

Congress of the United States

Washington, DC 20515

September 11, 2025

The Honorable Lee Zeldin
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Administrator Zeldin:

We write to express our serious concerns regarding the adequacy of the Environmental Protection Agency's (EPA) oversight of underground injection control (UIC) wells used for carbon dioxide (CO₂) sequestration under the Safe Drinking Water Act (SDWA). Recent events, including the substantial well failures at the Archer Daniels Midland (ADM) Class VI injection well facility in Decatur, Illinois, and a pattern of well failures and non-compliance at Class II injection wells in Texas, demonstrate regulatory gaps that threaten underground sources of drinking water and warrant immediate EPA action. The events highlight systemic issues with carbon capture and storage (CCS) technology and its regulation, raising serious concerns about the safety and viability of CCS.

On August 13, 2025, EPA issued an Administrative Order on Consent to Archer Daniels Midland for these violations, confirming that injected CO₂ and brine migrated into an unauthorized underground formation.¹ While the order acknowledges breaches of core safeguards, it imposes no penalties, does not suspend ADM's permit, and leaves in place the weak rules that allowed this incident to occur. This underscores the urgent need for EPA to strengthen its Class VI oversight, update regulations, and halt additional injections until it can ensure such leaks will not endanger drinking water.

ADM Decatur Leak and Abandoned-Well Failures

In March 2024, ADM identified a subsurface CO₂ leak from its Illinois Class VI injection well facility caused by corrosion at a monitoring well.² This followed years of monitoring equipment failures,³ dating back to 2020. In October 2024, ADM reported a second subsurface leak connected to another monitoring well.⁴ Concerns have been raised that other existing wells in the vicinity of the well failures could serve as vectors for the migration of CO₂ into Lake Decatur, the primary source of drinking water for 80,000 people in central Illinois.⁵

¹ U.S. Environmental Protection Agency (2025, August 13), "EPA Orders Archer Daniels Midland to Ensure Environmental Compliance of Carbon Sequestration Well in Decatur, Illinois" (press release), <https://www.epa.gov/newsreleases/epa-orders-archer-daniels-midland-ensure-environmental-compliance-carbon-sequestration>, accessed August 20, 2025.

² Anchondo, Carlos (2024, September 13), "First U.S. CO₂ injection well violates permit – EPA," *Energy Wire*, <https://subscriber.politicopro.com/article/eenews/2024/09/13/first-u-s-co2-injection-well-violates-permit-epa-00178914>, accessed July 29, 2025.

³ Murawski, Steven, Associate General Counsel, Regulatory & Environmental Law (2024, August 22), letter to Michael D. Harris, Director, Enforcement and Compliance Assurance Division, Region 5, U.S. Environmental Protection Agency, <https://bloximages.chicago2.vip.townnews.com/herald-review.com/content/tncms/assets/v3/editorial/e/73/e731ea84-71e2-11ef-ac48-e7d7bdfb3e05/66e456e2ae34a.pdf.pdf>, accessed July 29, 2025.

⁴ Snider, Annie (2024, October 2), "ADM halts carbon injections after finding second leak at Illinois site," *Politico Pro*, <https://subscriber.politicopro.com/article/2024/10/adm-finds-second-link-at-illinois-carbon-storage-site-00182181>, accessed July 29, 2025.

⁵ Snider, Annie (2024, November 11), "ADM finds 24 other wells near its leaky Illinois carbon sequestration site," *Energy Wire*, <https://subscriber.politicopro.com/article/eenews/2024/11/05/adm-finds-24-other-wells-near-its-leaky-illinois-carbon-sequestration-site-ee-00186812>, accessed July 29, 2025.

EPA notified injection well applicants in June 2024 that steel commonly used by the industry is prone to corrosion in the presence of CO₂,⁶ but did not take steps to notify the public about the leak and threats to drinking water sources. It was ultimately media reports that made the public aware of these concerns,⁷ which surfaced five months after the leak was disclosed and two months after EPA notified pending permit applicants.

Broader Texas Class II Noncompliance

Following the public reporting regarding the ADM facility, EPA was made aware of well failures throughout Texas in an October 2024 letter⁸ highlighting:

- a sudden increase in significant non-compliance violations starting in 2011; and
- a higher percentage of Class II CO₂ injection wells failing one or more mechanical integrity tests relative to other Class II wells.

