

April 10, 2023

Michael Walker, CEO  
STAX Engineering, Inc.  
65 Pine Avenue, Suite 943  
Long Beach, California 90802  
[m.walker@staxengineering.com](mailto:m.walker@staxengineering.com)

Dear Michael Walker:

The California Air Resources Board (CARB) staff have reviewed the amended Test Plan for the mobile barge-based STAXbox Emissions Control System to treat emissions from container vessel auxiliary engines.

On July 14, 2021, STAX submitted a preliminary Test Plan to gain approval for the barge based Xcap-1 and STAXbox.A-1 to be used for compliance with the 2020 Control Measure for Ocean-Going Vessels At Berth (2020 At Berth Regulation). CARB staff reviewed the Test Plan and submitted comments to STAX on September 2, 2021, November 5, 2021, December 3, 2021, and December 31, 2021. To address staff's comments, STAX revised the Test Plan on October 25, 2021, November 23, 2021, December 22, 2021, and again on January 3, 2022.

On April 20, 2022, CARB approved STAX's Test Plan (Revision 4, dated January 3, 2022) and issued STAX a Test Plan approval letter. On September 28, 2022, STAX sent CARB an amended Test Plan (Revision 5, dated September 28, 2022) and requested CARB's review and approval. The amended Test Plan eliminated the XCap-1 capture device and changed the type of flow measurement device. No changes were made to the type, quantity, or methods of testing. CARB staff reviewed the Test Plan and submitted comments to STAX on February 21, 2023. To address staff's comments, STAX revised the Test Plan and submitted on February 28, 2023.

Based on CARB staff's review, and pursuant to section 93130.5(f) of the 2020 At Berth Regulation, STAX's Test Plan (dated February 28, 2023, attached) is hereby approved in accordance with testing requirements under the CARB 2020 At Berth Regulation and the CARB Recommended Emissions Testing Guidelines for Ocean-Going Vessels. CARB's Test Plan approval letter (dated April 20, 2022) and STAX's Test Plan (Revision 4, dated January 3, 2022) are now considered superseded. Test Plan approval is based on the system description, design, and operational procedures outlined in STAX's Test Plan (dated February 28, 2023). No changes or modifications are permitted to STAX's emissions control system, including the capture system design and operation, without prior CARB approval. In order to obtain CARB Executive Officer approval of STAX's emissions control strategy application, STAX will need to complete all testing outlined in their Test Plan dated February 28, 2023, and provide all reports generated from these tests along with an application for an Executive Order. The application requirements that STAX must meet to submit test results are outlined in section 93130.5 of the 2020 At Berth Regulation.

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Vessel visits that coincide with testing identified in the approved Test Plan may count as a compliant visit under either the a) 2017 Advisory Scenario 5 for visits on or before December 31, 2022, or b) the research exceptions in section 93130.8 (d) or 93130.10 (e) of the Regulation for visits on or after January 1, 2023. Advisory Scenario 5 and the research exceptions only apply for testing identified in the approved Test Plan (dated February 28, 2023) and conducted after April 20, 2022, when the now superseded Test Plan (dated January 3, 2022) was approved. All testing must adhere to the system description, design, and operational procedures outlined in the approved Test Plan (dated February 28, 2023).

If you have any questions, please contact Angela Csondes, Manager, Marine Strategies Section, at [angela.csondes@arb.ca.gov](mailto:angela.csondes@arb.ca.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Heather Arias".

Heather Arias, Chief, Transportation and Toxics Division

Enclosure: STAX CARB Test Plan.container.012 with appendices.PDF

cc: Angela Csondes, Section Manager, Marine Strategies Section