petition for Writs of Mandamus and Injunction, *Public Citizen, Inc. v. Railroad Commission of Texas*, Case No. D-1-GN-20—3795, ¶ 28 (Dist. Ct. of Travis Cnty. 53rd Jud. Dist.) (July 22, 2020), *available at* https://www.citizen.org/wp-content/uploads/2020-7-22-Original-Petition-for-Writs-of-Mandamus-and-Injunction.pdf.

These leaks can severely endanger drinking water sources. In some communities in West Texas, well water tests have returned results showing high concentrations of various contaminants.[52] In one East Texas community, the EPA documented saltwater leaking from a local injection well's casing and additionally noted the contaminated groundwater around it, including benzene and petroleum hydrocarbons.[53] In response, the EPA started giving the community bottled water because there was no access to clean drinking water.[54] RRC's mismanagement of the Class II well program has left minority and low-income communities across Texas without access safe clean drinking water, in direct violation of the State's obligations under Section 1425 of the SDWA.

B. More Frequent and More Severe Seismic Events

Underground injection into Class II wells can also lead to induced seismicity.[55] When huge volumes of water are injected into the ground near faults, subsurface pressure changes can cause faults to slip resulting in earthquakes.[56] Areas in Texas, specifically near Midland and the surrounding Permian Basin, have seen a significant uptick in earthquakes as a result of Class II well activities.[57] One significant cluster of earthquakes occurred near Pecos, where increased

---

[52] Dylan Baddour, *Landowners Fear Injection of Fracking Waste Threatens Aquifers in West Texas*, Inside Climate News (Mar. 20, 2023), https://insideclimatenews.org/news/10032023/fracking-texas-produced-water/.
[53] Rusty Middleton, *What Lies Beneath*, Texas Observer (May 19, 2006), https://www.texasobserver.org/2206-what-lies-beneath-the-threat-from-oilfield-waste-injection-wells/.
[54] *Id.*
[55] Jim-Woo Kim & Zhong Lu, *Association Between Localized Geohazards in West Texas and Human Activities, Recognized by Sentinel 1A/B Satellite Radar Imagery*, Sci. Rep. 8, 4727 (2018), https://doi.org/10.1038/s41598-018-23143-6; Scott Staniewicz et al., *InSAR Reveals Complex Surface Deformation Patterns Over an 80,000 Km2 Oil-Producing Region in the Permian Basin*, Geophysical Research Letters 47, No. 21 (November 16, 2020): e2020GL090151,https://doi.org/10.1029/2020GL090151.
[56] Erin Douglas, *Earthquakes in Texas Doubled in 2021. Scientists Cite Years of Oil Companies Injecting Sludgy Water Underground*, Texas Tribune (Feb. 8, 2022), https://www.texastribune.org/2022/02/08/west-texas-earthquakes-fracking/; *see also* Staniewicz, *supra* note 49.
[57] Erin Douglas, *Another Large Earthquake Shows Seismic Activity Continues to Increase in West Texas, Experts Say*, Texas Tribune (Nov. 8, 2023), https://www.texastribune.org/2023/11/08/earthquake-west-texas-oilfield-fracking/; *see also* Bureau of Economic Geology, The University of Texas at Austin, TexNet Earthquake Catalog, https://www.beg.utexas.edu/texnet-cisr/texnet/earthquake-catalog (last visited Jan. 11, 2024).

seismic activity began in 2009 and climbed to more than 2,000 earthquakes in 2017.[58] This seismic activity correlates with the increase in injection well activity in that area.

RRC acknowledged that saltwater disposal well activity is contributing to the increased seismic activity in the region and has made unsuccessful attempts to address the problem. As part of its efforts, RRC temporarily suspended injection activities within certain "Seismic Response Areas."[59] For example, in 2021, RRC suspended underground water injections in an area of land near Midland, affecting activities at 33 disposal wells in the area. In response to 15 earthquakes in occurring from January 2020 to October 2021, the RRC created the "Northern Culberson-Reeves Seismic Response Area" to address the seismic activity in that region.[60] Most recently, from November 8 through December 17, 2023, seven earthquakes occurred in northern Culberson and Reeves Counties with magnitudes between 3.6 and 5.2.[61] One of these seismic events occurred near Coalson Draw, Texas,[62] and is tied for the fourth strongest recorded in Texas.[63] It was the second 5.0 magnitude or greater earthquake to occur in the area in just over a year, with another 5.4 magnitude earthquake having occurred in November of 2022.[64] In response to the earthquakes in this area, RRC again temporarily suspended disposal well permits.[65] Despite the short-lived suspensions that have been imposed by the RRC, injection-induced earthquakes continue

[58] Staniewicz, *supra* note 49.
[59] RRC, Seismicity Response, https://www.rrc.texas.gov/oil-and-gas/applications-and-permits/injection-storage-permits/oil-and-gas-waste-disposal/injection-disposal-permit-procedures/seismicity-review/seismicity-response/ (last visited Jan. 11, 2024).
[60] RRC, Seismicity Response, https://www.rrc.texas.gov/oil-and-gas/applications-and-permits/injection-storage-permits/oil-and-gas-waste-disposal/injection-disposal-permit-procedures/seismicity-review/seismicity-response/ (last visited Jan. 11, 2024).
[61] *Id.*
[62] USGS, Earthquake Hazards Program: M 5.2 – Coalson Draw, Texas (Nov. 8, 2023), https://earthquake.usgs.gov/earthquakes/eventpage/tx2023vxae/executive.
[63] Bureau of Economic Geology, The University of Texas at Austin, TexNet Earthquake Catalog, https://www.beg.utexas.edu/texnet-cisr/texnet/earthquake-catalog (last visited Jan. 11, 2024).
[64] Erin Douglas, *Texas Oil and Gas Agency Investigating 5.4 Magnitude Earthquake in West Texas, the Largest in Three Decades*, The Texas Tribune (Nov. 18, 2022), https://www.texastribune.org/2022/11/18/texas-earthquake-fracking-railroad-commission/.
[65] *Id.*

throughout the State. And while the RRC temporarily suspended *disposal* into these permitted wells, it did not halt its approval process for additional disposal well permits throughout the state. In February 2023, the RRC issued a notice to operators that it would add requirements to new disposal well permits to require operators to report injection pressures, volumes, and fluid densities for all new deep injection wells in the Permian Basin and all new shallow disposal wells within an SRA.[66] The data is required to be collected on a daily basis, but it is only reported on a monthly basis. A December 2023 notice to operators clarified that the requirements would also apply to amended permits in the Permian Basin and specified acceptable methods for collecting bottom hole pressure measurements.[67]

Despite these reporting requirements, the commission has not taken any immediate actions related to disposal elsewhere (such as limiting disposal volumes or initiating a rulemaking to ensure a better understanding of pressures in injection wells throughout the state). These failures by the RRC demonstrate the noncompliance under the SDWA as detailed further below.

C. Large and Dangerous Sinkholes

Class II well activities are also known to have caused several sinkholes in Texas, particularly in the Permian Basin where there is the highest concentration of Class II wells. For example, two very large sinkholes formed in June 1980 and June 2002 near two communities: Wink and Kermit in Winkler County, Texas. Each of these holes were 110 and 137 meters in diameter.[68] A study from Southern Methodist University in Dallas, Texas, found that these two

[66] RRC, Notice to Oil and Gas Operators: Disposal Well Monitoring and Reporting Requirements in the Permian Basin (Feb. 2023), *available at* https://www.rrc.texas.gov/media/l1on5x0d/2023-nto-disposal-well-monitoring-reporting-requirements-in-the-permian-basin-2-6-2023.pdf.

