



TULANE LAW SCHOOL

TULANE ENVIRONMENTAL LAW CLINIC

July 3, 2023

Via Federal eRulemaking Portal to:

Suzanne Kelly
U.S. EPA
Drinking Water Infrastructure Development Division
Office of Ground Water and Drinking Water

Lisa Pham
U.S. EPA Region 6
Groundwater/UIC Section

Re: Comments on the State of Louisiana’s Underground Injection Control Program; Class VI Program Revision, 88 FR 28450, Docket ID No. EPA–HQ–OW–2023–0073

Dear Ms. Kelly and Ms. Pham,

On behalf of our clients, the Sierra Club and the Lake Maurepas Preservation Society (“Commenters”), we respectfully submit these comments concerning the U.S. Environmental Protection Agency’s (“EPA’s”) proposed rule approving the State of Louisiana’s application under the Safe Drinking Water Act (SDWA) Section 1422 for primary enforcement responsibility (primacy) over Underground Injection Control (UIC) Class VI Wells for the geologic sequestration of carbon. We write with serious concerns about the State’s application and urge, for the following reasons, that EPA maintain primary enforcement responsibility. However, if primacy is granted, we respectfully suggest that revisions be made to the State’s plan to better protect Louisiana’s environment and its residents.

Summary

The Louisiana Department of Natural Resources (LDNR) should not be granted primacy over this novel program based on this application, for multiple reasons. Most fundamentally, Louisiana state law is incompatible with the federal SDWA requirements in two important ways: State law releases well owners and operators from liability under La. Rev. Stat. Ann. § 30:1109, rendering state law substantially less stringent than its federal counterpart, and the State’s voluntary environmental self-audit law, La. Rev. Stat. Ann. § 30:2044, raises similar concerns about stringency as well as the transparent sharing of critical information about program safety. These two statutes create gaps in Louisiana’s regulatory framework that could pose risks to the State’s drinking water and residents. Their incompatibility with federal law alone mandates rejection of this application.

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In addition, LDNR does not have the internal resources to effectively and safely execute a new program of this magnitude. The Department's past practice demonstrates a pattern of insufficient oversight that has had devastating consequences for Louisiana communities and the environment. Moreover, Class VI wells and the related infrastructure needed to support carbon capture and storage (CCS) projects would have an outsized impact on Louisiana's environmental justice (EJ) communities who are already overburdened by industrial pollution. LDNR's proposed program does not sufficiently account for impacts to these communities, including the compounding risks associated with other pollutants that would be emitted from the proposed CCS projects.

Critically, approval of this program would contravene EPA's stated environmental justice goals, and it is now beyond question that Louisiana environmental justice communities will receive far less protection—and essentially no consideration—than they will under EPA's administration of the program. Indeed, EPA no longer has any basis to rely on Louisiana "ensur[ing] that equity and EJ will be appropriately considered." 88 Fed. Reg. at 28453. Three weeks after EPA publicly noticed its intent to grant primacy to Louisiana, Louisiana sued EPA over its Civil Rights Act Title VI disparate impact regulations and expressed outright hostility to considerations of environmental justice and equity. *Louisiana v. EPA, et al.*, No. 23-0692 (W.D. La. filed May 24, 2023).

Finally, the already-proposed CCS projects in Louisiana do not use this technology as a "last mile" effort towards greenhouse gas emissions reductions. Instead, they support the creation of a novel industry that will not demonstrably reduce overall carbon dioxide (CO₂) emissions, and which may even contribute to a net increase in emissions of greenhouse gases (CH₄ and CO₂) and pollutants that harm human health.

For the following reasons, we urge the EPA to reject Louisiana's application for primacy because of the substantial risks it poses to Louisiana's drinking water and its residents, especially the State's most vulnerable residents. Instead, the EPA should follow the mandates of federal law, proceed with caution, and retain primary enforcement authority.

Specific Comments

I. Louisiana's Liability Release Statute is Incompatible with the Requirements of the Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) and interpreting regulations establish clear, minimum requirements that state programs must meet for the EPA to grant primacy over UIC Class VI wells. *See* 42 U.S.C. §300h *et seq.*; 40 C.F.R. §§ 124, 144-146. These requirements are governed by a stringent equivalency standard. Indeed, any state applying for primacy must demonstrate that its program is "no less stringent"¹ than the EPA's to ensure that it serves the

¹ 40 CFR §142.10; *see also* Geologic Sequestration of Carbon Dioxide: Underground Injection Control (UIC) Program Class VI Primacy Manual for State Directors, EPA, at 13 (April 2014), <https://www.epa.gov/sites/default/files/2015-07/documents/epa816b14003.pdf> (noting that "[w]hile states may impose more stringent requirements, they may not make one requirement more lenient as a tradeoff

guiding principles of the Act—to “protect the quality of drinking water in the U.S.”² and, more specifically in the UIC context, to ensure that such injection does not “endanger drinking water sources” through the introduction of contaminants into public water systems, the presence of which “may result in such system’s not complying with any national primary drinking water regulation or may otherwise adversely affect the health of persons.” 42 U.S.C. § 300h(d)(2). As part of its primacy application, a state must submit its own drinking water regulations and “a demonstration that any different State regulation is at least as stringent as the comparable [federal] regulation.” 40 C.F.R. § 142.11.

Louisiana’s regulatory scheme is not as stringent as its federal counterpart. For the reasons discussed below, Louisiana’s liability release statute, La. Rev. Stat. Ann. §30:1109, exempts Class VI well owners and operators from certain liabilities in contravention of federal primacy requirements. A memorandum authored by the Environmental Defense Fund and Gupta Wessler (“EDF Memo”) and attached to the instant Notice of Proposed Rule in the Federal Register extensively discusses the tensions between this state statute and federal law.³ However, that memorandum analyzed a prior version of Louisiana’s liability statute, passed in 2009. In June 2023, after the start of this notice and comment period, the Louisiana legislature amended La. Rev. Stat. Ann. §30:1109.⁴ The passage of this substantial revision to the law should render Louisiana’s existing primacy application incomplete and should prompt both a new review of the relevant law by the EPA and a new opportunity for public comment. However, to the extent the EPA is treating the currently-submitted application as complete, this comment will briefly reiterate the concerns raised initially in the EDF Memo and discuss why they still apply to the modified statute. In fact, a comparison of earlier drafts of the legislation suggests that Louisiana lawmakers are aware of the incompatibilities between federal and state law but declined to fully rectify those incompatibilities in the final bill, instead enacting half measures that do not rise to the level of full equivalency.

a. Federal law requires post-closure liability for well owners and operators.

Louisiana’s liability release law violates EPA practice and the SDWA. The EPA itself has repeatedly declined to grant full liability releases to Class VI well owners and operators. A core component of the SDWA’s protections for drinking water requires authority “to restrain . . . any person . . . engag[ed] in any unauthorized activity which is endangering or causing damage to public health or environment.” 40 C.F.R. § 145.13. This includes the ability to enforce post-

for making another requirement more stringent.” Further, “[i]f the state provisions differ from the federal UIC requirements, the state will want to explain in the crosswalk how its requirements are *no less stringent*, in order to facilitate EPA’s evaluation of the differences.”) (emphasis added), excerpt attached as Exhibit A.

² Summary of the Safe Drinking Water Act, EPA (Sept. 2022), <https://www.epa.gov/laws-regulations/summary-safe-drinking-water-act>, Ex. B.

³ Memo from EDF and Wessler March 2 2023 memo Class VI primacy and liability 3-2-23, EPA (April 11, 2023), <https://www.regulations.gov/document/EPA-HQ-OW-2023-0073-0003>.

⁴ H.B. 571, Reg. Sess. 2023, signed into law as Act No. 378 (June 14, 2023), <https://www.legis.la.gov/legis/BillInfo.aspx?i=244567>, Ex. C.

closure safety requirements.⁵ In the regulatory preamble to its 2010 rulemaking on Class VI injection wells, the EPA specifically noted that, despite myriad comments requesting post-closure liability transfer, “an owner or operator may be held liable for regulatory noncompliance under certain circumstances *even after site closure is approved* under §146. 93.” 75 Fed. Reg. 77230 at 77272 (Dec. 10, 2010) (emphasis added).

The EPA then enumerated several instances in which an owner may still face liability, namely (1) for providing erroneous data in a site closure report; (2) where post-closure fluid migration threatens a U.S. drinking water (USDW); or (3) for liability under other statutes including the Clean Air Act, 42 U.S.C. §§ 7401-7671; CERCLA, 42 U.S.C. § 9601-9675; and RCRA, 42 U.S.C. 6901-6992, as well as tort and other remedies. *Id.* The EPA even emphasized that it “does not have authority to transfer liability from one entity. . . to another.” *Id.*

b. Louisiana law exempts well owners and operators from post-closure liability in the exact circumstances contemplated by federal law.

