



**THE PORT
OF LOS ANGELES**
Executive Director's
Report to the
Board of Harbor Commissioners

DATE: OCTOBER 11, 2017

FROM: ENVIRONMENTAL MANAGEMENT

SUBJECT: RESOLUTION NO. _____ - TECHNOLOGY ADVANCEMENT PROGRAM MEMORANDUM OF AGREEMENT WITH SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT FOR THE DEVELOPMENT OF ULTRA-LOW EMISSION DIESEL ENGINE TECHNOLOGY FOR ON-ROAD TRUCKS

SUMMARY:

Staff requests that the Board of Harbor Commissioners (Board) approve and enter into a Memorandum of Agreement (MOA) with the South Coast Air Quality Management District (AQMD) for a Technology Advancement Program (TAP) grant in the amount of \$287,500. The Clean Air Action Plan (CAAP) TAP Advisory Committee (AC) has reviewed and recommends funding for the project to develop and validate a near-zero-emission diesel engine for on-road heavy-duty trucks (Project). The objective of the Project is to advance engine and after-treatment technologies in heavy-duty diesel engines to achieve oxides of nitrogen (NOx) levels that are at least 90% lower than 2010 heavy-duty NOx emission standards. This TAP Project will be managed by the AQMD in coordination with the Southwest Research Institute (SwRI) and the California Air Resources Board (CARB). It is part of a larger engine development program currently underway by CARB. The total Project cost is estimated to be \$1,325,000 of which CARB will pay \$750,000, and AQMD will pay \$287,500. The total requested TAP funding amount is \$287,500, which will be paid by the City of Los Angeles Harbor Department (Harbor Department).

RECOMMENDATION:

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

1. Find that the proposed action is administratively and categorically exempt from the requirements of the California Environmental Quality Act (CEQA) under Article II Section 2(f) and Article III Class 6 of the Los Angeles City CEQA Guidelines as determined by the Director of Environmental Management;

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2. Approve the Memorandum of Agreement with the South Coast Air Quality Management District for the total not-to-exceed amount of \$287,500 for a term of three years;
3. Authorize the Executive Director to execute and the Board Secretary to attest to the Memorandum of Agreement, for and on behalf of the Board;
4. Adopt Resolution No. _____.

DISCUSSION:

Project Background/Context - On November 20, 2006, during a joint meeting between the Ports of Los Angeles and Long Beach (Ports) 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. The CAAP TAP Advisory Committee comprised of representatives from the United States Environmental Protection Agency (EPA), CARB, AQMD, and the California Energy Commission, along with both Ports, meets regularly to review and recommend projects for funding.

The TAP AC received and evaluated the Project proposal, assessed the technological merit of the proposed project, and has recommended it for TAP funding. The Project supports the Harbor Department's goals and efforts to advance near-zero and zero-emission technologies in order to reduce air pollution from freight operations occurring in and around the Port of Los Angeles. The Port of Long Beach has elected not to participate in this project.

Purpose - The Ports of Los Angeles and Long Beach are in the process of updating the CAAP. The goal of the CAAP's Clean Truck Program (CTP) will be to assist in transitioning the current drayage truck fleet, made up of 2007 and 2010 EPA-compliant diesel trucks, to a cleaner near-zero and finally zero-emissions drayage trucking fleet by 2035. A truck with a low-NOx engine, also known as near-zero-emission truck, is expected to be 90% cleaner than a 2010 EPA-compliant diesel truck. The first near-zero emission heavy duty trucks are anticipated to be available in 2018. These initial trucks will be fueled by natural gas. The proposed TAP Project supports the effort to produce diesel-fueled near-zero engines in the future, so that trucking companies will have a variety of options to purchase over time.