[67] RRC, Notice to Oil and Gas Operators: Disposal Well Monitoring and Reporting Requirements in the Permian Basin (Dec. 2023), *available at* https://www.rrc.texas.gov/media/sm5bzzpg/nto-disposal-well-monitoring-reporting-requirements-in-the-permian-basin-12-19-2023.pdf.

[68] Bureau of Economic Geology, The University of Texas at Austin,Wink Sink, https://www.beg.utexas.edu/research/programs/near-surface-observatory/wink-sink (last visited Jan. 17, 2024).

caprock and cover collapse sinkholes "were associated with intense hydrocarbon drilling and production activities in the Hendrick oilfield."[69] "Production records and prior investigations imply the sinkholes developed after salt dissolution due to freshwater intrusion, cavity formation, roof failure, and successive upward cavity migration."[70] The study concluded that hydrocarbon production activities were the main contributors to the formation of both of the sinkholes.[71] Specifically, inappropriate borehole management, such as poor sealing and inadequate cement linings of abandoned wells, were the main contributors to sinkhole collapse.[72] Where hydrocarbon production in the area of a sinkhole ceases, the ground surface stabilized.[73]

In 2008, a massive sinkhole formed in Daisetta, just east of Houston.[74] After the huge sinkhole remained stable for 15 years, a second sinkhole opened up right next to it. And, when the ground collapsed it swallowed up trucks, farm equipment, oil tanks and trees. Daisetta was a hub of oilfield exploration in the early 1900s, and it is believed there were at least 15 wells around the perimeter of the first large sinkhole. Observers who witnessed the sinkhole said that 4 to 5 drill casings were just sticking up in the air after the earth caved in.[75]

Abandoned wells at a ranch near Imperial, Texas have also contributed to massive sinkholes. At the same ranch, a 2,800-foot-deep well's casing fell in, causing it to wash out salt

[69] Jin-Woo Kim et al., *Evolution of Sinkholes over Wink, Texas, Observed by High-Resolution Optical and SAR Imagery*, 222 Remote Sensing of Environment 119 (2019), *available at* https://doi.org/10.1038/s41598-018-23143-6.
[70] *Id.* at 119.
[71] *Id.* at 130.
[72] *Id.*
[73] *Id.*
[74] Katie Watkins, *The Ground Isn't There Anymore:' Researchers Searching for the Reason Second Sinkhole Opened up in Daisetta*, inDepth Health & Science (May 30, 2023), https://www.houstonpublicmedia.org/articles/news/health-science/2023/05/25/452704/daisetta-liberty-county-second-sinkhole-research/.
[75] *Id.*

water over a wide area and create a 90-foot-deep, quarter mile-wide sinkhole.[76] That sinkhole even expands to Farm to Market Road 1053, and has repeatedly caused cracks in the road.[77]

Figure 6. FM 1053 Sinkhole in Pecos County, Texas[78]

The Texas Department of Transportation is planning to spend nearly $30 million to reroute the road.[79] The RRC has failed to take any action to prevent further harm from these abandoned wells, leaving the owner of the ranch with additional financial burdens in addition to the safety and environmental problems posed by the sinkhole.

[76] Bob Campbell, *Texas Rancher Struggles with Sinkhole*, Longview News-Journal (last updated Apr. 3, 2023), https://www.news-journal.com/news/business/texas-rancher-struggles-with-sinkhole/article_52843884-95c5-11ec-aa02-d7cd7b708f7c.html.
[77] Jacob Ford, *Water Well Sink Hole South of Imperial*, Odessa American (Feb. 19, 2022), v https://www.oaoa.com/multimedia/water-well-sink-hole-south-of-imperial/.
[78] Jolina Okazaki, *Sink Hole Leads to Road Collapse in Pecos County*, NewsWest9 (last updated July 10, 2018), https://www.newswest9.com/article/news/local/sink-hole-leads-to-road-collapse-in-pecos-county/513-1c8af3aa-14f2-4513-bb0e-00f8d16304cd.
[79] TxDOT – Project Tracker, Control Section Job No. 086605036, https://apps3.txdot.gov/apps-cq/project_tracker/ (last visited Feb. 21, 2024).

D. Aquifers at Risk

There are only 6,500 aquifers in the United States and a majority of these are concentrated in six states and in sovereign tribal nations. Texas is one of these six states.[80] One aquifer in Texas, the Ogallala aquifer, located in the Texas panhandle, supplies water for 30% of the nation's irrigation for farmers and ranchers who supply a quarter of the nation's agriculture.[81] Approximately 55% of the estimated 15 million acre-feet of water used in Texas is from aquifers, and 32% of the municipal waters come from groundwater.[82]

The map below depicts the Major and Minor aquifers in Texas, as well as the CO_2 infrastructure (injection wells and pipelines) that intersect with these valued natural resources.

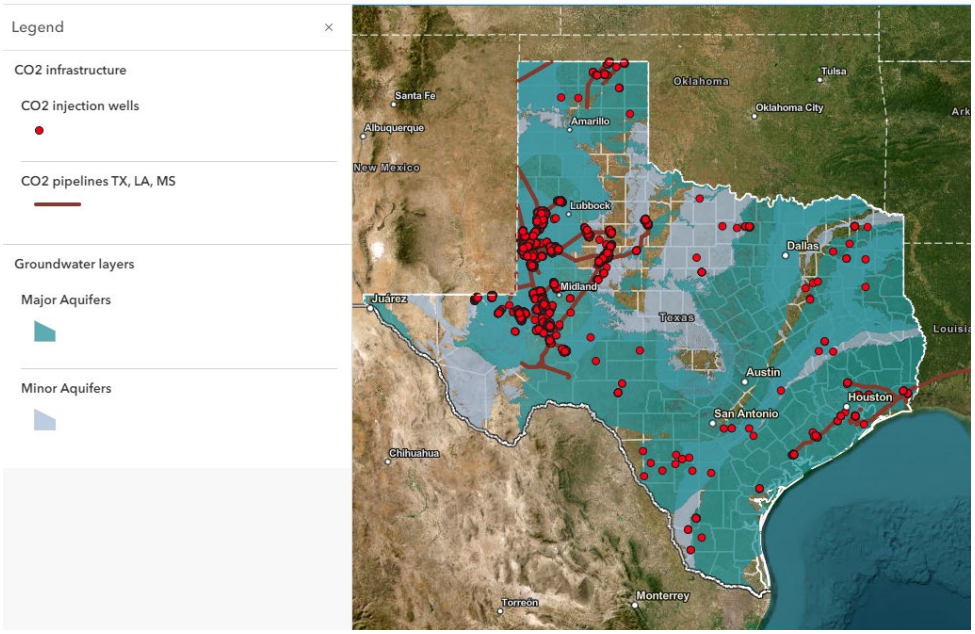


Figure 7. Map of Minor & Major Aquifers in Texas and CO_2 Infrastructure

[80] U.S. EPA, Underground Injection Control (UIC): Aquifer Exemptions Map, https://www.epa.gov/uic/aquifer-exemptions-map.

