

August 28, 2025

Nicholas Tonsich, President Clean Air Engineering - Maritime, Inc. 2500 Via Cabrillo Marina San Pedro, California, 90731 ntonsich@caemaritime.com

## Dear Nicholas Tonsich:

California Air Resources Board (CARB) staff have reviewed the "METS-4 Duplicate System" request from Clean Air Engineering - Maritime (CAEM) submitted July 1, 2025 (CAEM's Request). CAEM's Request for Executive Order (EO) approval is for METS capture and control system for auxiliary marine diesel engines on tanker, container, and auto carriers/roll-on roll-off (ro-ro) vessels. **This letter addresses CAEM's Request as it pertains to container vessels only.** 

The purpose of CAEM's Request was to verify and attest that the METS-4 is a duplicate of the METS-3, which was approved under EO G-25-096 for container vessels operating one or two auxiliary engines.

For duplicate systems that are identical to one that CARB previously approved through an EO, the CARB Approved Emission Control Strategy (CAECS) operator may request that CARB confirm the system is a duplicate system and add it to an approved equipment list attached to the previously issued EO. Once an updated EO is issued, the duplicate system may operate as a CAECS to comply with CARB's Control Measure for Ocean-Going Vessels At Berth, title 17, California Code of Regulations 93130 *et seq* (2020 At Berth Regulation).

CARB staff's review of CAEM's Request was based on the requirements in the 2020 At Berth Regulation, conditions provided in CAEM's Test Plan for container vessels submitted on May 14, 2024, and CAEM's Request submitted on July 1, 2025.

We are pleased to inform you that we have approved METS-4 to be a duplicate of METS-3 and are issuing the enclosed EO G-25-096-001 under the 2020 At Berth Regulation, California Code of Regulations, title 17, section 93130.5(e)(3). Executive Order G-25-096-001 identifies the monitoring, reporting, and recordkeeping requirements for the approved METS-3 system and newly approved METS-4 and stipulates the approved operating conditions for the use of the METS systems listed as Approved Equipment in Attachment 1 (METS). Executive Order G-25-096 is hereby superseded and is of no further force and effect.

The approved duplicate system (METS-4) must complete the following in-use compliance testing, confirming the performance of the duplicate equipment per section 93130.5(j) of the 2020 At Berth Regulation, and submit the test data to CARB within six months (by

February 28, 2026) or 30 vessel visits, whichever comes first, after the duplicate equipment is approved and added to the EO:

- 1. Third-party source testing for all pollutants listed in section 93130.5 (g) at one load point following the requirements and test methods listed in section 93130.5(g) with Relative Accuracy Test Audit (RATA) testing.
- 2. Third-party capture efficiency testing at one load point.
- 3. Durability testing on a minimum of 5 vessels and for a minimum of 200 hours.

If CAEM fails to submit test results for the new system within the specified timeframe, or if the new system fails to achieve emissions reductions required by the 2020 At Berth Regulation while performing with the same design, conditions, and requirements approved for the original approved system, the Executive Officer may revoke the approval of the duplicate system and remove it from the EO.

Executive Order G-25-096-001 identifies the vessel and engine types for which the METS systems in Attachment 1 are approved to control. CAEM may operate the approved METS systems under the terms specified in the EO as CAECS for five years from the date when METS-3 was approved (June 3, 2025) before needing to apply for an extension, as specified in section 93130.5(i)(1).

For a future duplicate system(s) to be added as approved equipment on an EO, CAEM will again need to submit information confirming that there are no modifications to design or operation for a future system(s) as compared to the existing approved equipment. When requesting approval for a future duplicate system(s), please submit the following information in writing to assist CARB in verifying that there are no modifications (as described in section 93130.5(i)(2)):

- ID number for this new piece of equipment
- Brief description of the control strategy's operation, confirm no changes
- Brief description of the monitoring and notification system, confirm no changes
- List of all components (provide spec sheets as applicable), confirm no changes
- Confirm no changes requested to any portion of the EO approval
- Refer to previously approved test plan, agree to abide by test procedures (to be used for in-use compliance testing, as applicable) and maintenance procedures
  - Option to include test plan as an attachment, or submit a truncated version applicable to this new request

Per section 93130.19, this information may be submitted via email to *shorepower@arb.ca.gov*, and shall include an attestation that the information is true, accurate, and complete, signed under penalty of perjury.

Nicholas Tonsich August 28, 2025 Page 3

If you have any questions, please contact Angela Csondes, Manager, Marine Strategies Section, at <a href="mailto:angela.csondes@arb.ca.gov">angela.csondes@arb.ca.gov</a>.

Sincerely,

Bonnie Soriano, Chief, Freight Activity Branch, Transportation and Toxics Division

Attachment: EO G-25-096-001

Bom I Sun

cc: Angela Csondes, Section Manager, Marine Strategies Section