Despite the EPA’s clear decision to not release owners and operators from post-closure site liability, Louisiana’s statute does just this. Under the amended, 2023 version of La. Rev. Stat. Ann. §30:1109 A(2), after the issuance of a site closure certificate, ownership of the site transfers to the State. Under section (A)(3), owners and operators are released from “*all* future duties or obligations” (emphasis added). The implications of this statute are discussed in detail in the EDF memo.⁶ Especially noteworthy is that the Louisiana legislature explicitly considered revisions to the statute that would have maintained liability in some of the post-closure situations enumerated by the EPA but, in the final version of the bill passed into law, rejected these revisions and declined to extend liability to the full extent required under federal law.

An earlier version of H.B. 571 proposed adding language to §30:1109(A)(5) to extend liability to situations where “the commissioner determines that the operator provided deficient or erroneous information that was material and relied upon by the commissioner to support approval of site closure or issuance of a certificate of completion of injection operations.”⁷ This language is consistent with the EPA’s emphasis on maintaining liability where erroneous data has been provided. Yet, this language is notably absent from the final legislation. Also absent in the final legislation is draft language from section (A)(3) extending liability to situations where “the commissioner determines that there is fluid migration for which the operator is responsible . . .” Again, these omissions evidence that the Louisiana legislature was aware of the EPA’s position and consciously decided to depart from federal law. Perhaps most striking is the

⁵ EDF memo at 6-7, discussing 40 C.F.R. §145.13(a)(2) post-closure liability requirements and emphasizing that “even after a well has closed, regulatory authorities must be able to hold owners or operators liable for earlier injection activity that has caused contaminants to move into underground drinking water.”

⁶ Indeed, as the EDF Memo powerfully summarized, “for issues discovered after closure, Louisiana’s enforcement authority against itself, the fund, or a previous owner or operator is a best vague and at worst nonexistent.” EDF Memo at 5.

⁷ See H.B. 571 Re-Reengrossed, available at <https://www.legis.la.gov/legis/ViewDocument.aspx?d=1321513>, Ex. D.

legislature’s decision to remove proposed language extending liability to “contractual obligations and criminal liability, associated with or related to that storage facility which arises after the issuance of the certification of completion of injection operations.”⁸ There is also no mention of ongoing tort liability or liability under other major federal environmental statutes. These omissions suggest that the State broadly exempts owners from post-closure liability per La. Rev. Stat. Ann. §30:1109, which is not equivalent to federal law.

The revised version of La. Rev. Stat. Ann. §30:1109 attempts to address some of the concerns outlined in the EDF memo but does not address these concerns adequately. For instance, the prior version of the statute was in conflict with 40 C.F.R. § 145.13(a)(1), requiring states to reserve the power to “restrain immediately and effectively any person by order or by suit in State court from engaging in any unauthorized activity which is endangering or causing damage to public health or environment.” In a new section of the statute, §30:1109(G), the legislature added a provision allowing the Commissioner to exercise “the state’s authority to restrain any person from engaging in any unauthorized activity which is endanger or causing damage to public health or the environment.” However, in the federal regulation there is a note explaining that “this paragraph requires that States have a mechanism (e.g., and administrative cease and desist order or the ability to seek a temporary restraining order) to stop any unauthorized activity endangering public health or the environment.” 40 C.F.R. §145.13 (a)(1). Louisiana’s statute makes no mention of the mechanism by which the Commissioner can and will enforce such unauthorized activity. Further, it is not clear who the Commissioner would restrain if a former owner or operator were exempt from post-closure liability and the State is technically in possession of the well.⁹ The EPA should seek clarification from the State about the inconsistencies that arise from this new section of the law.

Louisiana’s liability release statute matters because of the incentives it creates. As is documented elsewhere in this comment, the risks to human health and the environment are potentially immense if there were a major infrastructure failure at a CCS site in the future. Long-term stability of CCS sites is difficult to predict and requires constant, careful monitoring.¹⁰ If the goal of CCS is to permanently remove CO₂ from the atmosphere, Class VI wells must be securely maintained and monitored after closure into perpetuity—whether ten, fifty, or one hundred and fifty years from the time of closure, there must be mechanisms to ensure not just

⁸ Ex. D, *Id.*

⁹ The State’s Geologic Storage Trust Fund, if adequately funded, could provide some financial resources to remediate post-closure site deficiencies. However, as the EDF memo maintains, La. Rev. Stat. Ann. § 30:1110 does not provide the state with a mechanism to “compel an entity or person to actually take any required steps necessary to prevent endangerment or to cure a program violation.” EDF Memo at 9.

¹⁰ A recent report documenting two already-established offshore CCS wells in Norway notes that “the security and stability of the two fields have proven difficult to predict,” even though there has been extensive site study and monitoring. Indeed, the report details many unexpected turns with storage security for both projects, some requiring “emergency remedial actions and permanent long-term alternatives [that] needed to be, and were, identified on short notice and at great cost.” See Norway’s Sleipner and Snøhvit CCS: Industry Models or Cautionary Tales?, Institute for Energy Economics and Financial Analysis (June 14, 2023), <https://ieefa.org/resources/norways-sleipner-and-snohvit-ccs-industry-models-or-cautionary-tales> (hereinafter “IEEFA Report”), Ex. E.

that sufficient funds are available to remediate any problems, but also that there are individuals accountable to effectuate that remediation. Liability releases could ensure just the opposite by removing the most serious long-term consequences for owners and operators.

EPA acknowledges concerns about environmental and human health risks explicitly in its Notice of Proposed Rule.¹¹ There, it suggests that the Memorandum of Agreement (MOA) addendum, entered into between LDNR and EPA, sufficiently addresses the incompatibility between state and federal law. Although the MOA does create pre-site closure requirements that are compatible with federal law, it still relinquishes post-site closure liability. Further, the MOA itself binds only the EPA and LDNR; it does not prevent or limit the enactment of new laws by the state legislature that would modify the state's CCS plan, nor executive orders or actions by the state Governor.¹² And the MOA does not give impacted citizens a right to enforce its provisions if either LDNR or EPA does not abide by its terms. For the aforementioned reasons, the MOA does not ensure long-term accountability, and the latest version of Louisiana's liability release statute remains antithetical to both the spirit and text of the SDWA's protections.

II. Louisiana's Self-Audit Statute and Interpreting Regulation Raise Serious Concerns for Primacy and Require Additional Consideration

The Louisiana Department of Environmental Quality's (LDEQ's) recently-proposed environmental self-audit regulation poses additional concerns for primacy. Environmental self-audits can exempt owners and operators from penalties or provide other leniency to entities that otherwise would have to meet more exacting requirements under state environmental laws. This leniency can in turn render a state program less stringent than its federal counterpart. It is for this reason that states' Attorneys General *must* affirmatively disclose whether their state has such a self-audit provision that could conflict with the State's duties under federal law.¹³

Louisiana Attorney General Jeff Landry submitted a letter to the EPA in support of the State's primacy application in February 2021 certifying "that the State of Louisiana has not enacted any environmental audit privilege or immunity laws."¹⁴ But in March of 2021, State Representative Jean-Paul Coussan prefiled H.B. 72, creating an environmental self-audit privilege, which was passed on June 29, 2021, as Act. No. 481 and became effective as La. Rev.

¹¹ "EPA is aware that stakeholders have raised concern about Louisiana's long term liability provision in Louisiana Revised Statute (LA R.S.) 30:1109." State of Louisiana Underground Injection Control Program, Class VI Program Revision Application, Supplementary Information (April 4, 2023), <https://www.federalregister.gov/documents/2023/05/04/2023-09302/state-of-louisiana-underground-injection-control-program-class-vi-program-revision-application#addresses>.

¹² "General Provisions," MOA Addendum March 2023 final signed, EPA at 3 (April 11, 2023), <https://www.regulations.gov/document/EPA-HQ-OW-2023-0073-0007> (hereinafter "MOA").

¹³ State Audit Privilege and Immunity Laws & Self-Disclosure Laws and Policies, EPA, <https://19january2021snapshot.epa.gov/compliance/state-audit-privilege-and-immunity-laws-self-disclosure-laws-and-policies.html>, excerpt attached as Ex. F.

¹⁴ Louisiana Attorney General's Statement to Accompany Louisiana's Underground Injection Control Program Class VI Primacy Application (April 11, 2023) <https://www.regulations.gov/document/EPA-HQ-OW-2023-0073-0002>.

Stat. Ann. §30:2044 on August 1, 2021. That law directs the Secretary of LDEQ to promulgate regulations for enacting voluntary environmental self-audits. On June 6, 2023, LDEQ released the proposed implementing regulation for notice and comment. The State has not, to the Commenters' knowledge, alerted the EPA about the existence of this law or the proposed regulations.¹⁵ There is no evidence in the application record that EPA has reviewed the State's self-audit regime.

In addition to allowing penalty mitigation not otherwise provided for under federal law for entities that affirmatively disclose environmental violations, Louisiana's self-audit regulation creates a large carveout for confidentiality. Indeed, all documentation supporting voluntary environmental self-audits is to be held confidential under Louisiana Administrative Code (LAC) §33:7009(F). Although this provision has a catch-all that "[i]nformation that is required to be reported to a state or federal agency by statute, regulation, or permit . . . shall not be held confidential," the self-audit regulation still raises concerns for information sharing between LDEQ and EPA, LDEQ and LDNR, as well as LDEQ and the Louisiana Department of Health (LDH), which tests public drinking water, and LDEQ and the public.

