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California Air Resources Board
P.O. Box 2815
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[submitted electronically]

RE: Comments on May 23, 2023, Workshop on Auto-Acceleration Mechanism for the Low Carbon Fuel Standard

Remora appreciates the opportunity to provide comments on the California Air Resources Board's (CARB) May 23, 2023, Workshop on Auto-Acceleration Mechanism for the Low Carbon Fuel Standard (LCFS). 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 engine exhaust technology that captures carbon dioxide (CO₂) directly from heavy, hard-to-decarbonize mobile sources**, including Class 8 heavy-duty vehicles (semi-trucks). Remora invented and designed mobile carbon capture and storage (MCCS) technology in the Detroit, Michigan, metropolitan area that can be directly attached to existing semi-trucks. Using Remora's technology, semi-truck exhaust is diverted to a mobile carbon capture unit, which captures a significant percentage of CO₂ emissions generated by the semi-truck (as well as nitrous oxide emissions). Filtered exhaust is then released into the atmosphere. The captured CO₂ is compressed, stored onboard, and then offloaded at designated sites that are co-located at refueling or cargo-loading infrastructure sites. All captured CO₂ can be safely and permanently disposed of via underground sequestration.

Semi-trucks are essential to our economy, delivering over 70% of goods that Americans use. Unfortunately, semi-trucks are also extremely high greenhouse gas (GHG) emitters and difficult to decarbonize. The approximately two million semi-trucks in operation today emit approximately 339 million metric tons of CO₂ per year. In addition, these high-emitting semi-trucks will be on the roads for decades to come, given the investments made by companies to purchase these vehicles and the need for these vehicles to support supply chain needs across the United States. Remora's M CCS technology has the power to decarbonize existing trucks and, if coupled with the use of biofuels, can result in semi-truck operations with a negative carbon intensity score.

Remora has partnered with numerous nationally significant companies, including three in the Fortune 10 and numerous in the Fortune 500, to install its carbon capture equipment on their semi-trucks. Market demand for Remora's technology is extremely high as companies seek to reduce their CO₂ emissions. Remora's M CCS technology, and that developed by other M CCS companies, is uniquely poised to offer major decarbonization benefits while also supporting the growth of small businesses, helping to remedy environmental justice injustices and inequalities, advancing further innovations in CCS technology, and more, as described further below:

- Air Quality Benefits: Remora's M CCS technology acts as a filter on engine exhaust. Along with capturing CO₂, it demonstrates the potential to drastically improve air quality by reducing toxic air pollutants and other GHGs like nitrogen oxides. These benefits could immediately serve low-income and disadvantaged communities that are most affected by vehicle emissions due to their proximity, in many cases, to highways and other major roadways.
- Scalable Impact: The decarbonizing impact of Remora's technology has the potential to rapidly scale.. With millions of semi-trucks in the United States, the opportunity for M CCS is enormous and increases further when utilized for other mobile sources of CO₂ emissions.
- Benefits for Small Businesses: While Remora currently partners with Fortune 500 fleet customers who can afford to test and invest in new technologies, in order to have an industry-wide impact, Remora's M CCS technology must be affordable to small, family-owned fleets. Over 90% of fleets in the United States are under six trucks. Working with small, family-owned fleets will be essential to decarbonizing trucking.
- Industry-Wide Benefits: The development of Remora's M CCS technology and others like it will benefit the carbon capture and management industry more broadly. Remora's

MCCS technology uses the same science as other CCS technology, meaning innovations that Remora advances benefit the general understanding of CCS technology. Remora has already advanced critical outcomes in the energy usage, size and weight, and cost of CCS technology.

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).

May 23, 2023, LCFS Workshop Comments

Remora supports CARB's proposal to adopt a more stringent CI reduction target of at least 30 percent by 2030 with increasing stringency in subsequent years, as the emission reductions driven by the LCFS program will be critical to ensure California remains on track to meet its climate goals. LCFS CI targets can be made more ambitious by the inclusion of a suite of transportation decarbonization technologies, including mobile carbon capture technologies that can be rapidly scaled to deliver significant climate, air quality, and public health benefits in California. Additionally, Remora supports the incorporation of a compliance target acceleration mechanism that can automatically adjust based on clear criteria to increase programmatic stringency. This type of mechanism will help provide critically needed emissions reductions and provide market certainty for ongoing investment in low- and zero-carbon technologies.

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,

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Alexandra Frumar
Chief Legal Officer

