

July 27, 2022

Lee Kindberg, Ph.D.  
Director, Environment & Sustainability  
Maersk Line  
9300 Arrowpoint Boulevard  
Charlotte, North Carolina 28273  
[lee.kindberg@maersk.com](mailto:lee.kindberg@maersk.com)

Dear Lee Kindberg:

The California Air Resources Board (CARB) staff has reviewed Maersk Line’s request for exemption from the Ocean-going Vessel (OGV) Fuel Regulation to allow emissions testing to be conducted by the University of California at Riverside (UCR) on the cargo container vessel, Gerner Maersk. The objective of this project will be to explore various European Union-developed technologies and study the feasibility of utilizing unscrewed ariel vehicles (UAV) with sensor packages developed in Finland, and at the same time may study the use of a small plane (equipped with an infrared (IR) hyperspectral imaging camera) in determining compliance with emission control area (ECA) and CARB OGV Fuel Regulations. CARB staff has approved the request for a temporary experimental or research exemption from the “Fuel Sulfur and Other Operational Requirements for Ocean-Going Vessels Within California Waters and 24 Nautical Miles of the California Baseline” (OGV Fuel Regulation) as documented in the enclosed Executive Order.

The approved project includes testing of the main engine on the Gerner Maersk ocean-going container vessel while switching between CARB-compliant fuel (0.1 percent sulfur distillate fuel) and very low sulfur fuel oil (VLSFO) (0.5 percent sulfur fuel oil). The exemption applies to the fuel requirements under 13 CCR, section 2299.2(c)(6), and title 17 CCR 93118.2(c)(6), subject to the conditions specified in Executive Order G-22-317. The exemption covers the main engine on the vessel listed in Table 1.

**Table 1. Vessel and Engine Information**

Owner/ Operator	Vessel Name	IMO	Main Engine Make/Model	Number of Main Engines
Maersk Line	Gerner Maersk	9359002	Doosan-Wärtsila 12-RT Flex96C	1

Enclosed is Executive Order G-22-317 granting the OGV Fuel Regulation exemptions for the vessel and engine identified above and specifying the conditions under which the vessel may operate while in Regulated California Waters. Testing is scheduled to occur on the Gerner Maersk over a ~14-hour voyage from the Port of Los Angeles to the Port Hueneme pilot station on August 8, 2022. However, to account for unforeseen scheduling delays, this exemption will be valid from August 8, 2022, to September 8, 2022.

Please note that the exemption applies only to the extent necessary as directly required by the fuel-switching and emissions testing needs of the approved test protocol as determined by UCR and approved by CARB staff. The Gerner Maersk should take all feasible measures to minimize the emissions from testing operations which include but are not limited to, avoiding the unnecessary operation of the engine on non-compliant fuel and connecting to shore-side power when able.

If you have any questions or comments, please contact Elizabeth Melgoza, Air Pollution Specialist, at [elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Bonnie Soriano".

Bonnie Soriano, Branch Chief, Freight Activity Branch

Enclosure

cc: Kent Johnson, Ph.D., Principal Investigator, Center for Environmental Research and Technology, College of Engineering, University of California Riverside,  
[kjohnson@cert.ucr.edu](mailto:kjohnson@cert.ucr.edu)

Todd Sax, Chief, Enforcement Division

Alex Barber, Air Pollution Specialist, Railroad and Marine Enforcement Section

Elizabeth Melgoza, Air Pollution Specialist, Marine Strategies Section