[81] Jayme Lozano Carver, *Texas Farmers are Worried one of the State's Most Precious Water Resources are Running Dry. You Should Be, Too*, The Texas Tribune (June 20, 2023), https://www.texastribune.org/2023/06/20/texas-ogallala-aquifer-farming-climate-change/#:~:text=The%20aquifer%20provides%20water%20for,supplies%20their%20drinking%20water%20too.

[82] Texas Almanac, Aquifers of Texas (last updated 2022), https://www.texasalmanac.com/articles/aquifers-of-texas#:~:text=About%2060%20percent%20of%20the,municipal%20needs%20of%20the%20state.

When Texas was granted primacy, it was tasked with administering the Class II well injection program *and* preventing injection wells from contaminating underground sources of drinking water. The abundance of aquifers throughout Texas' land area and the collocation of oil and gas activities with those aquifers may warrant additional measures to protect USDW. Nonetheless, the RRC has failed to manage those operations UIC in a way that avoids accidents that could cause harm to these USDW, in direct contradiction to its obligations under the SDWA.

III. Petitioners

Commission Shift, based in Laredo, Texas, is a non-profit organization focused on reforming oil and gas oversight in the State of Texas by building support to hold the Railroad Commission of Texas accountable to its mission in a shifting energy landscape. Commission Shift educates and organizes a wide array of stakeholders to build support for changes at the Railroad Commission of Texas that improve the agency's function, transparency, and accountability to people and places impacted by the oil and gas industry.

Clean Water Action is a national 501(c)(4) organization headquartered in Washington DC. Founded in 1972, Clean Water Action works at the national level and in a dozen state offices on environmental and health issues. Reducing water pollution and protecting drinking water sources are among the organization's priorities. Clean Water Action has a track record of research and engagement around threats to drinking water from oil and gas activities, and around SDWA and Clean Water Act programs – including the SDWA UIC Program – intended to address those risks. Clean Water Action's Texas work is headquartered in Houston and Austin.

IV. Primary Enforcement of the UIC Program under the SDWA

In 1974, in response to concerns about underground injection practices, EPA issued a policy in which it stated that underground injection should only be conducted with strict control

and clear demonstration that the wastes will not adversely affect us able groundwater supplies.[83] The SDWA ratified EPA's underground injection policy position and required the EPA to promulgate a UIC program that set forth minimum injection well requirements for state programs to prevent endangerment of underground sources of drinking water. [84]

The SDWA also established the current federal-state arrangement in which states may be delegated primary implementation and enforcement authority for the UIC program. States, tribes, and territories may apply for, and the EPA may grant by rulemaking, primary enforcement responsibility for all or part of the UIC program. This is commonly referred to as "primacy." These primacy programs are then responsible for permitting or otherwise regulating underground injection wells so they do not endanger USDWs as required by the SDWA.

The SDWA provides two statutory methods to approve a state's application for primacy of a UIC program for Class II wells: under Section 1422 and 1425.[85] First, under Section 1422, a state must show that its UIC program satisfies applicable minimum federal regulations promulgated by EPA under 42 U.S.C. § 300h, set forth in 40 C.F.R. Parts 142-148. Programs authorized under section 1422 must include well owner and operator requirements for construction, operation, monitoring and testing, reporting, and closure requirements.

Section 1425, which Congress enacted in 1980, offers an alternative to the detailed requirements at 40 C.F.R. Parts 142-146. Section 1425 requires a state to demonstrate that its UIC program meets the requirements of SDWA Sections 1421(b)(1)(A)-(D) and represents an effective

[83] J.E. Clark, D.K. Bonura & R.f. Van Voorhees, *An Overview of Injection Well History in the United States of America*, Underground Injection Science and Technology (C.F. Tsang & iA. Apps, eds.) (2005), *available at* https://www.sciencedirect.com/science/article/abs/pii/S016756480552001X.
[84] J.E. Clark, D.K. Bonura & R.f. Van Voorhees, "An Overview of Injection Well History in the United States of America" Underground Injection Science and Technology (C.F. Tsang & iA. Apps, eds.) (2005), *available at* https://www.sciencedirect.com/science/article/abs/pii/S016756480552001X.
[85] *Id.* §§ 300h–1(b), 300h–4(a).

program to prevent underground injection that endangers drinking water sources.[86] While the specifics of the standards under Section 1425 and Sections 1421(b)(A)(D) are less detailed than the program standards set forth in 40 C.F.R. Parts 142-146, the statutory sections and EPA's interpretive guidance outline criteria for permitting, inspections, monitoring, record-keeping, reporting, and public participation for a Section 1425 program.[87]

Section 1425 itself requires that a state meet five conditions for approval. The state program must: (1) prohibit underground injection that is not authorized by permit or rule pursuant to section 1421(b)(1)(A); (2) require the applicant for a permit satisfy the state that the underground injection will not endanger drinking water sources and that no rule is promulgated which authorizes any underground injection that endangers drinking water sources pursuant to Section 1421(b)(1)(B); (3) include inspection, monitoring, recordkeeping and reporting requirements pursuant to Section 1421(b)(1)(C), (4) apply to underground injection by Federal agencies and any other person pursuant to Section 1421(b)(1)(D); and (5) be effective to prevent underground injection which endangers drinking water sources pursuant to Section 1425(a).[88] EPA determines whether a state program meets Section 1421(b)(1)(C)'s mandate for an inspection, monitoring, recordkeeping, and reporting program by assessing: 1) whether the program has adequate field inspectors to inspect the facilities in the state and qualified inspectors to witness mechanical integrity tests, corrective actions, and plugging procedures; 2) whether the program has authority to sample injected fluids

[86] U.S. EPA, Guidance for State Submissions Under Section 1425 Of the Safe Drinking Water Act, Ground Water Program Guidance #19 (hereinafter "EPA Guidance for States"), at 1, *available at* https://www.epa.gov/sites/default/files/2020-02/documents/guidanceforstatesubmissionsundersection1425ofthesdwa_0.pdf.
[87] *Id.*
[88] *Id*. at 9-10.

at any time; 3) effective monitoring of injection pressure and injection rate; and 4) prompt notice of mechanical failure or downhole problems.[89]

EPA may withdraw state primacy over a UIC program if the EPA Administrator determines, after a public hearing, that the state is not administering or enforcing its program in compliance with SDWA requirements,[90] including Section 1421(b)(1)(A)-(D), and no longer represents an effective program to prevent underground injection that endangers drinking water sources.[91.] Procedurally, when EPA has cause to believe that a state is not administering a Class II injection well program in compliance with the SDWA, EPA informs the state of the specific areas of noncompliance, and the state then has 30 days to demonstrate that its program is in compliance. If the state fails to demonstrate compliance, EPA schedules a public hearing to discuss withdrawal of the state program.[92] If EPA finds that the state is not in compliance after the public hearing, EPA notifies the state of the specific deficiencies in the Class II program and necessary remedial actions.[93] If the state fails to carry out the remedial actions within 90 days, EPA must withdraw the program and implement its own federal program.[94]

EPA should undertake this process here because there is sufficient evidence demonstrating that Texas is not administering its Class II injection well program in compliance with the SDWA.