Inter-agency information sharing is important in situations that may fall short of mandatory reporting requirements, but in which other agency expertise could alert LDEQ to potential risks. For instance, La. Rev. Stat. Ann. § 30:1107.1(B) mandates reporting to LDNR for the owner or operator of a Class VI UIC well where an injection system could endanger an underground source of drinking water. But it does not mandate reporting where pipelines or other associated infrastructure might do so, nor does it mandate other potentially useful forms of reporting for understanding degrees of risk approaching, but not reaching, drinking water contamination. Such information could be reported to LDEQ, an agency with no expertise in overseeing the geological sequestration of carbon and related processes, but kept confidential from parties with relevant expertise, including LDNR, LDH, or the public. The EPA should conduct a comprehensive review of this proposed regulation to ascertain whether any of its provisions render Louisiana law less stringent than its federal counterpart – or require Louisiana to conduct this review. Any inconsistencies must be rectified before the EPA grants primacy.

III. EPA Approval of Louisiana's Primacy Application is Premature Because LDNR Cannot Safely and Effectively Manage this Program

- a. LDNR admits it does not currently have the in-house resources to manage this program and third-party management is problematic.

¹⁵ This failure to inform the EPA of the self-audit bill is itself already a violation of the MOA, which dictates that "The LDNR shall promptly inform EPA of any proposed, pending or enacted modifications to law, regulations or guidelines, and any judicial decisions or administrative actions, which might affect the state program." MOA at 2 ("Sharing of Information").

It is premature to hand control of the CCS program over to LDNR when the EPA has nationwide experience in reviewing Class VI well permit applications and LDNR admits it cannot manage the program itself. Only two other states currently have Class VI well primacy; EPA otherwise manages the process nationwide. In 2022, EPA announced steps to speed up its Class VI permitting timeframe.¹⁶ EPA has also received \$25 million in additional funding from Congress to support Class VI well permitting in the Infrastructure, Investment and Jobs Act of 2022.¹⁷

If primacy is granted to Louisiana, however, CCS permitting will rapidly overwhelm available state resources, due to both (a) a massive number of permit applications and (b) LDNR's lack of staffing and resources. To the first point, CCS permitting could rapidly become a large program for LDNR to administer. The projections for permit numbers in Louisiana's program proposal are unrealistically low. EPA currently has 10 pending Class VI applications from Louisiana, which, under the MOA, it will transfer over to LDNR to complete processing once primacy is granted.¹⁸ Louisiana has only officially predicted nine applications in the first year, yet there are at least 20 anticipated projects already developing permit applications or related acquisition projects and pore space development in anticipation of primacy.¹⁹ Meanwhile, the Building Back Better Act of 2022 included updates to the 45Q tax credit, which incentivizes the use of carbon capture and storage technologies by providing a direct credit per ton of CO₂ stored, further spurring the industry to rush into this new space.²⁰

LDNR's proposal, however, fails to provide sufficient staffing or other resources for the scale of anticipated permit applications. LDNR proposes running the program through their Office of Conservation. The Office of Conservation (the "OC") has not assembled a team with sufficient expertise to carry out the responsibilities for all aspects of the Class VI UIC Program. The application does not present the education and experience of staff that would qualify them to evaluate testing and monitoring under challenging conditions. In fact, LDNR plans to utilize third party contractors to handle almost all aspects of the permitting evaluation process.

¹⁶ EPA Class VI Permitting Report to Congress at 13 (Oct. 28, 2022),

<https://www.epa.gov/system/files/documents/2022-11/EPA%20Class%20VI%20Permitting%20Report%20to%20Congress.pdf>, Ex. G.

¹⁷ Carbon Management Provisions in the Infrastructure Investments and Jobs Act, Clean Air Task Force, <https://cdn.catf.us/wp-content/uploads/2021/12/13104556/carbon-management-provisions-ijja-1.pdf>, Ex. H.

¹⁸ Class VI Wells Permitted by EPA (May 19, 2023), <https://www.epa.gov/uic/class-vi-wells-permitted-epa>, Ex. I.

¹⁹ Carbon Capture and Sequestration in Louisiana, Part 1: Permitting for Rapid Expansion, Empower, LLC (June 7, 2023) https://static1.squarespace.com/static/6422298c9536175973c5173c/t/647fba41fdb96c18bd68e27a/1686092354913/CCS+in+Louisiana_Part+1_7JUN2023.pdf, Ex. J.

²⁰ See Ex. H, Clean Air Task Force Report at 2.

Expertise Area	In-House	Contractor
Site characterization, e.g., geologists, hydrogeologists, geochemists, and log analysts/experts to review site characterization data submitted during permitting and throughout the project duration.	✓	✓
Modeling, e.g., hydrogeologists and environmental/reservoir modelers to evaluate area of review (AoR) delineation computational models during permitting and AoR reevaluations.	✓	✓
Well construction and testing, e.g., well engineers, log analysts/experts, and geologists to review well construction information and operational reports on the performance of Class VI wells and review/evaluate testing and monitoring reports.	✓	✓
Finance experts to review financial responsibility information during permitting and annual evaluations of financial instruments.	✓	
Risk analysts to evaluate emergency and remedial response scenario probabilities and remediation cost estimates.		✓
Policy/regulatory experts on the UIC Program and the Class VI Rule to evaluate compliance with Class VI Rule requirements.	✓	
Enforcement/compliance, e.g., staff who can initiate and pursue appropriate enforcement actions when permit or rule requirements are violated.	✓	
Inspectors including well engineers or log analysts/experts to inspect wells or witness construction activities, workovers, and/or mechanical integrity tests.	✓	
Environmental justice experts to evaluate the Environmental Justice impact report, ensuring that the report is thorough, contextualized, and agrees with the demographic and environmental data from the EPA-developed EJSCREEN tool.	✓	✓

Source: Louisiana Class VI Primacy Application, Program Description ²¹

Class VI permitting and oversight is a resource-intensive activity, requiring a well-funded and well-trained regulator to facilitate safe and secure project development. Despite Louisiana’s well-developed oil and gas industry, including the rise of Class II wells for hydraulic fracturing operations using injected carbon dioxide, LDNR has failed to develop in-house expertise for key aspects of permit evaluations, including site characterization and modeling.²² This failure demonstrates a lack of serious and diligent planning and action to ensure that LDNR’s testing and monitoring analyzes risks. The plan to rely almost exclusively on third-party contractors

²¹ Louisiana Class VI Primacy Application, Program Description at 3, <https://www.regulations.gov/document/EPA-HQ-OW-2023-0073-0008> (April 11, 2023).

²² Additionally concerning is the fact that within the proposed law, there is a mechanism for converting Class II wells into Class VI wells with scant discussion of how this would be done safely, or what enforcement actions could be taken if done improperly. A recently-released white paper details the potential safety risks associated with well conversion and the urgent need for EPA guidance on how such conversion should be regulated. *See* Keri N. Powell, Powell Environmental Law LLC, The Carbon Sequestration Loophole: Long-Term Carbon Storage in Poorly Regulated Class II Oil and Gas Underground Injection Control Wells (June 22, 2023), Ex. K.

raises more issues. There are limited people in the State with expertise to do this work and many of them already work for the oil and gas industry (or for third-party consultants and contractors that in turn handle contract work for the oil and gas industry) and will be working for the nascent carbon capture and sequestration industry. Conflicts of interest can be reasonably anticipated from such a system, yet the application does not address how such potential conflicts will be managed or mitigated. Can a contractor review a permit application for adequacy, approve it, and then work on the project? Alternatively, can a contractor review a permit application of a direct competitor? How will such conflicts be managed? The proposal provides no answers.

The shortcomings in Louisiana's staffing plan are especially clear when compared with Texas's primacy application, which is also pending. Louisiana's entire LDNR has roughly 314 full-time equivalent employees; Texas's state equivalent has over 830 employees, including already-available personnel within the Oil and Gas Division with the technical expertise to evaluate permit applications and oversee geologic storage projects throughout their lifespan.²³ Notably, Texas has in-house expertise on all aspects of Class VI well permitting evaluation and project management, with the exception of "risk analysts to evaluate emergency and remedial response scenario probabilities." Texas's primacy application also emphasizes its developed expertise in site characterization and modeling: "The reservoir geologist/reservoir engineer will have the necessary experience and expertise to review computer-generated reservoir models and reservoir simulations to determine the accuracy of the required computer-generated models. Selected geological and engineering staff under the UIC manager will be trained in the basics of computer reservoir modeling and simulation to enable a general understanding of the models received under the program."²⁴ Louisiana, on the other hand, plans to rely heavily on third-party contractors for multiple significant areas of the process rather than ensuring in-house available expertise, particularly in the areas of site characterization, modeling, and risk analysis and environmental justice analysis. Site characterization and modeling are important issues in the evaluation of the suitability of a Class VI well, but LDNR does not have the ability to competently evaluate those parts of any permit application package.

