



October 6, 2025

Rachel Danielson
Nora Kennedy
California Air Resources Board
1001 I Street Sacramento, CA 95814

Re: Information Solicitation to Advise Implementation of the Carbon Capture, Removal, Utilization, and Storage Program: Senate Bill 905

Dear Ms. Danielson and Ms. Kennedy,

The CA CCUS Forum thanks the California Air Resources Board (“CARB”) for providing stakeholders and the public with an opportunity to provide feedback on information that will aid in the implementation of Senate Bill (“SB”) 905 (Caballero, 2022). The CA CCUS Forum previously responded to questions posed at the *Carbon Capture, Removal, Utilization, and Storage Program Workshop* held on February 27, 2025 and now responds to a select subset of questions posed in the Information Solicitation to Inform Implementation of Carbon Capture, Removal, Utilization, and Storage Program. Responses are numbered below to match the applicable question numbers in the solicitation.

1. In addition to the terms defined in statute, are there other key terms that should be defined? Please provide any proposed definitions with applicable citations.

Yes, as part of the SB 905 implementation process CARB should define the following terms:

- Large emitter
 - o CARB should clarify how “large emitter” in the context of the SB 905 program will be defined. For example, the definition could align with the threshold emissions amount used in the Mandatory GHG Reporting Program, which is 10,000 metric tons of CO₂e.
- Material threat
 - o The term “material threat” is used numerous times in the statute but is not defined. CARB could use the European Union’s definition of “significant risk” to inform the definition of “material threat.” “Significant risk” is defined by the European Union’s Directive on the Geological Storage of Carbon Dioxide as “a combination of a probability of occurrence of damage and a magnitude of

damage that cannot be disregarded without calling into question the purpose of this Directive for the storage site concerned.”¹

2. Are there any definitions in the statute that may require further expansion or clarification?

A term that is not defined in the statute but that requires further expansion is the term “to reduce.” The term is used in Health and Safety Code § 39741.1(f)(1) in the context of CARB reporting to the legislature on recommendations to reduce the impacts of completed carbon dioxide capture, removal, or sequestration projects. The method with which a reduction would be measured for each type of monitored impact should be clarified. Additionally, to benefit the public interest, CARB should define what constitutes an acceptable or material reduction amount, so that proposed reduction recommendations result in a meaningful lessening of impacts. The associated costs of each reduction recommendation should also be clarified in the report, so that the public and legislature can understand the cost-effectiveness of certain recommendations, relative to the reduction in impacts they would achieve.

6. What other additions or changes to the existing requirements for financial responsibility should CARB consider and why?

At this time, CARB should refrain from considering any additions to the existing requirements for financial responsibility because adding requirements risks stymying a nascent market. Part of the intent behind establishing California’s Carbon Capture, Removal, Utilization, and Storage Program was to facilitate the capture and sequestration of carbon dioxide in California. The requirements in Section 146.85 of Title 40 of the Code of Federal Regulations are appropriate to use for the first iteration of California’s Carbon Capture, Removal, Utilization, and Storage Program. Anything more stringent may lead to an industry preference for building carbon capture, removal, utilization, and storage projects outside of California.

19. Considering the data and information portal will be voluntary to use, what features of the permit portal would increase the likelihood the portal is used by both project developers and permitting agencies?

¹ European Union. (2009). *Directive 2009/31/EC of 23 April 2009 on the geological storage of carbon dioxide*. OJ L 140, 5 June 2009. Article 3(18).

Although it is a large undertaking and use is voluntary, there is value in CARB developing the unified permit application portal. Gathering and centralizing permit application requirements will increase the likelihood of the portal's use. Additionally, to increase the likelihood of the permit portal being used, the permit portal should include the following features:

- 1) The ability to create a query for both a site location (address or coordinates) and the specific activity for which a permit is sought. The query should return the applicable list of permits required for the queried activity (e.g., geological sequestration in a Class VI well) along with the list of authorities having jurisdiction ("AHJs") over the site based on the site location.
- 2) The ability to search the portal for a specific project to gather common information about the project and its permitting status. If some permits have already been granted for a certain project, the common information relevant to another permitting agency should be easily downloadable for those other permitting agencies.
- 3) A data dictionary that defines common permit application data fields and maps the common information across different permit types.
- 4) A user guide for the portal.
- 5) "Last updated" date information clearly visible throughout the portal. Outdated information will diminish trust and ultimately the likelihood that the portal is used by project developers and permitting agencies.

23. Are there other things the state could be doing to scale up deployment of projects under SB 905?

Yes, the state should work on facilitating the transport of carbon dioxide. The sequestration or utilization site is often not the same site where the emissions are captured (for direct air capture projects) or produced and captured (for point source capture projects). However, transporting carbon dioxide through pipelines is not an option in California because of the moratorium on carbon dioxide pipelines. It is essential that more options for the transport of carbon dioxide be allowed as the transportation of carbon dioxide has been historically underdeveloped and underinvested and has fallen behind relative to the development of capturing and storage technologies. However, carbon capture and removal cannot appropriately scale without the key function of transport being solved.

26. Should CARB consider adopting project type specific protocols or defining more widely applicable standards, or a combination of both? If CARB were to define key standards

applicable to all methodologies as opposed to individual methodologies based on specific technology or storage, what could those look like (i.e. recommendations on existing standards), and would that approach help to scale and innovate in this space faster than development of individual protocols?

Developing individual protocols by project type will add significant time and complexity to the establishment of California's Carbon Capture, Removal, Utilization, and Storage Program. At the same time, developing general standards that can apply to all carbon capture, removal, utilization, and storage methodologies increases the likelihood that the general standards are not truly applicable to all project types. For this reason, the CA CCUS Forum recommends a hybrid approach and recommends that to start, the same monitoring, reporting, and verification standards apply to all project types and methodologies.

Sincerely,

Nicole Cheng
Manager, Engagement
CA CCUS Forum