V. EPA Must Revoke Texas's Primacy for its Class II Well Program

Texas' program fails to constitute an effective Class II program because it fails to adequately protect drinking water in the state and fails to (1) enforce proper closure requirements

[89] *Id.* at 15.
[90] 40 C.F.R. § 145.34(b)(1).
[91] *See* 42 U.S.C. § 300h-4(c)(2).
[92] 40 C.F.R. § 145.34(b)(2).
[93] *Id*. § 145.34(b)(3).
[94] *Id*. §§ 145.34(b)(1),(3); *see also* 42 U.S.C. §§ 300h-4(c)(2), 300h-1(c) (granting EPA the authority to prescribe a program applicable to the state that meets the requirements of the SDWA).

and require financial responsibility to plug and abandon all Class II wells, (2) implement an aquifer exemption program that properly protects USDW, (3) apply an Area of Review process that adequately evaluates all risks and potential impacts of a proposed activity, and (4) allow for full public participation in permitting and enforcement. For the reasons explained below, EPA should revoke Texas's primacy over its Class II well program until these deficiencies are addressed.

A. The RRC Must Properly Manage Unplugged and Abandoned Wells in the State and Hold Operators Financially Responsible.

Texas has thousands of unplugged or inactive or orphaned oil and gas wells across the state. Texas currently has nearly 8,200 orphaned wells,[95] up 32% since 2019 despite plugging an average 1,440 wells per year over the last five years.[96] An additional 113,400 are considered "inactive," meaning that they have not produced within the past 12 months, and the RRC has not required their owners to plug them.[97] These unplugged oil and gas wells continue to endanger water quality and human life. The Texas Natural Resource Code sets forth requirements for inactive wells that apply to oil, gas, and injection wells.[98] Although operators are required to remove equipment after a certain number of years,[99] they can apply for inactive well plugging extensions almost indefinitely, and state law does not require annual reports ensuring the integrity of the wellbore or require the well owner to ensure the pressure of the underlying reservoir has not been negatively impacted by its inaction (or those actions of others).[100]

---

[95] RRC, Orphaned Wells with Delinquent P-5 Greater Than 12 Months (Dec. 18, 2023), https://www.rrc.texas.gov/oil-and-gas/research-and-statistics/well-information/orphan-wells-12-months/.

[96] RRC, Oilfield Cleanup Program Annual Reports and 2023 4th Quarter Report (2019-2022), https://www.rrc.texas.gov/oil-and-gas/environmental-cleanup-programs/oil-gas-regulation-and-cleanup-fund/#OCP_annual.

[97] RRC, Inactive Well Aging Report (Jan. 10, 2024), https://www.rrc.texas.gov/oil-and-gas/compliance-enforcement/hb-2259-hb-3134-inactive-well-requirements/inactive-well-aging-report-iwar/.

[98] Tex. Nat. Res. Code Chapter 89.

[99] Tex Nat. Res. Code § 89.029.

[100] *See* RRC, HB 2259-Inactive Well Compliance Summary, https://www.rrc.texas.gov/oil-and-gas/compliance-enforcement/hb-2259-hb-3134-inactive-well-requirements/inactive-well-compliance-summary/ (last visited Feb. 5, 2024).

Under the federal SDWA, the law requires, among other things, that well operators remain financially responsible for the plugging and cleanup of their abandoned wells. In its Guidance for State Submissions Under Section 1425 of the SDWA, EPA specifies that, at a minimum, plugging and abandonment requirements should be reviewed for the presence of the following elements:

> (1) that appropriate mechanisms are available in the State program to insure the proper plugging of wells upon abandonment;
> (2) that all Class II wells are required, upon abandonment, to be plugged in a manner which will not allow the movement of fluids into or between USDW, and
> (3) that operators are required to maintain financial responsibility in some form, for the plugging of their injection wells.[101]

Despite these requirements, the state allows injection well operators to apply for plugging extensions,[102] and expressly allows plugging extensions for wells that are used in enhanced oil recovery projects.[103]

Additionally, the state collects so little financial assurance from operators that it cannot keep up with its growing list of orphaned wells. For example, operators are only required to file financial assurance for an individual well "in an amount equal to $2 for each foor of well depth for each well,"[104] even though it costs the RRC an average of $14.50 per foot to plug orphaned wells.[105] Operators may also file blanket bonds for multiple wells, depending on the number of wells in their well population.[106] These blanket bonds can result in bonding amounts of $500 or less per well; in contract, the RRC's average expenditure to plug orphaned wells in Fiscal Year 2023 was $30,000 per well.

---

[101] EPA Guidance for States, *supra* note 86, at 15.
[102] Tex. Nat. Res. Code § 89.023.
[103] *Id.* § 89.025.
[104] *Id.* § 91.1041.
[105] RRC, Cost Calculation (2023), https://www.rrc.texas.gov/oil-and-gas/compliance-enforcement/hb-2259-hb-3134-inactive-well-requirements/cost-calculation/.
[106] Tex. Nat. Res. Code § 91.1042.

Number of wells	Blanket Bond Amount	Per-well range of bonding
10 or fewer	$25,000	$2,500 to $25,000
11 to 99	$50,000	$505 to $4,545
100 or more	$250,000	$2,500 or less

Table 1: Blanket bonding tiers in Texas. [107]

By failing to collect sufficient financial assurance to plug orphaned wells, and by generously allowing inactive well plugging extensions, the RRC leaves Texans to face both the impacts of the unplugged wells and the costs to clean them up.[108]

For example, at the ranch in near Imperial, where abandoned wells are leaking contaminated water, hydrogen sulfide, and radioactive materials, the RRC refuses to take responsibility for the cleanup of some of the wells referred to as "P-13" wells. The RRC's Form P-13 allows oil and gas operators to convey unplugged wells to landowners for use as water wells.[109] RRC has often raised the argument that because these wells are now considered water wells, they are no longer under the commission's authority to plug or clean up.

Contrary to the RRC's arguments, there is nothing in the SDWA that allows the RRC to shed jurisdiction of wells drilled by oil and gas operators, even if reclassified to a P-13 water well. Such wells fall within the Texas Natural Resource Code Section 89.047 definition of an orphaned well and should be included within the RRC's cleanup obligations. The Texas Natural Resource Code § 89.047 defines an orphaned well as a well: "(A) for which the commission has issued a

[107] RRC, Oil Field Cleanup Program Quarterly Status Report, Fiscal Year 2023, 4th Quarter (Oct. 24, 2023), *available at* https://www.rrc.texas.gov/media/2nglbh1s/oilfield-cleanup-program-qtrly-rpt-fy-23-4th-qtr.pdf.
[108] Amal Ahmed, *Abandoned "Dry Hole" Oil Wells are Polluting Texas Farms, Ranches and Groundwater. The State won't Fix Them,* The Texas Tribune (Oct. 13, 2020), https://www.texastribune.org/2022/10/13/texas-abandoned-oil-wells-railroad-commission (quoting RRC spokesperson).
[109] *See* 16 Tex. Admin. Code § 3.14(a)(4); *see also* RRC, Form P-13, *available at* https://www.rrc.texas.gov/media/ltcaukal/finalp-13-92104.pdf.

permit; (B) for which production of oil or has or another activity under the jurisdiction of the commission has not been reported to the commission for the preceding 12 months; and (C) whose operator's commission-approved organization has lapsed." Although P-13 wells may no longer be classified as oil and gas wells, they still meet all these statutory criteria required for RRC to retain jurisdiction over them. The RRC has recorded approximately 2,050 P-13 wells conveyed since 2001, though many wells were conveyed in a similar manner before the state began to track them.[110]

The RRC's refusal to take accountability for thousands of oil and gas wells across the state, and its insistence that Texans foot the bill for maintenance of these wells and the residual damages caused by them, is in violation of the SDWA. Until RRC properly manages the unplugged and abandoned wells in the state, including financial assurance requirements and processes to have the wells properly plugged, EPA must take control of the program.