- b. LDNR's primacy application makes no mention of the other requisite infrastructure that would be required, including pipelines which the agency would be responsible for in the coastal zone.

Louisiana's intensively developed oil and gas industry presents another set of risks as multiple CO₂ pipelines and injection wells would necessarily be competing for space with, and interact with, the preexisting networks of wells and pipelines in place. The state has thousands of orphaned wells, over ten thousand idle wells, and thousands more inactive or unplugged wells already in place, which increases each new project's potential risk of failure and the burden on the permitting agency—LDNR—to ensure new projects account for existing infrastructure.²⁵ As fossil fuels are phased out in response to governmental and market shifts toward renewables and

²³ Class VI Underground Injection Control Program Description, Railroad Commission of Texas, Ex. L

²⁴ Ex. L, *Id.*

²⁵ Interstate Oil and Gas Company Commission, Idle and Orphan Oil and Gas Wells, State and Provincial Regulatory Strategies 2021,

https://iogcc.ok.gov/sites/g/files/gmc836/f/iogcc_idle_and_orphan_wells_2021_final_web.pdf, Ex. M.

other energy sources, those abandoned and idle well numbers will only increase (while LDNR will also be tasked with managing those new areas of energy production).²⁶ LDNR has no plans to bring the risk analysis portion of permit evaluation work in house at any point, however.

Pipelines will necessarily be a major part of this new industry, as carbon dioxide will typically be transported via pipeline from point of capture to point of storage.²⁷ While the LDNR primacy application only addresses the storage portion of this chain of events, projects will also require dedicated pipelines.²⁸ Corrosion and metal fatigue are potential hazards from the use of steel pipelines to transport carbon dioxide for these purposes. Much is unknown about the long-term use of existing pipeline infrastructure for moving carbon dioxide, and “even recently constructed pipelines that were originally designed for natural gas transmission now being considered for transmission of CO₂ produced from the CCS process is a high-risk decision without additional corrosion studies of the proposed pipeline materials.”²⁹ LDNR’s Pipeline Division will have to take on this new regulatory and permitting burden and this new potential set of risks, yet the primacy application makes no note of or accommodation for this; nor does the LDNR’s FY2023 budget, which does anticipate CCS primacy in the state, account for the impact of CCS on the state’s pipeline infrastructure nor on the LDNR’s Pipeline Division.

LDNR’s application also fails to account for how this infrastructure might be impacted by other external, geographically-tied factors like floods, wetland erosion, salination, and hurricanes. This is not a theoretical concern; a CO₂ pipeline in Mississippi ruptured in May of 2022 due to heavy rains shifting the ground levels – a realistic occurrence in Louisiana. That rupture led to 45 hospitalizations and many more evacuations of the population nearest the

²⁶ In 2022, H.B.165 was passed, adding wind energy regulatory control to LDNR’s scope of powers. At least two companies have begun the process of seeking leases to produce wind energy in Louisiana state offshore waters, a process that will be run through the LDNR. *See* Tristan Baurick, Louisiana begins negotiations for first three wind farms in the Gulf of Mexico, Nola.com (June 7, 2023), https://www.nola.com/news/environment/louisiana-begins-talks-for-for-gulfs-first-three-wind-farms/article_d8ae0042-0541-11ee-b59c-effcd831950f.html, Ex. N.

²⁷ This is not an insignificant consideration, and was addressed as a factor preventing the use of CCS in a Louisiana steel plant’s Title V air permit application: “[A]n approximate \$40 million investment in pipeline connections would be required not including the additional cost of compression equipment and on-going electricity and maintenance requirements.” Nucor Steel, Inc., Addendum to the July 2020 Title V Air Permit Renewal, Significant Modification, and PSD Modification Application, July 27, 2021 (EDMS Doc. 12820367), <https://edms.deq.louisiana.gov/app/doc/view?doc=12820367>, Ex. O.

²⁸ One report suggests that as much as \$1.3 billion in pipeline investment could be required to make CCS feasible in Louisiana. *See* Great Plains Institute, Regional Carbon Capture Deployment Initiative- Jobs and Economic Impact of Carbon Capture in Louisiana, https://carboncaptureready.betterenergy.org/wp-content/uploads/2020/10/LA_Jobs.pdf, Ex. P.

²⁹ Risks and Potential Impacts from Carbon Steel Pipelines in Louisiana Transporting and Processing Variable Produced Gases such as Carbon Dioxide (CO₂), Hydrogen (H₂), Methane (CH₄), Dr. Steven Jansto, at 3 (Oct. 9, 2022), <https://healthygulf.org/wp-content/uploads/2022/10/CCS-and-Pipeline-Final-Report-Jansto-October-9th-1.pdf>, Ex. Q.

rupture.³⁰ Many projects are planned in Louisiana coastal wetland areas, which have specific vulnerabilities including pipeline/infrastructure corrosion from saltwater intrusion; erosion of wetlands, coastal flooding and storms and sea level rise. None of these special geologic and geographic concerns are addressed in LDNR's application materials, perhaps reflecting LDNR's plan to outsource all risk analysis work to a private contractor indefinitely.

c. LDNR has historically mismanaged programs under its jurisdiction and lacks adequate resources to handles its current workload.

LDNR is an agency already overwhelmed with management issues in this industry-heavy state. As noted above, LDNR has been unable to maintain its regulatory duties to oversee orphaned oil and gas wells.³¹

In 2014, the Louisiana Legislative Auditor ("LLA") released a report that specifically found that there was a lack of effective oversight to ensure that well operators follow the law; a lack of adequate financial security required; and an inability of the agency to reduce the total number of orphaned wells in the state, largely due to inadequate staffing.³² Overall, the LLA concluded that "the OC has not always effectively regulated oil and gas wells to ensure operators comply with regulations."³³ Between the fiscal years of 2008 to 2013, "the OC did not conduct routine inspections in accordance with timeframes established by the Commissioner of at least 26,828 (53%) of 50,960 oil and gas."³⁴ Furthermore, 25% (12,702) of all oil and gas wells were not inspected at all."³⁵ The 2014 Report also stated that "the OC has not developed an effective enforcement process that sufficiently and consistently addresses noncompliance and deters operators from committing subsequent violations," and "the OC has not developed formal procedures in policy or in rule that outline the enforcement process."³⁶

The audit was revisited in 2020; that second audit report found that little improved in the intervening years. The number of orphaned wells had more than doubled in the six years between audits; the LDNR still did not require operators to timely plug idle wells; and the financial

³⁰ Julia Simon, The U.S. is expanding CO2 pipelines. One poisoned town wants you to know its story, NPR (May 21, 2023), <https://www.npr.org/2023/05/21/1172679786/carbon-capture-carbon-dioxide-pipeline>, Ex. R.

³¹ Idle and Orphan Oil and Gas Wells, Ex. M; *see also* Terry Jones, Carbon capture portrayed as a linchpin to Louisiana's success, failure, "Concerns," Louisiana Illuminator (June 23, 2023), <https://lailluminator.com/2023/06/23/carbon-capture-portrayed-as-a-lynchpin-to-louisianas-success-failure/>, Ex. S.

³² Louisiana Legislative Auditor Report on Regulation of Oil and Gas Wells and Management of Orphaned Wells, Office of Conservation, Department of Natural Resources (May 28, 2014), [https://app.lla.state.la.us/publicreports.nsf/0/d6a0ebe279b83b9f86257ce700506ead/\\$file/000010bc.pdf?openement&.7773098](https://app.lla.state.la.us/publicreports.nsf/0/d6a0ebe279b83b9f86257ce700506ead/$file/000010bc.pdf?openement&.7773098), Ex. T.

³³ Ex. T, *id.* at 2.

³⁴ *Id.* at 3.

³⁵ *Id.*

³⁶ *Id.* at 3, 11.

security that LDNR required of operators was insufficient to plug wells as they were retired.³⁷ In 2020, nearly 4,300 abandoned wells were documented in the state.³⁸ The LDNR's Office of Conservation (the same office that will run the CCS program) estimated it would take \$128 million and nearly 20 years to properly plug the existing wells and rectify such serious environmental and public safety risks.³⁹ Yet, despite this emergency situation worsening over time, LDNR now asserts it has the bandwidth, money, and personnel to take on entirely new, complex and resource-intensive areas of work.

