



April 18, 2022

Senator Bob Wieckowski
Senate Environmental Quality Committee
State Capitol, Room 2205
Sacramento, California

Senator Henry Stern
Senate Natural Resources and Water Committee
1021 O Street, Room 3220
Sacramento, CA 95814

Re: SB 1101 (Caballero) Carbon sequestration: pore space ownership and Carbon Capture, Utilization, and Storage Program - OPPOSE

Dear Chairs Wieckowski and Stern,

On behalf of the undersigned organizations, we are writing in opposition of SB 1101, which would require the state board to establish a Carbon Capture, Utilization, and Storage (CCUS) Program to accelerate the development, deployment, and commercialization of new technologies to capture and sequester carbon dioxide emissions from industrial and commercial facilities. SB 1101 would further specify that free space includes pore space that can be possessed and used for the storage of gaseous or liquid substances.

We are strongly concerned about the state aggressively promoting CCUS technologies – as this bill aims to do – in light of tremendous health and safety risks and the tremendous opportunity cost of investing in this unproven technology at the expense of proven effective and safer emissions

reductions strategies. Much of the research done to date supporting CCUS is compromised in its academic and scientific integrity by tens of millions of dollars in funding from the fossil fuel and other industries that stand to profit from the use of CCUS. At the same time, research conducted by independent physicians and public health scientists, as well as community experience on the ground showing the dangers of piping carbon dioxide – including the risk of sudden mass death – demands more careful oversight and regulatory direction from the legislature.

Moreover, scant evidence of CCUS's effectiveness as a carbon reduction strategy exists, and real life examples, such as Shell's "Quest" plant in Alberta, Canada – which has been touted as a "thriving example" of how CCS is working to significantly reduce carbon emissions, and is the exemplar basis for CARB's Low Carbon Fuel Standard (LCFS) CCS Protocol – **released a total of 7.5 million tons of greenhouse gasses since 2015, while capturing just 5 million tons of carbon dioxide over the same period.**¹

When a carbon dioxide pipeline ruptures, its effects are best measured in miles, not feet. A cloud of carbon dioxide boils out of the rupture and sits in a cloud, heavier than air, for several miles around. These clouds displace oxygen and cause potentially lethal asphyxiation, as well as preventing any automobile that relies on combustion from fleeing the area or from entering to provide emergency rescue or medical services. Further, ruptures in carbon dioxide pipelines are more likely than in oil and gas pipelines as currently regulated or as proposed by SB 1101. This increased rupture risk results from the unique properties of carbon dioxide, including its proclivity for forming carbonic acid in the presence of water, an acid which corrodes carbon steel and weakens pipelines.²

The recent disaster in Satartia, Mississippi, in which dozens of people needed to be rushed to the hospital after suffocating near a sudden carbon dioxide pipeline rupture,³ counsels careful regulation of this dangerous new technology. That disaster also harkens back to the mass death tragedy in Lake Nyos, Cameroon, in which over 1,700 people died due to a sudden natural carbon dioxide release.⁴

The state should avoid allowing a mass tragedy to happen in its rush to implement new technologies that the oil and gas industry misrepresents as a panacea to all our woes. Instead, the legislature should slow down and consider this serious problem more carefully in order to avoid potentially severe unintended consequences.

¹ <https://www.cnn.com/2022/01/24/shell-ccs-facility-in-canada-emits-more-than-it-captures-study-says.html>

² *CO₂ Pipelines: Dangerous and Under-Regulated*, Pipeline Safety Trust, report backgrounder (March 30, 2022), <https://pstrust.org/wp-content/uploads/2022/03/CO2-Pipeline-Backgrounder-Final.pdf> (with link to full report).

³ *The Gassing of Satartia*, Dan Zegart, HuffPost (August 26, 2022), https://www.huffpost.com/entry/gassing-satartia-mississippi-co2-pipeline_n_60ddea9fe4b0ddef8b0ddc8f

⁴ E.g., *Lake Nyos Suffocated Over 1,746 in a Single Night*, Atlas Obscura, Slate (July 26, 2013), http://www.slate.com/blogs/atlas_obscura/2013/07/26/lake_nyos_killed_1746_when_it_released_a_huge_pocket_of_co2.html

Instead of spending millions of public dollars on subsidizing the fossil fuel industry through CCUS, the legislature should invest in *real* climate solutions that prioritize a just transition off fossil fuels for workers and communities by phasing out fossil fuels, growing a regenerative, renewable energy-powered economy, and strengthening the resilience of frontline and environmental justice communities.

For all of those reasons, we urge you to vote “NO” on SB 1101.

Sincerely,

Martha Dina Argüello
Physicians for Social Responsibility - Los Angeles

Dan Ress
Center on Race, Poverty & the Environment

Gloria Medina, Executive Director
SCOPE LA

Ellie Cohen, Chief Executive Officer,
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Kyle Heiskala, Climate Justice Policy Advocate
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