B. The RRC Must Manage the Aquifer Exemption Program to Adequately Protect Current and Future Sources of Drinking Water.

Groundwater containing less than 10,000 mg/l total dissolved solids ("TDS") is considered a USDW, and injecting into an USDW requires a permit, unless EPA grants an aquifer exemption, which removes protections and allows the proposed injection activity into a specific aquifer or section of an aquifer.

EPA developed the aquifer exemption program in the 1980s when oil and gas interests argued that certain oil and gas development would not be possible if every USDW were protected. The intention of the aquifer exemption process is to protect drinking water aquifers while also meeting industry needs.

[110] List of P-13 Wells (obtained from the RRC via open records request on Oct. 17, 2023), on file with Commission Shift.

Texas has abused this exemption for more than 40 years now to the detriment of current and future drinking water sources across the State. At the time of Texas's primacy agreement in 1982, EPA and the RRC agreed that all currently producing oil fields would be given blanket aquifer exemptions. After that, however, those seeking an exemption would be required to follow a specified application process and gain concurrence from the EPA. Additionally, Texas was to provide a full inventory of wells that would fall under this exemption as of the date of the agreement.

When an application for an aquifer exemption is submitted, EPA is required to evaluate the boundaries and the proposed aquifer exemption and only approve those requests for specific portions of the aquifer that will not allow for further endangerment of a drinking water source. Under the application process, EPA or the primacy state agency is to review the site information, determine whether the proposed exemption meets the regulatory requirements set forth in 40 CFR 146.4 (criteria for exempted aquifers[111]), and consider comments submitted by the public. All exemptions are subject to public input. Both EPA and primacy states must provide notice and opportunity for public hearing for aquifer exemptions.[112] These procedures are intended to ensure that nearby drinking water sources remain protected.

In 1982, when Texas was first granted primacy and the blanket exemptions were allotted, the RRC agreed to provide maps of producing oil fields that were exempt. No such maps were

[111] These criteria were developed more than 30 years ago and do not reflect the modern threats to drinking water, changing demands for groundwater, impacts on water resources, or improvements in water treatment technologies. Because the criteria could result in injection into aquifers that were once considered not suitable for human consumption but could now or in the future become usable and necessary, they should be reevaluated. Specifically, what is considered to be a USDW should be expanded given that developing treatment technologies have allowed for a broader consideration of "future" sources of drinking water. *See* 40 C.F.R. § 144.3 (defining defines USDW broadly to include any aquifer or its portion that either currently supplies water for human consumption or contains fewer than 10,000 mg/l of total dissolved solids).

[112] *See* 40 CFR 144.7.

available until 2017, nearly 40 years later.[113] Even now, and for recently granted exceptions, much of the information provided to the public on EPA's website lacks any information about the circumstances of the applications (or if any were reviewed at all), the basis of the decision or the "injectate characteristics" that may justify such an exemption being granted, or any conformance with the requirements to provide an opportunity for public notice and hearing. [114]

These actions ignore federal requirements granted under the SDWA. The RRC's disregard for the requirements of the aquifer exemption program prioritizes business interests over the protection of sources of drinking water and allows the injection of contaminated wastewater and other chemicals into groundwater that would otherwise be protected as a potential source of drinking water in contravention of the explicit language and the intent of the SDWA. These violations should not be taken lightly, as allowing any exemption and thereby allowing injections into an aquifer is to sacrifice it as a drinking water source forever.

Until these deficiencies are cured, Texas' primacy over the Class II well program should be revoked.

C. The RRC's Area of Review Process Must Account for Foreseeable Risks

Texas' flawed Area of Review ("AOR") process fails to address formation over-pressurization and identify fluid migration pathways. Despite these known problems in Texas, RRC continues to apply a fixed radius Area of Review during its Class II permitting process that is unable to evaluate these risks.

---

[113] *See* RRC, Final Report: State of Texas Aquifer Exemption Project (Nov. 2017), *available at* https://www.cleanwater.org/sites/default/files/docs/publications/2017-11-30-Final%20Report-Texas%20Aquifer%20Exemption%20Project-correction.pdf.

[114] EPA, Underground Injection Control (UIC): Aquifer Exemption Data, *Site-Specific Aquifer Exemption Information*, https://www.epa.gov/uic/aquifer-exemption-data.

Federal regulations define AOR as "the area surrounding an injection well described according to the criteria set forth in §146.6 or in the case of an area permit, the project area plus a circumscribing area the width of which is either ¼ of a mile or a number calculated according to the criteria set forth in §146.6." Section §146.6 states that the AOR may be determined for each well or field through either a zone of endangering influence (ZEI)[115] or a fixed radius, which cannot be smaller than ¼ mile.

In Texas, the RRC applies the fixed radius method (a minimum of ¼ mile) for purposes of determining the AOR for Class II wells. [116, 117] Current requirements from the RRC for Class II wells include making best efforts to identify all wells in a ¼-mile radius of the proposed injection well and to provide evidence that all abandoned wells intersecting the injection formation have been plugged.

Texas' method of determining the AOR fails to account for scenarios that foreseeably result in migration that endangers USDW, including risks associated with over-pressurization. As described by Alexander Bump, a research scholar at the University of Texas, there are significant risks related to over-pressurization at and around a CO_2 injection site, like when a Class II well is used for EOR:

> CO_2 injection elevates pressure, which often spreads much farther than the CO_2 itself and may be far more consequential. Elevated pressure can drive displacement of existing formation brines which may be much more hazardous than the CO_2 itself if released to the environment. At a minimum, these brines are highly saline and they

[115] The radius of the ZEI is calculated as the lateral distance in which the pressures in the injection zone may cause migration of the injection and/or formation fluid into a USDW.

[116] 16 Tex. Admin Code §5.102 defines Area of Review as "[t]he subsurface three-dimensional extent of the CO_2 stream plume and the associated pressure front, as well as the overlying formations, any underground sources of drinking water overlying an injection zone along with any intervening formations, and the surface area above that delineated region."

[117] In some circumstances, this radius has been increased, for example in the Fort Worth Basin where the RRC expanded the AOR to an area of ½-mile radius. Fiscal Year 2022, EPA Region 6 End-of-Year Evaluation Railroad Commission of Texas Underground Injection Control Program, at 9, *available at* https://www.rrc.texas.gov/media/mw0nz4d5/trrc-eoy-fy-2022.pdf

> may also contain trace heavy metals, naturally-occurring radioactivity, and/or hydrocarbons, any of which could be damaging to fresh-water resources. In the presence of critically-stressed fractures, pressure build-up may also trigger induced seismicity. Last, pressure build-up may cause loss of injectivity, possibly impacting neighboring storage projects as well.[118]

Given the increase and intensity of over-pressurization incidents that occur in Texas related to Class II wells, as well as the high volumes of existing injection wells, any Texas UIC program must account for cumulative injection pressures and capture potential migration pathways to comply with the SDWA. The long list of examples of leaks and blowouts resulting from over-pressurization provides more than adequate support for EPA seeking the RRC's response to this petition.[119]

D. The RRC Must Develop a Comprehensive Plan to Address Risks Associated with Utilizing Class II Wells for Long-Term CO_2 Storage.