LDNR's documented history of failing to manage abandoned wells is especially concerning in this context because supercritical CO₂ could exert more pressure than those wells are capable of containing, potentially leading to underwater or surface water contamination.⁴⁰ Indeed, Louisiana scientists have raised alarm about abandoned wells because they can act like "straws in the earth" and create "easy pathways that carbon dioxide can take to reach the surface."⁴¹ LDNR does not have a full inventory of these wells, and with the locations of many wells unknown, there must be significant review of potential Class VI well sites to ensure that no undiscovered orphaned or abandoned wells are within the area of review. However, the Louisiana regulation requires only that:

- ii. within the area of review, the map(s) must identify all injection wells, producing wells, abandoned wells, plugged wells or dry holes, deep stratigraphic boreholes, State- or USEPA-approved subsurface cleanup sites, surface bodies of water, springs, surface and subsurface mines, quarries, water wells, other

³⁷ Louisiana Legislative Auditor Progress Report on Regulation of Oil and Gas Wells and Management of Orphaned Wells, Office of Conservation, Department of Natural Resources (March 11, 2020), [https://app.lla.state.la.us/publicreports.nsf/0/c9d7297fea93568d86258528006ba4f8/\\$file/0001fa2e.pdf?openelement&.7773098](https://app.lla.state.la.us/publicreports.nsf/0/c9d7297fea93568d86258528006ba4f8/$file/0001fa2e.pdf?openelement&.7773098), Ex. U.

³⁸ *Id.*

³⁹ Number of 'orphaned' wells increased by 50 percent, could cost state millions: audit, THE TIMES-PICAYUNE (April 19, 2020), https://www.nola.com/news/business/article_313d8dd2-7a9d-11ea-b4a4-e7675d1484f7.html, Ex. V.

⁴⁰ Spatial Characterization of the Location of Potentially Leaky Wells Penetrating a Deep Saline Aquifer in a Mature Sedimentary Basin, Gadsa et. Al., Environmental Geology (2004) <https://link.springer.com/article/10.1007/s00254-004-1073-5>, Ex. W; *see also* Understanding Geochemical Impacts of Carbon Dioxide Leakage from Carbon Capture and Sequestration, <https://nepis.epa.gov/Exe/ZyNET.exe/P1006L2P.TXT?ZyActionD=ZyDocument&Client=EPA&Index=2006+Thru+2010&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C06thru10%5CTxt%5C00000015%5CP1006L2P.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpf&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL>, Ex. X.

⁴¹ Alex Kolker, A New Geological Risk for Louisiana, Nola.com, (May 24, 2023) https://www.nola.com/opinions/guest-column-carbon-capture-geological-risk-for-louisiana/article_c6c6c5c8-fa09-11ed-a20c-83df8fcf35b5.html, Ex. Y.

pertinent surface features including structures intended for human occupancy, and roads

iii. only information of public record is required to be included on the map(s), however, the applicant is required to make a *diligent search* to locate all wells not listed in the public record.

LAC §43:3607(C)(1)(a)(ii)-(iii) (emphasis added). If permit applicants are only required to consider information in the public record, the safety of potential Class VI sites will hinge largely on how diligent a search applicants make for wells not listed in the public record. There is no requirement that LDNR make a separate search. Depending on the area of review, there could be a potentially high volume of undiscovered wells. LDNR's track record with abandoned wells should raise serious concern that undiscovered wells could compromise the security of a potential Class VI well sites.

LDNR's problems extend beyond the orphaned wells; in 2018, the LLA conducted a financial audit of LDNR to ensure accurate reporting and compliance with applicable laws and regulations. That report concluded that LDNR had failed to establish written criteria for waiving civil penalties and late registration penalties, "increasing the risk of applying inconsistent enforcement action among noncompliant well operators."⁴² The report concluded that LDNR does not take timely and consistent action against operators of wells that are abandoned and not maintained, "which could result in an increased number of wells that are abandoned."⁴³

In 2022, the Auditor issued a report regarding LDNR's management of surface water in the state, specifically noting numerous errors in the agency's process and that "DNR has limited staff and funds to administer the program and does not monitor compliance with all terms of the [surface water cooperative agreements under its management]."⁴⁴

There are also examples of LDNR's failures resulting in disaster, including the Bayou Corne sinkhole in Assumption Parish, which, according to an appellate court opinion, was caused because a brine well operator routinely misled LDNR about the issues they were experiencing with leakage from the brine cavern and were nonetheless granted a permit to perform a mechanical integrity test based on LDNR's trust in the (lying) operator's established reputation. The attempt to pressurize the cavern in order to conduct the mechanical integrity test then caused the wall of the cavern to collapse, and the subsequent surface appearance of the sinkhole. *See Pontchartrain Nat. Gas Sys. v. Texas Brine Co., LLC*, 2018-1249 (La. App. 1 Cir. 12/30/20), 317 So. 3d 715, 735. A community near the sinkhole had to be permanently

⁴² See Department of Natural Resources State of Louisiana Financial Audit Services Procedural Report (August 22, 2018), [https://lla.la.gov/PublicReports.nsf/83D399A0C3E38E1B862582F1006592BC/\\$FILE/0001A490.pdf](https://lla.la.gov/PublicReports.nsf/83D399A0C3E38E1B862582F1006592BC/$FILE/0001A490.pdf), Ex. Z.

⁴³ Ex. Z, *id.*

⁴⁴ Louisiana Legislative Auditor, Status Update: Regulation and Valuation of Surface Water at 2 (July 6, 2022), [https://app.lla.la.gov/publicreports.nsf/0/4f969af92c8cd18625887700514556/\\$file/000274d4.pdf](https://app.lla.la.gov/publicreports.nsf/0/4f969af92c8cd18625887700514556/$file/000274d4.pdf), Ex. AA.

evacuated, and LDNR changed some spacing and pre-drilling testing rules for brine mining caverns as a result. While the proposed state regulations do not permit Class VI well development on salt dome formations, perhaps due to this sinkhole, the underlying issue of LDNR's failure to adequately monitor and control its regulated industries remains relevant.

Recent experiences in DeSoto Parish should also serve as a cautionary tale about the limits of LDNR's ability to stave off potential risks to drinking water and the challenges faced when complex remediation efforts are required. DeSoto Parish is home to the Haynesville Shale, a site of extensive natural gas drilling.⁴⁵ Many of the wells there permeate the Carrizo-Wilcox aquifer. In 2017, residents began noticing issues with their water including bubbling water sources and other signs of natural gas contamination due to fracking failures. Despite the scope of potential risk and the urgency of residents' need for assistance, it took LDNR a year to create a full investigatory action plan.⁴⁶ Ultimately, the Department spent \$4 million to plug leaking wells and remediate the problem but was never able to trace responsibility to any individual well owners or operators, and the companies likely responsible for the contamination evaded accountability at public expense.⁴⁷ There is nothing in the instant proposal that suggests that LDNR will be better equipped at hazard mitigation, post-disaster investigation, or subsequent liability enforcement.⁴⁸

These past site monitoring failures are especially concerning in the CCS context. A recently-released IEEFA report details that even with two smaller, extensively-studied and well-

⁴⁵ Louisiana Department of Natural Resources, Office of Conservation, Haynesville Shale available at: <https://www.dnr.louisiana.gov/index.cfm/page/442>, Ex. BB; *see also* Map of Haynesville gas well activity https://www.dnr.louisiana.gov/assets/OC/Energy_exploration_updates/haynesville/hville_WellActivityMap.pdf, Ex. CC.

⁴⁶ Natural Gas, Water Problems Bubble to the Surface in DeSoto Parish, KTBS News, (Oct. 11, 2018) https://www.ktbs.com/news/3investigates/natural-gas-water-problems-bubble-to-the-surface-in-desoto-parish/article_0b031a88-cda1-11e8-8f03-c73501c6b7b1.html, Ex. DD.

⁴⁷ Zurik: No Company Held Accountable After State Spends Millions on Leaking Wells Threatening Aquifer, Fox 8 News, (May 26, 2021) <https://www.fox8live.com/2021/05/26/zurik-no-company-held-accountable-after-state-spends-millions-leaking-wells-threatening-aquifer/>, Ex. EE .

⁴⁸ Indeed, rather than relying on after-the-fact oversight, these cautionary tales should give the EPA pause before granting primacy to LDNR in the first instance. Historically, EPA has not fully withdrawn primacy authority from states under 40 C.F.R. §145.33-34, even when states are demonstrably failing to meet the requirements of the SDWA. Two such examples are the water crisis in Flint, MI, and the state of Ohio's ongoing struggles to comply with its Class II well obligations. *See, e.g.* Management Weaknesses Delayed Response to Flint Water Crisis, Report No. 18-P-0221, U.S. EPA, Office of Inspector General at 15 (July 19, 2018), https://www.epa.gov/sites/default/files/2018-07/documents/_epaig_20180719-18-p-0221.pdf (detailing the ways in which EPA Region 5 mismanaged its primacy oversight duties, exacerbating the water crisis in Flint), Ex. FF; *see also* Petition to Determine by Rule that Ohio's 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, Earthjustice (Oct. 11, 2022), https://earthjustice.org/wp-content/uploads/class_ii_petition_2022oct11.pdf (demonstrating the added challenges that primacy can create when EPA must intervene to protect the safety of U.S. drinking waters), Ex. GG.

funded projects in Norway, many unexpected challenges arose requiring close monitoring and rapid emergency response capabilities.⁴⁹ That report emphasizes that “each CCS project has unique geology; that geologic storage performance for each site can change over time; and that a high-quality monitoring and engineering response is a *constant, ongoing* requirement.”⁵⁰ Furthermore, it suggests that “[e]very proposed project needs to budget and equip itself for contingencies both *during and long after* operations have ceased.”⁵¹ This type of rigorous, ongoing monitoring is precisely the kind of program LDNR has long struggled to implement.

