CALIFORNIA CARBON SOLUTIONS COALITION

Building Climate Smart Solutions for California

September 14, 2023

Clerk of the Board California Air Resources Board 1001 I Street Sacramento, California 95814

Submitted Electronically

RE: Comments re: September 14, 2023 Environmental Justice Advisory Committee & California Air Resources Board Joint Discussion of Implementation of California Air Resources Board's Assembly Bill 32 Climate Programs

The California Carbon Solutions Coalition appreciates the opportunity to provide comments regarding the Joint Discussion of the Environmental Justice Advisory Committee and the California Air Resources Board on the Implementation of Assembly Bill 32 Climate Programs.

The California Carbon Solutions Coalition is the state's leading business and labor organization working to support the rapid deployment of proven carbon capture, utilization and sequestration (CCUS) technologies to reduce greenhouse gas emissions and deliver high-quality jobs for Californians.

Globally leading climate experts including the Intergovernmental Panel on Climate Change, the International Energy Agency and Lawrence Livermore National Laboratories have identified CCUS as a critical component of efforts to achieve climate goals.¹ As detailed in California's 2022 Climate Change Scoping Plan, "carbon removal and sequestration will be an essential tool to achieve carbon neutrality, and the modeling clearly shows there is no path to carbon neutrality without carbon removal and sequestration."² Governor Newsom has directed CARB to establish carbon removal and capture targets of 20 MMTCO2 by 2030 and 100MMTCO2 by 2045.³ Additionally, in 2022, the California State Legislature passed and Governor Newsom signed key legislative measures that highlight the importance of CCUS technologies to California's climate action goals. These include Senate Bill 905 (Caballero), which established a carbon capture, removal, utilization and storage program and Assembly Bill 1279

³ See <u>Governor Newsom letter to CARB</u>, 2022









¹¹ See International Energy Agency; Lawrence Livermore National Labs; and Intergovernmental Panel on Climate Change.

² See 2022 Climate Change Scoping Plan, pg. 84.

(Muratsuchi), which directs CARB to work with other state agencies to "identify and implement a variety of policies and strategies that enable carbon dioxide removal solutions and carbon capture, utilization and storage technologies in California to complement emissions reductions."⁴

CCUS technologies have been safely and successfully practiced for decades across the spectrum of capture, transport and storage activities.⁵ As of September 2022, there were approximately 200 CCUS projects in development, deployment and operation across the globe capturing and permanently sequestering millions of tons of CO2.⁶ These technologies and practices can be applied, refined, and enhanced to enable CCUS to play a meaningful role in California's decarbonization efforts. California industries possess a depth of technological capability and technical expertise to quickly and safely deploy CCUS. The state has one of most skilled workforces in the world standing at the ready to design, build and operate CCUS projects and infrastructure.

The Biden-Harris Administration in tandem with US Congress have made billions of dollars of historic investment available to help quickly scale carbon capture, removal and storage technologies across the country. A number of industries across California are actively investing in CCUS projects and technologies. California has at least 76 industrial, fuel and power generating facilities that with application of CCUS technologies can deliver as much as 60MMT/year in GHG reductions – nearly twice as much as the entire buildings sector in the state.⁷ Given the scope and scale of the challenge to achieve carbon neutrality by 2045, the state cannot afford to limit the role that CCUS technology can play as part of this effort and we must take deliberate and timely action to benefit from the federal incentives available to projects and technologies that can drive down greenhouse gas emissions and support long-term, high quality jobs and careers for Californians.

The Coalition appreciates CARB's recognition of the need consider alignment of treatment of CCUS and CDR with cap and trade and the Scoping Plan, as well as with the aforementioned executive and legislative direction as presented at the June 14, 2023 cap and trade program workshop.⁸ Ensuring that the cap-and-trade program fully and appropriately accounts for the substantial greenhouse gas emission reductions that can be achieved through carbon capture and carbon removal will be critical to enable these projects to be deployed rapidly to deliver near-term and ongoing climate, economic and employment benefits for California.

Additionally, in collaboration with partner state agencies, CARB recently commenced the process to establish a carbon capture, removal, utilization and storage program pursuant to Senate Bill 905 (Caballero, 2022). This program, along with California's cap and trade program and California's Low Carbon Fuel Standard, will be a key element of

⁴ See SB 905 (2022) and AB 1279 (2022).

⁵ See <u>The Role of Carbon Capture and Storage in the Race to Carbon Neutrality</u>, Peridas & Schmidt, 2021

⁶ See <u>Global Status of CCS Report 2022</u>, Global CCS Institute.

⁷ See <u>An Action Plan for Carbon Capture and Storage in California</u>, Stanford University, 2020

⁸ See June 14, 2023 Joint Cap and Trade Workshop, pg 22.

the state's strategy to ensure that CCUS and CDR technologies can be safely deployed to cost-effectively cut greenhouse gas emissions on the path to carbon neutrality by 2045.

The Coalition appreciates the opportunity to comment and we look forward to ongoing engagement with CARB and all stakeholders as part of these processes to keep our state on the path to reaching our climate goals.

Sincerely,

Virgil Welch Director