Class II wells make up thousands of potential injection sites across the country used to extract oil by injecting CO₂ deep into these formations. The practice of injecting CO₂ into these wells carries many of the same risks associated with Class VI wells used for CCS; however, the regulations governing Class II wells are less stringent, posing an even greater risk of leaks.

Staffing and Programmatic Cuts at EPA

The Republican congressional leadership is moving forward with plans to cut EPA's budget by 23%,⁹ on top of 3,700 staff who are no longer working at EPA since January of this year.¹⁰ These cuts raise grave concerns about EPA's ability to comply with its mandate to protect human health and the environment. These cuts, moreover, compound specific concerns we have regarding EPA's ability to effectively provide oversight and accountability for the UIC program, including ensuring compliance by states that have primacy over Class VI and Class II injection wells.

Concerns with Well Blowouts

Horn, David, City Council, Decatur, Illinois (2024, September 15), "Leak calls into question safety of CO₂ sequestration under Lake Decatur" (press release), <https://www.hornfordecatur.org/news/leak-calls-into-question-safety-of-co2-sequestration-under-lake-decatur>, accessed August 28, 2025.

⁶ Snider, Annie, Lefebvre, Ben (2024, October 9), "Carbon storage projects hit a hurdle: Corroding steel," *Energy Wire*, <https://subscriber.politicopro.com/article/eenews/2024/10/09/carbon-storage-projects-hit-a-hurdle-corroding-steel-ee-00182889>, accessed July 29, 2025.

⁷ Anchondo, Carlos (2024, September 9), "First US CO₂ injection well violates permit – EPA," *Energy Wire*, <https://subscriber.politicopro.com/article/eenews/2024/09/13/first-u-s-co2-injection-well-violates-permit-epa-00178914>, accessed July 29, 2025.

⁸ Russ, Abel, Director of the Center for Applied Environmental Science and Senior Attorney, Environmental Integrity Project; Weiglein, Tyler, Engineering Analyst, Environmental Integrity Project; Palacios, Virginia, Executive Director, Commission Shift; Powell, Paige, Senior Policy Manager, Commission Shift (2024, October 2); letter to Dr. Earthea Nance, Regional Administrator, Region 6, U.S. Environmental Protection Agency, re: "Concerns regarding the Texas Railroad Commission's UIC Program," <https://drive.google.com/file/d/1qlpPt-nlzx6-mwjeDTcYGxizFI4IdFfn/view>, accessed July 29, 2025.

⁹ House Appropriations Committee Chairman Tom Cole (2025, July 14), "Interior, Environment, and Related Agencies Appropriations Bill, 2026" (press release), <https://appropriations.house.gov/sites/evo-subsites/republicans-appropriations.house.gov/files/evo-media-document/fy26-interior%2C-environment%2C-and-related-agencies-bill-summary-subcommittee.pdf>, accessed July 29, 2025.

¹⁰ The Associated Press (2025, July 18), "EPA eliminates research and development office as it begins layoffs," *NBC News*, <https://www.nbcnews.com/politics/trump-administration/epa-eliminates-research-development-office-layoffs-begin-rcna219725>, accessed July 29, 2025.

Due to changes in the tax code under the recent budget bill, which increased subsidies for the use of CO₂ for oil extraction, there are significant concerns with the potential impacts of CO₂ well blowouts, uncontrolled releases of CO₂ from Class II and Class VI wells, particularly in areas with a long history of oil drilling. Just as with the Deepwater Horizon oil spill (3.19 million barrels over 87 days)¹¹ and the Aliso Canyon methane blowout (109,000 metric tons from October 2015 to February 2016),¹² CO₂ wells can catastrophically fail.

CO₂ blowouts pose particular risks due to the rapid expansion of supercritical CO₂ that would occur during a blowout, as well as the extreme temperatures and pressures present in CO₂ wells.¹³ Given the thousands of legacy oil and gas wells, especially along the Gulf Coast, we are concerned that a major CO₂ blowout, with uncontrolled releases far from an injection site, could threaten the safety of nearby communities if the blowout reaches the surface.

Moratorium on CO₂ Injections

We urge EPA to exercise its broad authority to protect sources of drinking water from “imminent and substantial endangerment” under the Safe Drinking Water Act (42 U.S.C. §300i) by:

- halting approval of Class II and Class VI wells;
- halting approval of primacy applications;
- directing existing injection well operators to cease injections;
- directing states with primacy to ensure compliance with this EPA objective; and
- keeping these restrictions in place until such time that EPA is able to:
 - ensure that CO₂ is not leaking from wells;
 - update regulations to ensure that the integrity of injection well operations is sufficient to protect drinking water sources; and
 - ensure adequate staffing to provide direct oversight of injection wells to ensure protection of drinking water sources.