Again and again, LDNR has proven itself unable to handle its current suite of responsibilities. There is no need to hand over this entirely new set of well permit applications to be handled by this agency.

IV. EPA Approval of Louisiana’s Primacy Application Would Violate its Environmental Justice Mandates Under Executive Order 12898.

EPA cannot turn over the Class VI program to Louisiana without violating the environmental justice mandates to which it is bound under Executive Order (EO) 12898. Further, Louisiana environmental justice communities will receive far less protection under LDNR than what EPA must provide. After fully recognizing its duties under the Executive Order, EPA arbitrarily and capriciously concludes that Louisiana’s application “includes approaches to ensure that equity and EJ will be appropriately considered in permit reviews, and in LDNR’s UIC Class VI program as a whole.” 88 Fed. Reg. at 28453.

Though EPA hedges its language, merely attesting that Louisiana has “approaches to” ensure environmental justice is appropriately considered rather than that Louisiana has demonstrated that it *will* appropriately consider and implement environmental justice, Louisiana’s application and history makes apparent that its “approaches” will not ensure that equity and environmental justice will be appropriately considered. EPA must deny Louisiana’s application until Louisiana demonstrates an enforceable commitment to achieving environmental justice in the Class VI program.

- a. EPA’s Executive Order obligations prevent it from turning the Class VI program over to Louisiana.

Under EO 12898, EPA “shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. . . .” Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 59 Fed. Reg. 7629 (Feb. 11, 1994). EPA must also

⁴⁹ IEEFA Report, Executive Summary (June 14, 2023) <https://ieefa.org/resources/norways-sleipner-and-snohvit-ccs-industry-models-or-cautionary-tales>, Ex. E .

⁵⁰ Ex. E, *id.* (emphasis added).

⁵¹ *Id.*

“conduct its programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under, such programs, policies, and activities, because of their race, color, or national origin.” *Id.* at 7630-31. Thus, EPA has an affirmative obligation to “address” environmental justice effects of its “activity” to approve Louisiana’s primacy application and to “ensure[]” that its proposed approval activity does not have the effect of subjecting people of color (POC) in Louisiana to discrimination.

As a result, EPA does not satisfy its obligation by declaring that Louisiana’s application contains “approaches to ensure” environmental justice. 88 Fed. Reg. at 28453. This is not a purely procedural, checkbox exercise. EPA must address the anticipated and likely effects to POC, particularly Black communities, if it turns over its Class VI authority to Louisiana. And its obligation to ensure that turning over primacy to Louisiana will not have the effect of subjecting POC to discrimination means that it may not turn over the program unless and until Louisiana demonstrates that it will deliver not only meaningful involvement, but fair treatment to environmental justice communities.⁵²

Louisiana is miles away from meeting that requirement. It has not only failed historically and presently to take environmental justice seriously, it has now demonstrated outright hostility to the principle. Louisiana cannot on the one hand claim it will “include environmental justice as a core element in implementing [its] Class VI programs” while on the other hand suing EPA to invalidate EPA’s Civil Rights Act Title VI disparate impact regulations.⁵³ EPA cannot allow Louisiana to make a mockery of environmental justice and EPA’s commitment to achieving it by rewarding Louisiana with primacy over an entirely new industry. EPA must deny the application.

b. Louisiana’s “approaches” to ensure equity and environmental justice are inadequate.

Though this does not suffice as the standard, EPA is incorrect in concluding that Louisiana’s application includes approaches to ensure that equity and environmental justice will be appropriately considered in permit reviews and in the Class VI program as a whole. 88 Fed. Reg. at 28453. Louisiana does not have a sufficiently developed plan for preventing harm in general and disproportionate impacts in particular.

i. The absence of any environmental justice provisions in Louisiana’s Class VI program regulations mandate denial of its application.

⁵² See Plan EJ 2014, EPA at 3 (Sept. 2011),

<https://nepis.epa.gov/Exe/ZyPDF.cgi/P100DFCQ.PDF?Dockey=P100DFCQ.PDF>, Ex. HH.

⁵³ Addendum 3 to Louisiana/EPA MOA, March 3, 2023; *Louisiana v. EPA, et al.*, No. 23-0692 (W.D. La. Filed May 24, 2023), Ex. II.

Louisiana's legal path to primacy began with its January 2021 adoption of regulations for a Class VI well program. 47 La. Reg. 53 (Jan. 20, 2021). Louisiana knew its program would have to be approved by EPA and thus had to have been aware that EPA would demand environmental justice protections. EO 12898 has been in place for almost thirty years. Yet the regulations contain not a single provision related to environmental justice; nothing that addresses either fair treatment or meaningful involvement for overburdened communities.⁵⁴ This is a significant omission, as the regulations are arguably the only aspect of Louisiana's application that is legally binding and enforceable within the state for this program. Despite Louisiana's later (inadequate) representations in other application material, the ability of Louisiana residents to go to Louisiana courts to enforce the LDNR's environmental justice obligations is critical to their protection and to the protection of environmental justice communities. Is EPA prepared to guarantee Louisiana residents that it can effectively enforce Louisiana's assurance of environmental justice protections for every Class VI permit going forward? Enforceable regulatory provisions are essential. EPA should deny Louisiana's application and require it to promulgate (after notice and comment) meaningful and binding environmental justice provisions of which EPA approves.

ii. The environmental justice statements in Louisiana's application material are insufficient.

EPA's conclusion that Louisiana's program, as described in its application, includes approaches to ensure that equity and environmental justice will be appropriately considered is arbitrary and not supported by the application materials. EPA apparently relies on two aspects of Louisiana's application to reach this conclusion: 1) its Program Description, and 2) its MOA Addendum. 88 Fed. Reg. at 28452. Neither suffices.

Louisiana's Program Description (PD) discusses procedural measures to address environmental justice issues. At the outset, EPA has not explained how discussions in a program description are enforceable, even by EPA but particularly by Louisiana residents. Enforceability is key to any regulatory program. In addition, however, these procedures are inadequate for numerous reasons. First, they are almost entirely standardless, allowing LDNR and the applicant to conduct this EJ screening essentially however they want. The description says the agency will use EJScreen, but has no mandates about how the agency, or the applicant, will or must use EJScreen.⁵⁵ Even just looking at the limited purpose of "identif[ying] the presence of an EJ community or other increased risk factors," the PD lacks key detail.⁵⁶ What will LDNR consider to be an EJ community? What are the "other increased risk factors" LDNR will consider?

⁵⁴ EPA defines "environmental justice" as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Plan EJ 2014 at 3, Ex. HH.

⁵⁵ LA Class VI UIC Program Description, EPA at 6, (April 11, 2023), <https://www.regulations.gov/document/EPA-HQ-OW-2023-0073-0008> (hereinafter "Program Description").

⁵⁶ *Id.*

Where there is detail, it falls short of necessary protections. For example, the area in which LDNR agrees to look for “an EJ community” is far too limited. LDNR indicates it will look for EJ communities “located within the AoR [Area of Review].”⁵⁷ The PD itself does not appear to define the AoR, but the regulations define it as “the region surrounding the *geologic sequestration project* where USDWs may be endangered by the injection activity” LAC 43: XVII.601 (emphasis in original). While this definition may make sense for certain technical purposes, it is wholly inadequate when addressing impacts of permitting on the communities near the well site and near the CO₂ producing operation. At a minimum, EPA should require LDNR to conduct the screening in the area the regulations define as the “geological sequestration site.” The regulations define this area as:

the underground reservoir, carbon dioxide injection wells, monitoring wells, underground equipment, and surface buildings and equipment utilized in the sequestration or storage operation, including pipelines owned or operated by the sequestration or storage operator used to transport the carbon dioxide from one or more capture facilities or sources to the sequestration or storage and injection site. The underground reservoir component of the sequestration or storage facility includes any necessary and reasonable aerial buffer and subsurface monitoring zones designated by the commissioner for the purpose of ensuring the safe and efficient operation of the storage facility for the storage of carbon dioxide and shall be chosen to protect against pollution, and escape, or migration of carbon dioxide.

LAC 43: XVII.601.

If LDNR—with unfettered discretion to consider whatever it wants—decides there is an EJ community with the Area of Review, the application would be sent to a QTP (qualified third party) for evaluation and the QTP will send its evaluation to LDNR. Here again, this portion of the EJ review is utterly standardless. The PD says nothing about what the QTP must (or even should) evaluate the application for. No standards are provided as to what qualifications the third party must have, what conflicts of interest or biases would be considered when choosing the QTP, and how those conflicts would be disclosed.

Once LDNR receives the evaluation, and the review reaches the point where there could be some impact on the permitting process, again, LDNR has unfettered and undirected discretion to do anything or nothing at all. The Commissioner of Conservation “will use the results to determine if an enhanced public comment period will be required for the application.”⁵⁸ The PD says nothing about what the Commissioner should or must consider in making this decision, or if any set of conditions would mandate rejection of a project on EJ grounds. It only discusses the types of enhanced processes the Commissioner would consider.