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Project Background and Description - CARB is funding a multi-stage research program to demonstrate the technical feasibility of achieving ultra-low NOx emission reductions from various heavy-duty engines. CARB has contracted with SwRI to conduct the research and development necessary for the program. Phase One and Phase Two are now complete. CARB and AQMD will fund Phase Three of the program, which will focus on 15-liter or larger diesel engines and after-treatment technologies with an objective of advancing the use of technologies that will achieve 90 percent reduction in NOx emissions over multiple cycles, including the use of vocational specific test cycles that will provide insights for the engine's "real-life" emission reduction potential. The proposed TAP Project MOA, requested by AQMD, will partially fund Stage 3 (Transmittal 1).

Specifically, SwRI will: (1) identify specific diesel engines, test cycles and after-treatment technologies and calibrate to optimize emissions performance over various cycles (2) integrate and test after-treatment system configurations, (3) select after-treatment system configurations based on performance and possible engine control strategies, and (4) document results.

The expected outcome of this proposed Project is the advancement of engine and after-treatment technologies in heavy-duty diesel engines to achieve NOx levels that are at least 90 percent lower than 2010 heavy-duty NOx emission standards.

Memorandum of Agreement: Under the MOA, AQMD is the grant administrator and will separately enter into a bilateral grant agreement with SwRI that grants the project cost to SwRI who will perform the project deliverables outlined in the MOA. AQMD will provide the Harbor Department with a copy of this grant agreement and copies of all reports received by AQMD from SwRI under the grant agreement. The Harbor Department shall also be notified and may also participated in all project meetings or presentations regarding this project.

The term of the MOA is three years with two equal disbursements of \$143,750 scheduled to occur 12 months apart. AQMD has requested payments to be made within 60 days of receipt of an invoice from AQMD. The first payment may be disbursed upon execution of this MOA with AQMD and execution of AQMD's grant agreement with SwRI. The second payment will be disbursed at least 12 months later when AQMD submits deliverables demonstrating that SwRI has made project progress in accordance with their grant agreement.

The grant agreement is required to include an indemnity provision in which SwRI agrees to indemnify, hold harmless and defend the Harbor Department from any and all loss, liability, cost, or expense, including reasonable attorney's fees, incurred by the Harbor Department arising from the Project.

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ENVIRONMENTAL ASSESSMENT:

The proposed action is approval of a MOA with the AQMD to fund a demonstration project to develop and validate a near-zero-emission diesel engine for on-road heavy-duty trucks, which is an administrative activity involving data collection, field testing and research which does not result in a serious or major disturbance to an environmental resource. As such, the Director of Environmental Management has determined that the proposed action is administratively and categorically exempt from the requirements of CEQA in accordance with Article II Section 2(f) and Article III Class 6(2) of the Los Angeles City CEQA Guidelines.

FINANCIAL IMPACT:

The total cost of the proposed Project is \$1,325,000 funded as follows:

California Air Resources Board:	\$750,000
Air Quality Management District:	\$287,500
City of Los Angeles, Harbor Department:	\$287,500

Although the Port of Long Beach typically shares the cost of TAP projects, the TAP portion of this Project is only being funded by the Harbor Department.

Funds for this Project will be expended as follows:

Fiscal Year 17/18:	\$143,750
Fiscal Year 18/19:	\$143,750

Funds in Fiscal Year 2017/18 are available in Account 59965 (Incentives), Center 0330 (Environmental Management Division), Program 000 (Base Budget). Funds in future fiscal years will be requested through the annual budget process.

If any subsequent fiscal year funds are not appropriated by the Board for the work required by the Memorandum of Agreement, the Memorandum of Agreement may be terminated. However, such termination shall not relieve the parties of liability for any obligations previously incurred.

As this is a demonstration project, there is not expected to be any ongoing operating and maintenance costs subsequent to project completion.

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CITY ATTORNEY:


The Office of the City Attorney has reviewed and approved the Grant Agreement as to form and legality.

TRANSMITTALS:

1. Memorandum of Agreement with AQMD

FIS Approval: MB (initials)
CA Approval: gm (initials)


CHRISTOPHER CANNON
Director of Environmental Management


MICHAEL DiBERNARDO
Deputy Executive Director

APPROVED:

 FOR

EUGENE D. SEROKA
Executive Director

CC:yo
AUTHOR: T. PISANO
APP No.: 170104-500

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