Texas' Class II Program puts USDW at risk by ignoring the long-term risks associated with sequestration of CO_2 and without imposing the same level of scrutiny and standards already articulated by the EPA for Class VI well construction. This creates an incentive for operators to apply for Class II permits to save money with respect to carbon storage or use, regardless of the safety of such practices. As such, the RRC's Class II well program must be scrutinized and should meet the strictest standards within the well programs' guidance to ensure long term health and wellbeing of Texas' USDWs.

[118] A. Bump & S. Hovorka, *Minimizing Exposure to Legacy Wells and Avoiding Conflict Between Storage Projects: Exploring Area of Review as a Screening Tool*, International Journal of Greenhouse Gas Control Vol. 129 (Oct. 2023), https://www.sciencedirect.com/science/article/pii/S1750583623001378 (internal citations omitted).
[119] *See* Section II.A-C, *infra*.

EPA Class VI rules, issued in 2010, specifically govern CO_2 in deep rock formations for permanent (or at least long term) storage.[120] Class VI wells differ from Class II wells not only in their intended purpose, but also in their physical characteristics. For example, unlike the buoyant CO_2 that is injected into Class IV wells, water injected into a Class II well is usually not buoyant.[121] Further, when pressurized, CO_2 can exist in a "supercritical" phase, having the physical properties of both a liquid and a gas.[122] In Class VI wells there is also a relatively high subsurface mobility of CO_2 compared to water and corrosivity is to be expected in the presence of water because it forms carbonic acid.[123] Thus, the standards for operating these wells differs significantly.[124]

Despite the differences between Class II and Class VI wells' capabilities to store CO_2 safely and effectively and the resulting need for greater oversight with the long-term storage of CO_2, when an owner or operator of a Class II well intends to use the well for the primary purpose of long-term CO_2 storage, it is unlikely that the well owner or operator will be required to obtain a Class VI permit. Under Texas' carbon dioxide injection well rules, it is up to the Director of the RRC's Oil and Gas Division ("the Director") to determine whether an injection well permitted for Class II uses should in fact be regulated under the Class VI rules based on whether the "injection well is no longer being used for the primary purpose of enhanced recovery operations *or there is an increased risk to USDWs*."[125] The state recognizes that Class II wells that are poorly maintained

[120] Federal Requirements Under the Underground Injection Control (UIC) Program for Carbon Dioxide (CO_2) Geologic Sequestration (GS) Wells, 75 Fed. Reg. 77230 (Dec. 10, 2010).
[121] *Id*. at 77,234-77,235
[122] *Id.*
[123] *Id.*
[124] U.S. EPA, Underground Injection Control (UIC), Class VI – Wells Used for Geologic Sequestration of Carbon Dioxide, https://www.epa.gov/uic/class-vi-wells-used-geologic-sequestration-carbon-dioxide (last visited Jan. 11, 2024) ("The Class VI well requirements are designed to protect public health and USDWs from the unique nature of CO_2 injections for [geologic sequestration].").
[125] 16 Tex. Admin. Code §5.201(b)(2) (2023) (emphasis added).

and/or abandoned or inactive increase the risk to drinking water. Yet, the creation of this review structure puts the onus solely on the RRC to determine a potential increased risk toUSDW, an agency that currently cannot maintain the programs or Class II well responsibilities it already has under its authority.

Further, many other problems result from this review structure. First, there is no clarification as to what should constitute "primary purpose" of long-term CO_2 storage, or how a Class II well with minimal reporting requirements would even come to the attention of the RRC. Similarly, while the statute lists factors the Director must consider in determining if there is an increased risk to USDWs,[126] this list is likely not sufficient to lead to correct and consistent conclusions from the RRC.[127] EPA stated that it is "developing guidance to support Directors and owners or operators in evaluating these factors and making the determination of whether to apply Class II requirements."[128] Despite acknowledging that guidance is needed, EPA has only issued a two-page memorandum on the issue,[129] and thus, the Director remains without clear directions that would prevent an inconsistent and unpredictable interpretation of the requirements in different circumstances. Further, there is no mechanism available within Texas' program that allows for public review or challenges of the Director's determination, resulting in the Director's unchecked

[126] Those factors include: (A) increase in reservoir pressure within the injection zone; (B) increase in CO_2 injection rates; (C) decrease in reservoir production rates; (D) distance between the injection zone and USDWs; (E) suitability of the enhanced oil or gas recovery AOR delineation; (F) quality of abandoned well plugs within the AOR; (G) the storage operator's plan for recovery of CO_2 at the cessation of injection; (H) the source and properties of injected CO_2; and (I) any additional site-specific factors as determined by the director. *Id.*

[127] EPA has acknowledged that "further clarification is needed to sufficiently characterize the factors that lead to increased risks and warrant conversion from Class II to Class VI," but has yet to issue any valuable guidance on the issue.

[128] 75 Fed. Reg. 77,291, 77,245 (Dec. 10, 2010).

[129] Memorandum from Peter C. Grevatt, Director, U.S. EPA Office of Ground Water and Drinking Water, to U.S. EPA Regional Water Division Directors, "Key Principles in EPA's Underground Injection Control Program Class VI Rule Related to Transition of Class II Enhanced Oil or Gas Recovery Wells to Class VI, Apr. 23, 2015, *available at* https://www.epa.gov/sites/default/files/2020-08/documents/class2eorclass6memo_0.pdf.

ability to allow owners and operators of Class II wells to engage in the long-term storage of CO_2 without any increased oversight.

In other words, under Texas' current Class II program, each of these wells may be transitioned to what are essentially Class VI wells, but without the Class VI oversight required by EPA guidance. Although RRC has acknowledged that Class II wells would not meet the requirements of Class VI wells, the Commission has taken no steps towards ensuring the safety of drinking water for wells currently holding carbon that were previously used for EOR or otherwise.[130] And now, with greater financial incentives associated with the long-term storage of CO_2 provided by the Inflation Reduction Act ("IRA"),[131] an increased number of well owners and operators may seek Class II well permits with the intention of storing CO_2. In 2010, EPA acknowledged the risks associated with the addition of these financial incentives, stating that "if the business model for [enhanced recovery] changes to focus on maximizing CO_2 injection volumes and permanent storage, then the risk of endangerment to [underground sources of drinking water] is likely to increase."[132] Specifically:

> This [increased risk to underground sources of drinking water] is because reservoir pressure within the injection zone will increase as CO_2 injection volumes increase. Elevated reservoir pressure is a significant risk driver at [Geological Sequestration (GS)] sites, as it may cause unintended fluid movement and leakage into USDWs that may cause endangerment. Additionally, increasing reservoir pressure within the injection zone as a result of GS will stress the

[130] RRC, Geologic Storage of Carbon Dioxide (CO2), https://www.rrc.texas.gov/oil-and-gas/applications-and-permits/injection-storage-permits/co2-storage/ ("Be advised that most O&G wells and O&G injection wells (UIC Class II) will not meet [Class VI] requirements.").

