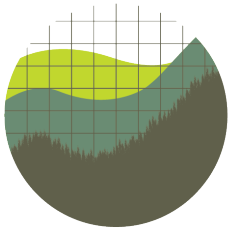

Institute *for*
Policy Integrity
NEW YORK UNIVERSITY SCHOOL OF LAW

June 29, 2023

To: Environmental Protection Agency

Re: State of Louisiana Underground Injection Control Program; Class VI Program Revision Application (EPA–HQ–OW–2023–0073)

The Institute for Policy Integrity (Policy Integrity) at New York University School of Law respectfully submits the following comments to the Environmental Protection Agency (EPA) regarding its proposal to approve a revision to the State of Louisiana's Safe Drinking Water Act (SDWA) section 1422 Underground Injection Control (UIC) program to include Class VI injection well primary enforcement responsibility (primacy). The proposed revision would allow the Louisiana Department of Natural Resources to issue UIC permits for geologic carbon sequestration facilities as Class VI wells and ensure compliance of Class VI wells under the UIC program.

Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy.[1]

We offer the following observations and recommendations:

- EPA should ensure that Louisiana has adequate and timely plans for transitioning Class II enhanced oil or gas recovery wells to the Class VI program, where appropriate, in order to mitigate safety concerns.
- EPA should provide thorough responses to all concerns about risk and oversight raised by community members, and require appropriate risk-mitigation measures before granting primacy.

These recommendations are each discussed in further detail in the following comments.

I. EPA should ensure that Louisiana has adequate and timely plans for transitioning Class II enhanced oil or gas recovery wells to the Class VI program, where appropriate, in order to mitigate safety concerns.

A 2015 memorandum from EPA's Office of Ground Water and Drinking Water specified that some Class II underground injection wells that had been used primarily for enhanced oil or gas recovery may need to be transitioned into the Class VI program, in order to better manage elevated risks such as those arising from "increased pressure in the injection zone related to the significant

[1] These comments do not purport to represent the views of New York University School of Law.

storage of CO_2."[2] A growing number of Class II wells may face such conditions as both enhanced recovery and CO_2 storage operations expand in Louisiana, driven in part by the increased 45Q tax credits made available for these activities pursuant to the Inflation Reduction Act of 2022. As EPA acknowledged in a 2010 rulemaking on the Class VI program, "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."[3] The agency outlined several concerns, including elevated reservoir pressure as injection volumes increase, stress on geologic caprock, and potential leakage through contact with active and abandoned well bores.[4]

A. Louisiana's planned timeline for Class II transition fails to meet the minimum requirements for UIC Class VI approval set forth in EPA's regulations and guidance.

Among the minimum requirements for Class VI primacy, a State UIC program description must include "a schedule for issuing permits **within two years** after program approval" for Class VI programs.[5] However, regarding this requirement, Louisiana's Class VI primacy application states:

> The agency will evaluate information about Class II enhanced oil recovery wells (e.g., carbon dioxide injection and production data or information related to the other factors at LAC 43:XVII.3603.G.2) and identify whether any projects are approaching risk thresholds **within four years** of receiving Class VI primacy in accordance with 40 CFR 145.23(f).[6]

This timeline discrepancy in Louisiana's primacy application arguably does not satisfy 40 CFR 145.23(f)(1).

B. Louisiana's Class II transition plan and related regulations may be inadequate for mitigating risks.

Compared to Texas, a neighboring state that also has significant activity in this sector, Louisiana's Class II transition plan and related regulations appear to be relatively lax with respect to addressing increased risk from CO_2 injection under the Class VI program. Texas' Class VI rules would require a Class II well operator to apply for a Class VI permit based solely on a determination of increased risk from CO_2 injection, regardless of whether the well's primary purpose was determined to be enhanced oil or gas recovery.[7] Louisiana instead appears to follow the minimum federal

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[2] 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, https://www.epa.gov/sites/default/files/2020-08/documents/class2eorclass6memo_0.pdf (visited June 28, 2023).
[3] 75 Fed. Reg. at 77,244
[4] *Id.*
[5] 40 CFR 145.23(f)(1) (Emphasis added.)
[6] Louisiana Primacy Application at 11, https://www.dnr.louisiana.gov/assets/OC/im_div/uic_sec/ClassVIPrimacyApplicationstamped.pdf (Emphasis added.)
[7] See, e.g., Texas' Class VI regulations at 16 TAC §5.201(b)(2)

requirement, which exempts a Class II well from stronger Class VI oversight if its primary purpose is deemed to be enhanced recovery.[8]

Louisiana's oversight of injection wells has suffered from gaps in the past. In 2012, a collapse at a salt cavern with underground injection activities in Bayou Corne, Louisiana, created a 40-acre sinkhole, prompting evacuations.[9] The companies operating the injection well and salt-mining operation likely enabled the incident by ignoring warning signs, and the regulatory regime failed to mandate adequate oversight.[10] In 2014, Louisiana updated its monitoring requirements for hydrocarbon storage wells in salt dome cavities in the wake of this incident.[11]

It is unclear whether blind spots in the Class VI program may exist, and proper oversight will require proactive regulatory approaches rather than reactive measures. As such, EPA should scrutinize any potential oversight or monitoring gaps in Louisiana's planned program.

II. EPA should provide thorough responses to all concerns about risk and oversight raised by community members, and require appropriate risk-mitigation measures before granting primacy.

Public opposition and skepticism about the risks of underground carbon storage present a significant barrier to the expansion of these activities, which, if carried out safely, could help mitigate the worst impacts of climate change. Advocates and community members in Louisiana have expressed concerns about whether the Louisiana Department of Natural Resources will provide proper oversight of these activities, and whether pollution and safety risks will be borne predominantly by overburdened communities.[12] Any problems that arise in Louisiana's Class VI program could threaten public health and safety. Such problems could also threaten the future of carbon storage activities nationwide or even worldwide.

EPA should pay close attention to the concerns raised by stakeholders in public hearings, public comments, and other forums, and the agency should provide exceptionally thorough responses to this input and communicate the responses through public channels. More importantly, EPA should seek to mitigate all identified risks by requiring appropriate changes to Louisiana's proposed program before granting primacy.

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[8] Louisiana Administrative Code, Title 43, Part XVII, §601(G)(1).
[9] Katy Reckdahl, *When the ground gives way*, Places (Aug. 2019), https://placesjournal.org/article/when-the-ground-gives-way-bayou-corne-sinkhole/?cn-reloaded=1
[10] David J. Mitchell, *Judge: Fault for Bayou Corne sinkhole lies with Texas Brine, OxyChem, Vulcan; companies had decades of warnings*, The Advocate (Jan. 12, 2018), https://www.theadvocate.com/baton_rouge/news/judge-fault-for-bayou-corne-sinkhole-lies-with-texas-brine-oxychem-vulcan-companies-had-decades/article_7856ff5e-f4ae-11e7-b86c-4f261682612b.html
[11] 43 La.Admin. Code, Pt. XVII, § 323(E); 43 La. Admin. Code, Pt. XVII, § 323(E); *Chevron U.S.A., Inc. v. Atmos Pipeline & Storage, LLC*, 2019 U.S. Dist. LEXIS 98195, *6 (explaining the regulation's historical background).
[12] Timothy Puko, *Why these environmentalists are resisting part of Biden's climate push*, The Washington Post (June 22, 2023) https://www.washingtonpost.com/nation/2023/06/22/biden-carbon-capture-climate-environmentalists/

Respectfully,

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