



**THE PORT
OF LOS ANGELES**

Executive Director's
Report to the
Board of Harbor Commissioners

DATE: JULY 27, 2021

FROM: ENVIRONMENTAL MANAGEMENT

SUBJECT: RESOLUTION NO. _____ - APPROVAL OF A MEMORANDUM OF UNDERSTANDING AMONG THE CITY OF LOS ANGELES HARBOR DEPARTMENT, THE PORT OF LONG BEACH AND THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT FOR FUNDING A TECHNOLOGY ADVANCEMENT PROGRAM DEMONSTRATION PROJECT FOR AN AT-BERTH EMISSIONS CONTROL TECHNOLOGY FOR TANKER VESSELS

SUMMARY:

Staff requests approval of a proposed Memorandum of Understanding (MOU) among the City of Los Angeles Harbor Department (Harbor Department), the Port of Long Beach (POLB) and the South Coast Air Quality Management District (SCAQMD) to fund a Clean Air Action Plan (CAAP) Technology Advancement Program (TAP) project to design, develop, and demonstrate an at-berth emissions capture and control system for tanker vessels calling at the ports of Los Angeles and Long Beach (Ports). SCAQMD has received a preliminary grant award from the California Air Resources Board (CARB) for \$9,500,000 to support this project. STAX Engineering Inc. (STAX) will conduct a safety assessment, design, and build the barge-based system, and perform the demonstration at POLB on a minimum of five different vessel classes. The total project cost is \$12,849,000. The total requested TAP funding amount is \$666,667 to be split equally between the Harbor Department and POLB. The SCAQMD is the project manager and administrator of the project. The Harbor Department is financially responsible for \$333,334 under this proposed MOU.

RECOMMENDATION:

It is recommended that the Board of Harbor Commissioners (Board):

1. Find that the Director of Environmental Management has determined that the proposed action has been previously evaluated pursuant to the requirements of the California Environmental Quality Act (CEQA) under Article II Section 2(i) of the Los Angeles City CEQA Guidelines;
2. Approve the Memorandum of Understanding among the City of Los Angeles Harbor Department, the Port of Long Beach and the South Coast Air Quality Management District in the amount of \$333,334 and for a term of up to three years;

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3. Authorize the Executive Director to execute and the Board Secretary to attest to said Memorandum of Understanding for and on behalf of the Board; and
4. Adopt Resolution No. _____.

DISCUSSION:

Project Background/Context – On November 20, 2006, during a joint meeting between the Los Angeles and Long Beach Boards of Harbor Commissioners, the 2006 San Pedro Bay Ports CAAP was adopted. A significant initiative of the CAAP is the TAP, which is the catalyst for identifying, evaluating, and demonstrating new and emerging emissions reduction technologies applicable to the port industry that could be utilized in future updates to the CAAP as new control measures, alternatives to existing measures, or as additional mitigation options for new projects.

On September 2, 2020, CARB released a grant solicitation offering up to \$10,000,000 to design and demonstrate a Capture and Control System for oil tankers. The solicitation, funded under the California Climate Investments Program, was designed to support future compliance with CARB's Ocean-Going Vessels At-Berth Emissions Regulation (At-Berth Regulation). The updated At-Berth Regulation will require all tanker vessels calling at the Ports to control their emissions while at berth by 2025, and at other California ports by 2027. CARB required that the proposed demonstration test the systems efficacy on at least five different vessel classes. The overall goal is to achieve CARB certification as an approved alternative method for tanker vessels to utilize in order to comply with CARB's At-Berth Regulation.

Proposed Project – SCAQMD submitted a proposal to CARB's solicitation on behalf of STAX, with a commitment from POLB's Tesoro Marine Oil Terminal (Tesoro) to perform the demonstration at their facility. The Harbor Department and POLB submitted a joint letter of support for the project. The letter of support committed the Harbor Department and POLB to consider contribution of an additional cost-share through the standard TAP review process if CARB selected the SCAQMD project for funding.

This project was preliminarily selected by CARB in December 2020, and subsequently presented to the TAP by SCAQMD requesting additional funding support for the project from the Harbor Department and POLB. SCAQMD will manage and administer the project. STAX has developed the STAXBox™ purification system that is the primary component of the control system to be demonstrated. The demonstration will occur at POLB's Tesoro terminal. The primary goal of the project will be to demonstrate the feasibility of barge-based capture and control systems on tanker vessels. This technology has been successfully demonstrated in a laboratory setting to reduce NOx emissions from

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two-stroke engines and will be a crucial alternative pathway to standard shore-power plug-in systems to comply with CARB's updated At-Berth Regulation.

The CAAP TAP Advisory Committee comprised of representatives from the U.S. Environmental Protection Agency, CARB, SCAQMD, and the California Energy Commission, along with the Harbor Department and POLB, meets regularly and has reviewed and recommended this project for funding.

A detailed project scope with deliverables is attached to the proposed MOU (Transmittal 1). The development of the system is anticipated to be completed by June 2022. The testing will cover a six-month period, concluding in December 2022. The total project cost is expected to be \$12,849,000. The total requested TAP funding amount is \$666,667 to be split approximately equally by the Harbor Department and POLB, of which \$333,334 will be paid by the Harbor Department.

ENVIRONMENTAL ASSESSMENT:

The proposed action is approval of an Agreement among the Harbor Department, POLB, and SCAQMD to fund a CAAP TAP project to design, develop, and demonstrate an at-berth emissions capture and control system for tanker vessels, which is an activity where the underlying project has been previously assessed by SCAQMD in an exemption dated November 6, 2020. Therefore, the Director of Environmental Management has determined that the proposed action has been previously evaluated pursuant to the requirements of CEQA in accordance with Article II Section 2(i) of the Los Angeles City CEQA Guidelines.

FINANCIAL IMPACT:

Approval of this Board item supports the demonstration of an emissions reduction project for tanker vessels, with funding from the TAP fund. The table below summarizes the total project cost and funding commitments by all participants:

Funding Source	Amount
CARB	\$ 9,500,000
SCAQMD	\$ 333,354
Port of Long Beach	\$ 333,333
Harbor Department	\$ 333,334
STAX (in-kind and cash)	\$ 2,348,979
TOTAL	\$ 12,849,000

Harbor Department funds will be expended in Fiscal Year 22/23. Funds will be requested through the budgeting process. If any subsequent fiscal year funds are not appropriated

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by the Board for the work required by the Agreements, the Agreements shall be terminated. However, such termination shall not relieve the parties of liability for any obligations previously incurred.

As this is a demonstration project, there are no ongoing operating and maintenance costs subsequent to project completion.

CITY ATTORNEY:

The Office of the City Attorney has reviewed and approved the proposed MOU as to form and legality.

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TRANSMITTAL:

1. Memorandum of Understanding with the Port of Long Beach and South Coast Air Quality Management District

FIS Approval: MB
CA Approval: SO



CHRISTOPHER CANNON
Director of Environmental Management

Michael DiBernardo
MICHAEL DiBERNARDO
Deputy Executive Director

APPROVED:

Marla Bleavins For

EUGENE D. SEROKA
Executive Director

CC/YO
AUTHOR: J. Goldberg

FILED: Y:_ADMIN_BOARD REPORTS_AIR QUALITYTAPIAQMD - STAX\Environmental_SCAQMD POLB STAX_Board Report - AGENDA SETTING.docx
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