[131] The IRA boosted the Section 45Q tax credit beyond that initially provided in the Energy Improvement and Extension Act of 2008 and the Bipartisan Budget Act of 2018 by modifying the base credit rates and definition of qualified facilities, as well as allowing for a larger credit for qualified facilities or carbon capture equipment that meet certain prevailing wage and apprenticeship requirements. The IRA also extended eligibility to claim the credit to certain nonprofits ("direct pay") and entities without ownership interests ("transferability") and extended the deadline to begin construction of Class VI wells to the end of 2032. Congressional Research Service, "The 45Q Tax Credit for Carbon Sequestration" (updated Aug. 25, 2023) https://sgp.fas.org/crs/misc/IF11455.pdf; *see also* Title 16 of the Texas Administrative Code, Title 16, Part 1, Chapter 3.50 (providing similar incentives under state law).

[132] 75 Fed. Reg. at 77,244.

> primary confining zone (i.e., geologic caprock) and well plugs to a greater degree than during traditional [Enhanced Recovery (ER)]. Finally, active and abandoned well bores are much more numerous in oil and gas fields than other potential GS sites, and under certain circumstances could serve as potential leakage pathways. For example, in typical productive oil and gas fields, a CO_2 plume with a radius of about 5 km (3.1 miles) may come into contact with several hundred producing or abandoned wells.[133]

Several states, including Texas, have expressed an interest in seeking primary enforcement and permitting responsibility for Class VI wells, which would attract geosequestration projects to these states and thereby increase the risk of endangerment. To adequately protect underground sources of drinking water, as required by law, Texas must develop a comprehensive plan that provides for proper oversight and mechanisms over both the Class II and Class VI program to ensure protection against associated risks, including those associated with the Class II-to-Class VI transition. But based on alleged failures by the RRC to appropriately protect drinking water in its Class II program, EPA should instead revoke Texas' primacy over its Class II well program until it can ensure that Texas has developed effective rules and policies to address these concerns.

E. The RRC Must Provide Meaningful Opportunities for Public Participation

Federal law and EPA guidance make clear that the effectiveness of a state program depends in large part on the degree to which it assures the public an opportunity to participate in regulatory decisions.[134] Texas' program, however, fails to provide for meaningful public participation in all permitting decisions as well as the enforcement process, thereby failing to meet the minimum federal requirements. Texas' primacy of its Class II program must be revoked while the State addresses these deficiencies.

---

[133] *Id.* (internal citations omitted).
[134] *See* 40 C.F.R. Part 124; EPA Guidance for States, *supra* note 87, at 18.

1. The RRC Must Provide for Public Participation in Permitting Decisions

Under Texas' Class II program, an operator may seek permit approval under one of two procedures: applying for approval of each injection well individually, or first seeking approval of an area permit.[135] An area permit will authorize injection into new or converted wells located within the area specified in the permit.[136] After an area permit is issued, an operator must then file an application for an individual well permit with the RRC. However, unlike the initial process for seeking an area permit, once the area permit is issued after having gone through the proper notice procedure,[137] no notice shall be required when an application for an individual injection well permit covered by the area permit is filed.[138] An individual well permit for a well within an approved permit area may be issued by the Commission or its delegate in writing; if the Commission or its delegate does not object to the application within 20 days of receipt of the application, the individual well permit is deemed issued.[139] Alternatively, if an injection well is not located within an approved area permit, the operator must follow Texas administrative

[135] 16 Tex. Admin. Code § 3.46 (2015).
[136] *Id*. § 3.46(k).
[137] Pursuant to 16 Tex. Admin. Code § 3.46(k)(2) (2015), an operator must give notice of an area permit application by providing a copy of the application to each surface owner of record within the permit area; each commission designated operator of a well located within 1/2 mile of the permit area; the county clerk of each county in which all or part of the permit area is located; and the city clerk or other appropriate city official of any incorporated city which is located wholly or partially within the permit area. An applicant must provide the required notice on or before the date the area permit application is filed with the commission. *Id*. An applicant must also publish notice once in a newspaper of general circulation for the county where the well will be located, in a form approved by the Commission or its delegate. *Id*. Proof of publication prior to the hearing or administrative approval must be filed with the Commission in its Austin office. *Id*. § 3.46(c)(4). If an affected person or local government protests an application within 15 days of receipt or publication of notice, or if the Commission determines that a hearing is in the public interest, then a hearing will be held on the application. *Id*. §3.46(c)(5). If no hearing is held, the Commission may administratively approve the application. *Id*.
[138] *Id*. § 3.46(k)(3).
[139] *Id*. § 3.46(k)(5) (2015).

procedures regarding notice and opportunity for hearing with regard to the application for the individual well. [140, 141]

Texas' two-tiered system for area permit applications defies EPA guidance that each permit application should include notice, a comment period, and that a final action on a permit application must include a response to comments.[142, 143] Texas' failure to provide public notice of the final issuance of both the area permit and the individual permit also differs dramatically from federal regulations for EPA-run programs, which mandate notice of the final permit decision to each person who submitted comments or requested notice.[260]

Texas' exclusion of a proper notice and a comment period in its Class II well permitting process also makes it practically impossible for impacted residents to access meaningful administrative or judicial review of an issued permit. The lack of an accessible route to review reduces the weight RRC must give citizen concerns. It also differs significantly from program requirements under SDWA's Section 1422, which provide the right of appeal to any person who filed comments or participated in a public hearing.[144] Thus, while SDWA 1425 was provided as an alternative method for compliance, nowhere in the guidance does it limit the right to participate in decision making for landowners adjacent to the facility.

---

[140] *See* 16 Tex. Admin. Code §3.46(c).

[141] Pursuant to this rule, on or before the date an application is filed, the applicant must give notice by mailing the application to affected persons, including the owner of record of the surface tract on which the well is located, each Commission designated operator of any well located within 1/2 mile of the proposed injection well, the county clerk of the county in which the well is located, and the city clerk or other appropriate city official of any city where the well is located within the corporate limits of the city. The applicant must also publish notice of the application in a newspaper of general circulation for the county where the well will be located in a form approved by the Commission. *Id*. If an affected person or local government protests an application within 15 days of receipt or publication of notice, or if the Commission determines that a hearing is in the public interest, then a hearing will be held on the application. *Id*. §3.46(c)(5) (2015). If no hearing is held, the Commission may administratively approve the application. *Id*.

[142] EPA Guidance for States, *supra* note 86, at 18-19.

[143] 40 C.F.R. § 124.15(a).

[144] *Id*. § 124.15(a)(2).

Finally, by failing to provide notice and an opportunity for comments, Texas' permit application process does not allow for meaningful review of RRC's siting and construction decisions regarding individual permits issued under the umbrella of the area permit. This is alarming given the primary concerns regarding a well's impact on USDW and public health and safety often relate to siting and construction.

As a result of these failures, Texas' program completely lacks the public participation factor EPA relies upon to determine the "effectiveness" of a state program. To properly comply with the SDWA, EPA must require RRC to enhance public involvement and enhance transparency through the Class II well permitting process.

