

Restore the Delta  
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August 10, 2024

U.S. Environmental Protection Agency,  
Region 9 Groundwater Protection Section 75  
Hawthorne Street San Francisco, CA 94105

**RE: Concerns Regarding Revised Carbon Dioxide Sources in EPA Draft Permits**

Dear Ms. Nord and EPA Region 9 Staff,

Restore the Delta (RTD) is submitting comments on the revised draft Class VI Underground Injection Control (UIC) permits for Carbon TerraVault JV Storage Company Sub 1, LLC (CTV) in Elk Hills, California (Permit No: R9UIC-CA6-FY22-1.4).

Restore the Delta is a 501(c)3 non-profit organization committed to restoring and advocating for the Sacramento-San Joaquin Delta. We've spent the past 18 years charting a sustainable economic future for the Delta in partnership with Delta tribes, farmers, and environmental justice communities. We envision a Delta region with fishable, swimmable, farmable, and drinkable waters; clean distributed energy resources; regenerative agriculture practices rooted in traditional ecological knowledge; and abundant community wealth building opportunities.

Our Carbon and Energy Program evaluates emerging climate technology industries in the Delta region. Our goal is to support community groups to advocate for themselves for protective standards, transparency and inclusion in economic development projects in the San Joaquin Delta region. We define Carbon Management as two different types of waste management approaches – Mitigative Carbon Capture & Storage (CCS) and Carbon Dioxide Removal (CDR) – to reach net-zero and net-negative emissions. Mitigative CCS is a waste management tool to reduce "hard-to-abate" CO<sub>2</sub> emissions on point sources. Carbon Dioxide Removal (CDR) is a waste management tool to remove CO<sub>2</sub> directly from the atmosphere to compensate for residual and legacy GHG emissions. The premise for CDR: even after we've transformed our urban landscapes and transit systems to reduce energy and water use and decarbonized major emitting sectors (e.g. power, transportation, agriculture, aviation, and heavy industry), atmospheric CO<sub>2</sub> concentrations will still threaten climate stability and life as we know it. We accept this premise, and recognize the urgent need to invest in new technology solutions to reverse the cascading consequences of fossil fuel emission. However we have serious reservations with the emphasis on scaling carbon management technologies in environmental justice communities where more proven clean energy and carbon removal solutions have yet to be developed.

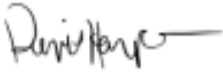
Our comments are not intended to make recommendations specific to CTV I, but rather to address broader issues with geologic storage projects being proposed in the Delta. We recognize and deeply value the expertise of community-based environmental justice organizations in Kern County and believe they should be the primary voices shaping their energy future. We are specifically concerned about the recent changes to the proposed carbon capture and storage (CCS) project at Elk Hills, as outlined in CTV's June 17, 2024 letter and reflected in EPA's revised draft permits. California Resources Corporation (CRC) has several Class VI permit applications in the Delta region, which is our primary area of focus. While the Carbon TerraVault (CTV) Elk Hills 26R carbon storage project is outside our immediate area, we are concerned that the EPA's decision on the CTV1 project in Kern County is likely to set a precedent for similar projects in the Delta region. As advocates for the Sacramento-San Joaquin Delta, we are concerned that the removal of Avnos Direct Air Capture Facility and Lone Cypress hydrogen plant as initial carbon dioxide sources for geologic storage represents a significant shift in the project's scope and potential environmental impact and could impact future projects in our region. These are our concerns:

1. **Shift in project Focus:** Without these two sources, the project appears to be shifting its focus primarily to capturing emissions from existing fossil fuel operations, particularly Elk Hills field gas treatment (pre-combustion for Elk Hills Power Plant) and potential future fossil fuel power plants and industrial sources. This shift essentially transforms the project from a diverse carbon management initiative to a mechanism for prolonging the viability of fossil fuel operations, to which we are strongly opposed.
2. **Balancing Legacy and Point source emissions:** We recognize the need for responsible CO<sub>2</sub> sourcing to be developed on a region-by-region basis. However we are cognizant that CO<sub>2</sub> sourcing decisions being made in Kern county have the potential to set a trend for sourcing decisions in the Delta. While respecting the autonomy of each region, we urge the EPA to consider how precedents set here may affect decisions for future projects in the Delta. By prioritizing point source emissions from fossil fuel operations, the revised project scope risks perpetuating reliance on fossil fuels, which runs counterintuitive to the purpose of geologic CO<sub>2</sub> storage as a solution for climate change mitigation.
3. **Reduction of CO<sub>2</sub> Capture Capacity:** The removal of the initial sources is estimated to reduce the project's anticipated CO<sub>2</sub> capture by 200,000 tonnes annually. This significant reduction in CO<sub>2</sub> supply may affect the project's overall carbon sequestration potential and timeline. The elimination of the Direct Air Capture (DAC) facility is particularly concerning, since DAC is capable of removing CO<sub>2</sub> directly from the atmosphere (legacy emissions) as opposed to merely capturing emissions at the point of origin (point source emissions). At present, DAC is a nascent, resource-intensive set of technologies that will require major efficiency gains to have any meaningful climate impact. That said, the inclusion of DAC would've signaled a potential commitment to removing legacy emissions from the atmosphere, which will be essential for a livable future. By contrast, the project's focus on current and future emissions from fossil-based sources risks extending the lifespan of harmful operations and delaying the transition to cleaner energy sources.
4. **Environmental Justice concerns:** While the scope of these comments is limited to the removal of two specified sources, as environmental justice advocates for the Delta, we are acutely aware of the long-standing disproportionate environmental burdens communities have historically borne

from polluting industries. While acknowledging the expertise of local EJ advocates in Kern County to address their specific concerns, we are deeply concerned about projects that could extend the life of fossil fuel operations and perpetuate pollution and other injustices to affected communities.

Thank you for your consideration of these comments. We look forward to ongoing dialogue as carbon management initiatives develop in the Delta region, with the goal of evaluating whether these projects can truly serve our communities and our shared climate objectives.

Sincerely,



Davis Harper  
Carbon & Energy Program Manager



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Carbon Policy Analyst



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