

June 24, 2022

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

## **RE: Comments 2022 Draft Scoping Plan Update**

Remora appreciates the opportunity to provide comments on the Draft 2022 Scoping Plan Update. The 2022 Climate Change Scoping Plan will be key to charting California's path to reaching the State's 2045 carbon neutrality goal. To be successful, it should be designed to maximize the range of innovative low and zero-carbon technologies that can support this effort. Remora is committed to working with CARB, its State agency partners, and all stakeholders to deliver innovative climate solutions that will provide benefits in California and beyond.

### **About Remora & Mobile Carbon Capture Technology**

[Remora](#) designs and manufactures an **innovative carbon capture system that captures carbon dioxide (CO<sub>2</sub>) directly from the exhaust of heavy, hard-to-decarbonize mobile sources**, including Class 8 heavy-duty vehicles ("semi-trucks"). The captured CO<sub>2</sub> is compressed, stored onboard, and then offloaded at designated sites that are co-located at refueling or cargo loading infrastructure sites. All captured CO<sub>2</sub> can be safely and permanently disposed of via underground sequestration. Remora's technology also significantly reduces tailpipe nitrogen oxide (NO<sub>x</sub>) emissions. Remora has **on-road partnerships with Pepsi, Procter & Gamble, Unilever, Ryder**, and numerous other nationally-significant trucking fleets.

Remora's technology has been **under development for a decade**. It draws from the EPA-funded PhD research of Christina Reynolds (Co-Founder and Co-CEO) and is **based on existing, proven carbon capture methods**. The technology retrofits onto semi-trucks, is easy to install and operate, and weighs significantly less than earlier prototypes ensuring that semi-trucks maintain a significant payload. Remora's device and other mobile carbon capture technologies can *quickly* address the most difficult sectors to decarbonize, including heavy-duty trucking, vessel shipping, and rail. Remora's technology is a critical near-term solution that can deliver significant climate benefits and support and complement efforts toward achieving zero emission transportation in California. When paired with vehicles that run on synthetic or renewable fuels, Remora's innovative technology can **make transportation carbon negative** (in what is known as a bioenergy with carbon capture and storage or "BECCS" carbon removal pathway).

### **Scoping Plan Comments**

California’s transportation sector is the State’s largest source of both greenhouse gas emissions and air pollution, accounting for more than half of statewide GHG emissions.<sup>1</sup> Rapidly driving down these emissions is a critical element of California’s strategy to achieve carbon neutrality. As described in the Draft Scoping Plan, the transition to zero emission technology will take time as internal combustion vehicles will remain on the roads in California for decades to come. The modeling for the Draft Plan indicates that even in 2045, significant volumes of liquid fuels, including fossil fuels, are likely to remain in California’s transportation fuel mix.<sup>2</sup> Solutions that can significantly reduce—and even fully eliminate—greenhouse gas emissions from California’s transportation sector will be key.

The Draft 2022 Scoping Plan Update acknowledges the key role that carbon capture and sequestration (CCS) technologies must play in the State’s efforts to achieve carbon neutrality.<sup>3</sup> While the plan currently focuses on the utilization of CCS technologies to deliver emission reductions from stationary sources, it also rightly indicates that **additional “enabling policies and regulations” for innovative low and zero carbon technologies will be key to the success of California’s efforts.**<sup>4</sup> Mobile carbon capture (MCC) technologies that can be rapidly scaled to deliver significant climate, air quality, and public health benefits in California provide a critical tool that the State can take advantage of.

The 2022 Scoping Plan Update will set the stage for a host of actions that California must pursue over the coming years to move successfully down the path to carbon neutrality. Given the scale and scope of this challenge, the State cannot afford to limit any approaches that can contribute to this effort. As CARB works to refine and finalize the 2022 Scoping Plan Update over the coming months, **Remora urges CARB to ensure that it optimally positions California to reap the benefits that innovative and proven technologies like mobile carbon capture (MCC) can provide.**

Remora appreciates the opportunity to submit comments and we look forward to continuing to work with you and all stakeholders in California on this critically important effort.

Sincerely,

*Christina Reynolds*

Dr. Christina Reynolds  
Co-Founder and CEO

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<sup>1</sup> See Draft 2022 Scoping Plan Update, pg. 147

<sup>2</sup> See Draft 2022 Scoping Plan Update, pg. 153

<sup>3</sup> See Draft 2022 Scoping Plan Update, pg. 66

<sup>4</sup> See Draft 2022 Scoping Plan Update, pg. 173