2. The RRC Must Provide for Public Participation in Enforcement Actions

Federal regulations applicable to programs approved under Section 1422 of the SDWA specify that any state program shall provide for public participation in the state enforcement process by providing either (1) authority for intervention as of right in any civil or administrative action by anyone having an interest or that may be adversely affected, or (2) assurance it will not oppose any citizen's permissive response to those complaints.[145] Again, while Section 1425 provides an alternative program for SDWA compliance, Texas must still demonstrate that its standards are effective in preventing endangerment of USDWs, and allowing public participation in the enforcement process can greatly improve these protections. Because Texas provides no mechanism for public involvement in enforcement actions in its Class II program, its enforcement

[145] 40 C.F.R. § 145.13.

program is severely limited and the effectiveness of its Section 1425's Class II well program is compromised.[146]

Under Texas' Class II program, if the RRC determines that there is a violation of a permit, it may subject the owner/operator to administrative penalties.[147] Administrative penalties are processed by the Legal Enforcement section of the Office of the General Counsel.[148] If after evaluation Legal Enforcement seeks to enforce a violation, it typically does so via settlement or a hearing.[149] If Legal Enforcement attempts to settle a violation voluntarily, it may do so without public knowledge. If a hearing is pursued, either initially or after settlement efforts prove unsuccessful, notice must only be provided to the owner/operator of the well in question.[150] A hearing would be held in front of an Administrative Law Judge and a Technical Examiner, who will prepare a proposal for decision for the commissioners to consider in deciding how the case should be determined.[151] It is not until after the commissioners assess and approve the administrative penalties that the RRC complies with the general understanding of public participation in a well-functioning Class II program and publicly distributes information on enforcement actions.[152]

Most violations, however, are resolved at the district level through other enforcement mechanisms controlled entirely by the RRC District Offices. For example, as described by the RRC, a notice of violation may consist of nothing more than a phone call and a back check, in

---

[146] *See* EPA Guidance for States, *supra* note 86, at 18 ("One factor to be used by EPA in assessing the "effectiveness: of a State program is the degree to which it assures the public an opportunity to participate in major regulatory decisions."

[147] *See* Tex. Nat. Res. Code Ann. §§ 81.0531-81.0533.

[148] RRC, Oil & Gas Monitoring & Enforcement Plan Fiscal Year 2024, at 12, *available at* https://www.rrc.texas.gov/media/h3kff2xp/og-enforcement-plan-fy-2024_web.pdf.

[149] *Id.*

[150] *Id.*

[151] *Id.* at 29.

[152] *Id.*

which an inspector visits the location to confirm compliance.[153] This means provides zero opportunity for the public to become aware of the nature of the violation, the method of correction, or whether their drinking water has been compromised and the violation has in fact been cured.

Either through the settlement, hearing, or other means of enforcement, Texas provides no way for the public to participate in its enforcement program. There is no public notice or comment period on enforcement actions, no citizen suit provision, and no formal complaint process. As a result, the people most impacted by Class II operations—who often learn first of problems at a given well due to proximity—have no means to meaningfully contribute to the enforcement process or even have their knowledge meaningfully considered. Locking impacted communities out of the enforcement process has allowed Texas' program to become largely captured by the interests and desires of Class II operators. The results are demonstrated above—a well spewing so much toxic wastewater that it is called a "lake"; the RRC having to use emergency powers to stop wastewater injections due to major seismic activity; the RRC not being able to plug and abandon or even identify the wells subject to area-wide aquifer exemptions; and tragically, the loss of drinking water supplies for entire communities.[154]

3. The RRC Must Provide Sufficient Language Accommodations

In addition to excluding the public from providing input in the permitting process, as described above, the RRC fails to make information available to the public due to the absence of language accommodations for those few times when notice is provided. Many Texans prefer information to be shared in Spanish or Vietnamese, yet the RRC does not provide information on its website in any language other than English.

---

[153] RRC, Oil & Gas Monitoring & Enforcement Plan Fiscal Year 2024, at 12, *available at* https://www.rrc.texas.gov/media/h3kff2xp/og-enforcement-plan-fy-2024_web.pdf.
[154] *See* Section II.A-C, *infra*.

To accommodate all Texans in the public participation process related to oil and gas development, RRC must, at a minimum, guarantee access to information and opportunities for Spanish-language and other non-English dominant communities to participate in decisions regarding Class II well operations by offering interpretation services at public meetings regarding Class II wells; guarantee language documents in alternative languages for people with limited English proficiency; and provide descriptions in plain language of proposed Class II well activities.[155]

VI. Conclusion

As detailed in this petition, Texas' Class II well program contains numerous technical deficiencies that have allowed for underregulated oil and gas waste disposal, which has resulted in serious consequences to human health and the environment. These consequences have included leaks and blowouts that have polluted the environment and endangered drinking water, an exponential increase in seismic activity in the state, and the creation of sinkholes that have swallowed cars and diverted roads and infrastructure projects. The state's public participation process is deeply flawed, resulting in a meaningless comment period and practically no right for the public to appeal a permit, causing public distrust of the Class II well permitting process throughout the state. Altogether, Texas' Class II program fails to comply with the SDWA and Section 1425 primacy by failing to protect USDW in its management of unplugged and abandoned wells, Aquifer Exemption program, Area of Review process, and in the transition of Class II wells from EOR activities to long-term storage of CO_2. In addition, RRC's program also fails to provide meaningful opportunities for public participation by failing to provide any notice of well siting or

[155] *See, e.g.,* TCEQ Language Access Plan (Sept. 2021), *available at* https://www.tceq.texas.gov/downloads/agency/decisions/participation/language-access-plan-gi-608.pdf.

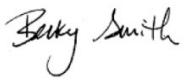
construction or enforcement, which has resulted in the siting of wells within minority and low-income communities without any meaningful opportunities for them to voice their concerns.

The Petitioners and other Texas citizens and citizens groups have raised many of these concerns to the state, and Texas consistently fails to address them. Therefore, pursuant to 42 U.S.C. § 300h-4(c)(2), Petitioners respectfully request that EPA begin the process to revoke Texas' primacy over its Class II program due to the longstanding and systemic failures described herein.

Respectfully submitted,

Jen Powis, Managing Attorney
Allison Brouk, Senior Attorney
Earthjustice
jpowis@earthjustice.org
abrouk@earthjustice.org

Virginia Palacios, Executive Director
Paige Powell, Policy Manager
Commission Shift
vpalacios@commissionshift.org
ppowell@commissionshift.org



Becky Smith, Texas State Director
Clean Water Action
bsmith@cleanwater.org

Robin Schneider
Executive Director
Texas Campaign for the Environment

Kristen Schlemmer
Legal Director and Waterkeeper
Bayou City Waterkeepers

Annalisa Peace
Executive Director
Greater Edwards Aquifer Alliance

Cyndi Valdes
Executive Director
Ingleside on the Bay Coastal Watch Association

Alex Spike
Climate Justice Coordinator
Air Alliance Houston

Joanie Steinhaus
Ocean Program Director
Turtle Island Restoration Network

Adrian Shelley
Texas Director
Public Citizen

John Beard Jr.
Founder & Executive Director
Port Arthur Community Action Network

Kirby F. Warnock
Landowner & Registered Voter
Pecos County, Texas