⁵⁷ *Id.*

⁵⁸ *Id.*

Finally, the PD discusses the *Save Ourselves* analysis required of all Louisiana state agencies when acting in a manner that affects the environment.⁵⁹ As discussed below, the *Save Ourselves* analysis, as interpreted and applied by LDNR, will not adequately address environmental justice.

The other document EPA relies on to conclude Louisiana will ensure appropriate consideration of environmental justice is the MOA Addendum LDNR and EPA completed in March 2023. At the outset, the fact that the environmental justice language in this addendum appears to be essentially a cut-and-paste job from the EPA Administrator’s December 9, 2022, Letter to Governors on environmental justice does not inspire confidence in LDNR’s commitments. Indeed, while this language provides additional detail on environmental justice procedures, the enforceability of this MOA provision is absolutely essential. This is the only language that attempts to provide some substantive, “fair treatment” component of environmental justice. Yet LDNR’s intentions to actually implement the language in this MOA addendum (which still lacks essential detail) has been directly contradicted by LDNR. In a PowerPoint presentation that LDNR made in July of 2022 about its proposed Class VI Program at a Pipeline Safety Conference, LDNR represented that “LDNR currently lacks statutory authority to make the results of an EJ review part of the actual permit decision.”⁶⁰ EPA cannot play ostrich on these critical issues; it must investigate with LDNR and obtain enforceable assurances that LDNR can and will exercise the functions it agreed to in its Addendum.

c. The *Save Ourselves* analysis as applied by LDNR does not address environmental justice issues.

LDNR implies in its PD that its obligation under the *Save Ourselves* case to conduct an environmental review of the project is another way it will consider environmental justice in its program. It states: “In addition to the site location questions considered in the Environmental Justice review, a weighing of siting, environmental effects, and a cost benefit analysis is required in the application as a result of *Save Ourselves, Inc., et al vs. the Louisiana Environmental Control Commission, et al.*”⁶¹ However, Commenters are unaware of any situation where LDNR has considered disproportionate burden, demographics, or any other environmental justice issue as part of this environmental analysis. Instead, LDNR has consistently and repeatedly interpreted this *Save Ourselves* constitutional duty as narrowly as possible. This despite the fact that environmental justice considerations would fall under several of the *Save Ourselves* factors, such as whether the potential and real adverse effects have been avoided to the maximum extent possible, the cost-benefit analysis, and the alternatives analysis.⁶²

⁵⁹ *Id.* (citing *Save Ourselves v. La. Envtl. Control Comm’n*, 452 So. 2d 1152 (La. 1984)).

⁶⁰ Carbon Sequestration at the Louisiana Office of Conservation, LDNR at slide 24 (July 21, 2022), https://www.dnr.louisiana.gov/assets/OC/im_div/uic_sec/2022SonristoSunset/ClassVIatPipelineSafetyConference7-10-22.pdf, Ex. JJ. Commenters also note that now that the legislature has enacted La. R.S. § 30:1104.1, mandating a *Save Ourselves* analysis for CCS applications, LDNR should have no basis for this position. At a minimum, environmental justice issues fit squarely within the *Save Ourselves* framework, and are properly considered to be mandatory components.

⁶¹ Program Description at 6.

⁶² See Act 378 (2023) (enacting La. R.S. § 30:1104.1 with *Save Ourselves* factors), Ex. C.

Indeed, even beyond the environmental justice context, LDNR's resistance to maximizing environmental protection as required by *Save Ourselves* has resulted in numerous Louisiana courts striking down its decisions as in violation of this constitutional mandate. See *Sierra Club v. DNR*, No. 60-961, slip op. (25th La. Jud. Dist. Ct. 12/23/14) (attached as Exhibit KK); *Save Lake Peigneur v. DNR*, No. 122358, slip op. (16th La. Jud. Dist. Ct. 9/23/14) (attached as Exhibit LL); *Town of Abita Springs v. DNR*, No. 637209, Judgment (19th La. Jud. Dist. Ct. 9/1/15) (attached as Exhibit MM); *Bertrand v. DNR*, No. 587-065, Judgment (19th La. Jud. Dist. Ct., 9/9/10) (attached as Exhibit NN); *Lake Peigneur Preservation v. Thompson*, No. 409139, Amended Oral Reasons for Judgment (19th La. Jud. Dist. Ct., 1/15/97) (finding that LDNR violated its duty but declining to vacate its decision) (attached as Exhibit OO).

If LDNR is now committing to exercise its constitutional duty by specifically considering environmental justice and disproportionate burden as part of the impacts and alternatives requirements of *Save Ourselves*, EPA must require an express commitment from LDNR to that effect. Otherwise, LDNR's reference to its *Save Ourselves* obligation as in any way satisfying environmental justice imperatives is a red herring.⁶³

- d. Louisiana's lawsuit against EPA over EPA's disparate impact regulations cannot be reconciled with a commitment to ensuring that environmental justice will be appropriately considered in a Louisiana Class VI Program.

On May 24, 2023, less than three weeks after EPA noticed its proposal to turn over Class VI well permitting to Louisiana, proposing to find that Louisiana would "ensure that equity and EJ will be appropriately considered," Louisiana filed a federal lawsuit against EPA over its Civil Rights Act Title VI disparate impact regulations.⁶⁴ Louisiana asked the court to vacate EPA's Title VI disparate impact regulations, complaining that EPA wants states to "satisfy EPA's increasingly warped vision of 'environmental justice' and 'equity.'"⁶⁵ It referenced EPA's environmental justice priorities as a "dystopian nightmare."⁶⁶ This statement alone—in a federal pleading—should disqualify the state for primacy under the current application. Louisiana asked the court to vacate the disparate impact regulations, arguing that there is no place for a disparate impact analysis under the law. And though in its MOA Addendum 3, Louisiana signed off on a statement that its evaluation of impacts on lower-income people and communities of color would include "cumulative impacts,"⁶⁷ in its lawsuit it said EPA lacked "the slightest authority" for a

⁶³ Commenters note that at the end of the recently-ended 2023 legislative session, the Louisiana legislature passed House Bill 571, containing numerous provisions related to CCS. Ex C. The bill would add La. R.S. § 30:1104.1 that codifies the *Save Ourselves* issues as applicable to Class VI well applications. However, the provisions go no farther than current well-established jurisprudence already clearly requires which, as noted, has long been ignored by LDNR. Act 378 does not speak to environmental justice.

⁶⁴ *Louisiana v. EPA, et al.*, No. 23-0692 (W.D. La. Filed Feb. 24, 2023), Ex. II.

⁶⁵ Ex. II, Compl. ¶ 2.

⁶⁶ *Id.* ¶ 6.

⁶⁷ MOA 3 at 5.

cumulative impacts assessment.⁶⁸ Indeed, even procedural meaningful involvement provisions for environmental justice communities did not escape Louisiana's scorn, as it complained of EPA's "demand[s]" that Louisiana conduct "community meetings" to address a "perceived lack of community involvement."⁶⁹

Louisiana cannot have made it any clearer: it has absolutely no intention of incorporating environmental justice, in any form, into its Class VI Program. The state is bitterly hostile to the idea of providing any fair treatment or meaningful involvement to environmental justice communities and, in particular, to communities of color. For EPA to turn over this program as consistent with environmental justice obligations under these circumstances would make a mockery of what this agency has accomplished for environmental justice communities.

- e. The already-proposed projects would emit a high volume of harmful pollutants, negatively impacting EJ communities.

Further, there are myriad other harmful emissions associated with CCS infrastructure that must be taken into consideration. The nature of the CCS projects already proposed for Louisiana and the underlying policies driving the build-out of those projects make the impacts of Class VI wells, including the environmental justice outcomes, inseparable from the impacts of the new industrial facilities associated with those wells. Since the beginning of the primacy application process, Louisiana has seen an explosion of proposed new industrial facilities that incorporate CCS, and thus require a Class VI well to sequester the captured emissions. These range from numerous "blue" hydrogen or ammonia manufacturing, to liquid natural gas (LNG) export terminals, to alleged "low-carbon" transportation fuel refining.

But CCS will not capture or sequester all of the harmful emissions associated with these facilities. Indeed, many harmful pollutants will still be released in high quantities. For instance, based on its permit application, the "blue" hydrogen/ammonia facility at St. Charles Clean Fuels would emit significant amounts of ammonia, along with other hazardous air pollutants like benzene, formaldehyde, and toluene.⁷⁰ Air Products, in Ascension Parish, would emit nearly 200 tons per year of ammonia, over 95 tons of nitrogen oxides (NOx) and over 66 tons of volatile organic compounds (VOCs).⁷¹ Both of these proposed projects would add significant emissions to already overburdened neighborhoods. The Census blockgroup bordering the proposed St. Charles Clean Fuels location to the east, in addition to being 77 percent people of color, is also in the 98th percentile nationally for air toxics cancer risk and 96th percentile nationally for toxic air

⁶⁸ Ex. II, Compl. ¶ 76.

