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Clerk of the Board
California Air Resources Board
1001 I Street
Sacramento, CA 95814
Submitted via email: https://www.arb.ca.gov/lispub/comm/bclist.php

RE: Comments On August 30, 2022 Proposed Advanced Clean Fleets (ACF) Regulation

Remora appreciates the opportunity to provide comments in response to the August 30, 2022 California Air Resources Board (CARB) Proposed Advanced Clean Fleets (ACF) Regulation.

About Remora & Mobile Carbon Capture Technology

Remora designs and manufactures an exhaust control technology that captures carbon dioxide (CO_2) directly from heavy, hard-to-decarbonize mobile sources, including Class 8 heavy-duty vehicles ("semi-trucks"). The captured CO_2 is stored onboard and later offloaded at designated collection centers, co-located with refueling and cargo-loading infrastructure sites. All captured CO_2 can be safely and permanently disposed of via underground sequestration. Remora's technology also significantly reduces tailpipe nitrogen oxide (NO_x) emissions. Remora has on-road partnerships with numerous other nationally-significant trucking fleets.

Remora's technology has been under development for a decade 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 heavy-duty transportation carbon-negative.

Comments in Response to the Proposed Advanced Clean Fleets Regulation

Remora supports the efforts of the California Air Resources Board (CARB) to rapidly secure critically needed greenhouse gas emission (GHG) reductions from the medium and heavy-duty truck sector in California. The transportation sector is the leading contributor to statewide GHG emissions, and medium and heavy-duty trucks contribute more than 30 percent of statewide NOx emissions.[1] In addition to the important steps California is taking to decarbonize heavy-duty transportation through efforts like the Advanced Clean Fleets (and Advanced Clean Trucks) regulation, a range of actions are needed to rapidly drive down emissions from this sector as part of California's efforts to achieve net-carbon neutrality by 2045 and meet state and federal air quality standards.

Innovative technologies have a key role to play in securing significant greenhouse gas and air pollution emission reductions in the near term. While the ACF regulation is designed to accelerate the adoption of increasing numbers of new zero-emission vehicles in California's medium and heavy-duty transportation sectors, there is a critical need to cut emissions from the hundreds of thousands of existing heavy-duty internal combustion engine vehicles that will continue to operate in California for decades to come. As detailed in the 2022 CARB State Implementation Plan Strategy, even with successful implementation of both the ACF and Advanced Clean Trucks regulations, there will still be nearly 500,000 internal combustion powered trucks on California roads in 2037.[2]

The Proposed ACF Regulation rightly acknowledges the important role that Near Zero Emission Vehicle (NZEV) technologies will play as part of the transition to a fully zero-emission transportation future.[3] **As currently defined, however, NZEVs are limited to vehicles powered by an internal combustion engine and a battery-electric powertrain capable of operating like a ZEV for "a limited time."[4] Technologies like mobile carbon capture have the potential to provide emission reduction benefits of equal or even greater significance than those provided by NZEVs.** Given the urgent need for rapid and substantial cuts in emissions from California's transportation sector, it is critical to **ensure that all technologies that can meaningfully contribute to these efforts can be appropriately accounted for and incentivized as part of the state's regulatory framework for decarbonization.**

As CARB moves ahead with implementation of the ACF and other key programs to drive down emissions from California's transportation sector, we urge you to carefully

[1] 2021 California GHG Emission Inventory
[2] 2022 State Implementation Plan
[3] Proposed Advanced Clean Fleets Regulation
[4] Proposed Advanced Clean Fleets Regulation

evaluate the ways that these programs can be optimized to deliver the greatest climate and air quality benefits that innovative pollution-reducing technologies can provide.

Conclusion

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,

Rayan Semery-Palumbo
Public Strategy & Policy Development