We also ask that you respond to the following questions by November 1 in order to allow Congress to provide resources to EPA in the Fiscal Year 2026 appropriations legislation to ensure adequate protection for drinking water sources from the injection of CO₂:

- How has EPA changed permitting of Class II and Class VI wells in light of the deficiencies discovered at the ADM facility?
- How has EPA revised its permit-review protocols and state primacy-application evaluations to prevent similar oversights in states with extensive oil-and-gas histories, including Texas, Louisiana, West Virginia, and Alaska?
- How was a permit issued to ADM without accurate subsurface mapping, and what steps has EPA taken to require comprehensive historical-well surveys prior to permit approvals?

¹¹ NOAA Fisheries (2020, April 13), “Deepwater Horizon 10 Years Later: 10 Questions,” <https://www.fisheries.noaa.gov/news/deepwater-horizon-10-years-later-10-questions>, accessed July 29, 2025.

¹² California Air Resources Board, “Aliso Canyon Natural Gas Leak,” <https://ww2.arb.ca.gov/our-work/programs/aliso-canyon-natural-gas-leak>, accessed July 29, 2025.

¹³ Acevedo, Luis, Chopra, Ajay (2017, July), “Influence of Phase Behaviour in Well Design of CO₂ injectors,” *Energy Procedia*, https://www.researchgate.net/publication/319196156_Influence_of_Phase_Behaviour_in_the_Well_Design_of_CO_2_Injectors, accessed July 29, 2025.

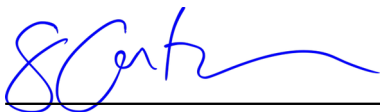
Bhuvankar, Pramod, Cihan, Abdullah, Birkholzer, Jens (2023, July), “A framework to simulate the blowout of CO₂ through wells in geologic carbon storage,” *International Journal of Greenhouse Gas Control (Volume 127)*, <https://www.sciencedirect.com/science/article/pii/S1750583623000919>, accessed July 29, 2025.

- Given that steel used in existing wells is prone to corrosion, what steps has EPA taken to ensure that well equipment at existing Class II and Class VI wells is not corroding and posing a threat to drinking water?
- What steps has EPA taken to ensure that injection well operators are not using steel that is prone to corrosion in CO₂ injection wells?
- Given that standard monitoring equipment was unable to detect a second leak at the ADM injection site, how has EPA changed monitoring protocols to ensure detection of future leaks?
- Is EPA aware of other leaks or well failures at Class II or Class VI wells?
- Why did EPA fail to notify the public about the leak, even while it notified the industry of issues with corrosion of steel in injection wells?
- What steps has EPA taken to ensure that states with primacy over Class II and Class VI wells are updating monitoring, oversight, and permitting in light of revelations from the Texas and ADM well failures?
- To what extent are staff positions responsible for the monitoring, reporting, and verification of CO₂ injection wells no longer filled at EPA headquarters and regional offices?
- Can you provide an assessment of staffing changes within EPA's UIC and SDWA enforcement offices over the past five years?
- Can you provide an evaluation of how resource constraints have affected permit reviews, inspections, and enforcement actions at EPA in general and for the UIC program specifically?
- What analyses or modeling has EPA conducted or is planning to conduct to quantify the likelihood and potential consequences of CO₂ well blowouts in various environments?
- What steps does EPA take to ensure that if a catastrophic blowout were to occur, well operators would be able quickly to identify and plug the well and prevent drinking water contamination?

We stand ready to work with EPA to safeguard our drinking water and public health. The ADM order makes clear that current safeguards are insufficient to prevent dangerous CO₂ migration, even under direct EPA oversight. Without stronger rules, robust enforcement, and adequate staffing, approving or operating additional Class II and Class VI wells risks repeating these failures and putting drinking water supplies at grave risk.

We request a written response to each of the points above and look forward to your prompt engagement on this urgent matter. Please have your staff contact Nikki Roy (nikki.roy@mail.house.gov) on Rep. Casten's staff with questions.

Sincerely,



Sean Casten
Member of Congress



Jared Huffman
Member of Congress
Ranking Member, House Natural
Resources Committee