⁶⁹ *Id.* ¶ 77.

⁷⁰ Excerpt from St. Charles Clean Fuels Minor Source Air Permit Application, Oil and Gas Watch, (May 25, 2023), <https://api.oilandgaswatch.org/d/5b/68/5b68dda9627b440982bf369e24883c20.1685735287.pdf>, Ex. PP.

⁷¹ Excerpt from Air Products Blue Energy LLC Minor Source Initial Permit Application, LDEQ EDMS, <https://edms.deq.louisiana.gov/app/doc/view?doc=13210585>, Ex. QQ.

releases.⁷² The area near the proposed Air Products facility is in the 98th percentile for air toxics cancer risk and 98th percentile for toxic releases to air.⁷³

Given the generosity of the federal 45Q tax credit for carbon sequestration, the Class VI wells associated with these projects are integral to the entire enterprise. The environmental justice consequences of permitting Class VI wells extend beyond the location of the wellhead itself, up the pipeline, and to the source of the emissions. LDNR's track record demonstrates a repeated failure to adequately assess the environmental impacts of the projects it permits, and its own words demonstrate a refusal to consider the environmental justice consequences of those impacts. EPA cannot expect anything different when it comes to LDNR exercising its regulatory role in the looming CCS build-out in Louisiana.

V. The Proposed Projects Would Not Contribute to Overall Emissions Reductions

In the Supplementary Information to the EPA's final rule entitled "Federal Requirements Under the Underground Injection Control (UIC) Program for Carbon Dioxide (CO₂)" the EPA emphasized that CCS could "play a sizeable role in mitigating US GHG emissions."⁷⁴ Indeed, it discussed extensively that the geologic sequestration of carbon could be used to help *mitigate* climate change. Louisiana's own Climate Action Plan echoes this sentiment, suggesting that CCS could be used as a mitigation tool for attaining the State's goal of net-zero greenhouse gas (GHG) emissions by 2050.⁷⁵ However, LDNR's proposal makes no mention of aligning the agency's program with these federal and state mitigation goals. Indeed, the regulation, PD, and MOA are all silent as to whether proposed projects will be evaluated for whether they contribute to the overall reduction of greenhouse gas emissions, rather than simply maintaining the status quo or worse, contributing to an increase in these emissions.

This is of concern because the already-proposed projects could, and likely would, contribute to an overall increase in greenhouse gas emissions. Of the proposed CCS projects documented in a recent report by Empower, LLC, more than half involve the construction of new industrial facilities, with new greenhouse gas emissions that would not be entirely captured by the facility.⁷⁶ For example, the proposed Nutrien ammonia plant – connected to the proposed

⁷² EJ Screen Report for Census Blockgroup 220890622001, Ex. RR.

⁷³ EJ Screen Report for Census Blockgroup 220050303022, Ex. SS.

⁷⁴ EPA, Federal Requirements Under the Underground Injection Control (UIC) Program for Carbon Dioxide (Jan. 10, 2011), <https://www.federalregister.gov/documents/2010/12/10/2010-29954/federal-requirements-under-the-underground-injection-control-uic-program-for-carbon-dioxide-co2>, excerpt at Ex. TT.

⁷⁵ Louisiana Climate Action Plan (Feb. 2022) https://gov.louisiana.gov/assets/docs/CCI-Task-force/CAP/Climate_Action_Plan_FINAL_3.pdf, Ex. UU.

⁷⁶ Carbon Capture and Sequestration in Louisiana, Part 1: Permitting for Rapid Expansion, Empower, LLC (June 7, 2023) https://static1.squarespace.com/static/6422298c9536175973c5173c/t/647fba41fdb96c18bd68e27a/1686092354913/CCS+in+Louisiana_Part+1_7JUN2023.pdf, Ex. J.

Denbury Class VI wells – claims it will capture 90% of its CO₂ emissions – leaving an additional nearly 100,000 tons per year of new CO₂ emissions in Louisiana.⁷⁷ The much-vaunted Air Products Blue Hydrogen facility would (allegedly) capture 95% of its CO₂ emissions – leaving uncaptured CO₂ emissions of over 250,000 TPY.⁷⁸ Lake Charles Methanol’s Prevention of Significant Deterioration permit states that it will emit over 6 million tons per year of CO₂,⁷⁹ while the company’s public statements claim it will capture 4 million TPY (also connected to a Denbury Class VI well).⁸⁰ In fact, Lake Charles Methanol’s PSD permit from DEQ states that the use of CCS will “also result in adverse energy and environmental impacts. . . . Generation of [the required] electricity [for a CCS project] would result in significant criteria pollutant emissions. In addition, amine-based scrubbing [a step in CCS] generates large volumes of wastewater, which would have to be treated and discharged, and solid waste, which eventually must be disposed in a landfill.”⁸¹ Based on its adverse environmental impacts, DEQ declared that CCS could not be considered as BACT (Best Available Control Technology).⁸² These are just a handful of the proposed projects that make clear that Louisiana does not see CCS as a “last mile” measure to reach emissions reductions goals, but rather the first step of new wave of polluting industry.

VI. If the EPA Proceeds with Granting Primacy, It Should Substantially Revise Louisiana’s Program

EPA should not approve Louisiana’s application for primacy as drafted and instead should retain primacy. Should Louisiana re-submit a complete application accounting for all current, relevant state laws and meeting EPA’s environmental justice guidelines with – both of which the pending application for primacy lacks – EPA should re-launch this application process and allow for public comment on the new application.

If, however, EPA decides to proceed, the following changes should be made to the program:

⁷⁷ “Nutrien Announces Intention to Build World’s Largest Clean Ammonia Production Facility,” Nutrien <https://www.nutrien.com/investors/news-releases/2022-nutrien-announces-intention-build-worlds-largest-clean-ammonia> (last visited June 20, 2023), Ex. VV.

⁷⁸ “Louisiana Clean Energy Complex,” Air Products, <https://www.airproducts.com/campaigns/la-blue-hydrogen-project> (last visited June 20, 2023), Ex. WW.

⁷⁹ Air Permit Briefing Sheet, Lake Charles Methanol Facility, LDEQ, *available at* <https://edms.deq.louisiana.gov/app/doc/view?doc=13083217>, Ex. XX. Lake Charles Methanol’s PSD Permit also details that LDEQ found geologic sequestration of carbon in the saline formations found throughout Southern Louisiana to be technologically infeasible. *See* PSD (Prevention of Significant Deterioration), LDEQ, at 11-12 *available at* <https://edms.deq.louisiana.gov/app/doc/view?doc=10254736>, Ex. YY.

⁸⁰ Net-Zero Carbon Blue Methanol, Lake Charles Methanol, LLC, *available at* <https://law.lsu.edu/jelrsymposium/files/2021/02/Johnston-Lake-Charles-Methanol.pdf>, Ex. ZZ.

⁸¹ Lake Charles Methanol Air Permit Application, EDMS 10254736 at 15, <https://edms.deq.louisiana.gov/app/doc/view?doc=10254736>, Ex. AAA

⁸² Ex. AAA, *id.*

1. EPA should seek clarification from Louisiana about the impacts of the revisions La. Rev. Stat. Ann. §30:1101 *et seq.* for post-closure liability. If EPA finds that the statute still creates gaps in post-closure liability, it should predicate primacy on revocation of the statute or, in the alternative, enact the changes to the MOA suggested in (3) below.
2. EPA should independently assess the impacts of Louisiana's not-previously-disclosed self-audit statute and interpreting regulations—or require the State to do so—and issue a report on same detailing its conclusions, including any recommended changes to the State's program.
3. The third paragraph of section H of the MOA should be removed, and a provision should be added to the MOA to allow impacted third-party citizens to sue to enforce its provisions, including those related to release from liability and environmental justice.
4. EPA should require LDNR to explicitly consider environmental justice as part of its analysis under the *Save Ourselves* factors, and mandate actual changes to proposed projects with a negative impacts on EJ communities, including the denial of permits.

VII. Conclusion

For the foregoing reasons, the EPA should not proceed with Louisiana's application for primacy over the UIC Class VI well program. As currently submitted, the proposed project is not as stringent as its corollary under the Safe Drinking Water Act—a clear requirement for primacy. Additionally, LDNR does not have the resources to effectively and safely administer this program, especially given the unique challenges posed by this State's landscape and existing infrastructure. Moreover, environmental justice requires that this program be administered in a manner that actually accounts for the burdens borne by Louisiana's most vulnerable residents—demands currently not met by the proposal. Instead, the already-proposed projects suggest a wave of new infrastructure that would only further burden those communities, rather than serving as part of “last-mile” efforts towards CO2 emissions reductions. At the very least, Louisiana's application requires substantial modification to comply with federal law and to adequately protect the safety of Louisiana residents and drinking water, especially in those communities already overburdened by the compounding effects of heavy industry.

Thank you for your consideration of this comment and for the opportunity to submit comments on Louisiana's UIC Class VI well primacy application. Please feel to contact us with any questions or concerns.

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