

BOARD MEETING DATE: June 6, 2025

AGENDA NO. 6

PROPOSAL: Recognize Revenue and Appropriate Funds for U.S. EPA Pass Through Grant to Develop Reference Method for Validating Open-Path Remote Sensing Systems

SYNOPSIS: In September 2022, the Board recognized revenue from University of California, Los Angeles (UCLA) for the implementation of U.S. EPA competitive Science to Achieve Results (STAR) research grant. South Coast AQMD staff are co-investigators for this grant to develop a reference method for validating the performance of open-path remote sensing systems for air toxic measurements. In February 2025, U.S. EPA granted a no-cost extension for this grant. The May 2025 Administrative Committee separately approved revenue recognition from Virginia Polytechnic Institute and State University for a separate STAR grant award, but U.S. EPA is no longer providing funds for that project. This action is to recognize revenue up to \$183,432 from UCLA through the STAR research grant into the General Fund, and appropriate up to \$29,963 in the Monitoring and Analysis FY 2025-26 and/or FY 2026-27 Budgets to support efforts on this project.

COMMITTEE: Administrative, May 9, 2025; Recommended for Approval

RECOMMENDED ACTION:

Recognize revenue up to \$183,432 from University of California, Los Angeles (UCLA) through the STAR research grant to the General Fund, upon receipt, and appropriate up to \$29,963 from the General Fund Undesignated (Unassigned) Fund Balance (\$153,469 for Salaries and Employee Benefits is already included in the budget) in the MAD FY 2025-26 and/or FY 2026-27 Budget (Org 43), Services and Supplies Major Object, as shown in Table 1.

Wayne Nastri
Executive Officer

Background

On March 25, 2021, U.S. EPA, as part of its Science to Achieve Results (STAR) program, solicited applications from research institutions, governmental agencies, and other organizations throughout the nation proposing research to advance “Measurement and Monitoring Methods for Air Toxics and Contaminants of Emerging Concern in the Atmosphere.” South Coast AQMD partnered with Virginia Polytechnic Institute and State University (Virginia Tech) and UCLA to submit two separate grant proposals, one to develop a low-cost sensing device for time resolved measurements of VOCs and another to develop a reference method for validating measurements of hazardous air pollutants (HAPs) from open-path optical remote sensing (OP-ORS) systems. Both proposals were initially selected for funding and, as co-principal investigator, South Coast AQMD staff was anticipated to have a major role in the implementation of both projects. However, on May 12, 2025, Virginia Tech received notice of contract termination from U.S. EPA and are in the process of appealing this decision. If successful, staff will seek board approval to continue this collaborative project with Virginia Tech. The project with UCLA, which will contribute to developing new tools that can be used for improving HAPs measurements from stationary sources such as refineries, is still moving forward and is the subject of this agenda item.

Under the award titled, “Development of a Reference Method for Open-Path Remote Sensing of Air Toxics,” South Coast AQMD staff is collaborating with UCLA on the testing and validation of a reference OP-ORS instrument. South Coast AQMD staff will design and build a trace gas release system and in collaboration with UCLA, perform a validation of the reference OP-ORS instrument. South Coast AQMD staff will also contribute to the development of an OP-ORS validation protocol and a guidance document for best practices for the operation, QA/QC, and validation of OP-ORS systems. Due to longer than anticipated lead-times for key instrument components and revisions to OP-ORS validation approach based on the U.S. EPA staff suggestions, the completion of the project was delayed. In February 2025, a two year no-cost extension was granted by U.S. EPA to utilize the remaining grant funding to complete all remaining goals and objectives of this project by April 30, 2027.

Proposal

This action is to recognize revenue up to \$183,432 from UCLA though the STAR research grant into the General Fund, and appropriate up to \$29,963 from the General Fund Undesignated (Unassigned) Fund Balance in the MAD FY 2025-26 and/or FY 2026-27 Budgets (Org 43), Services and Supplies Major Object, as shown in Table 1. As part of this project, staff will continue collaborating with UCLA on development of reference ORS system and its testing, and development of the procedure for validation of open-path ORS measurements.

Benefits to South Coast AQMD

The successful implementation of this project will provide South Coast AQMD with additional tools that will enhance the ability to detect HAPs for fenceline, and other important monitoring applications.

Resource Impacts

Sufficient funding exists from the U.S. EPA award to UCLA to meet the objectives of the project. There is no cost-share by South Coast AQMD or the project partners for the project.

Attachment

Table 1: Proposed Expenditures for U.S. EPA STAR Grant (UCLA subcontract) for FY 2025-26 and/or FY 2026-27

Table 1
Proposed Expenditures for U.S. EPA STAR Grant (UCLA subcontract)
for FY 2025-26 and/or FY 2026-27

Description	Account Number	Estimated Total Cost
Small Tools, Instruments, Equipment*	68300/77000	\$15,852
Communications	67900	\$3,120
Miscellaneous Expense (meeting supplies and publications)	69700	\$10,991
Total Appropriations Services & Supplies and/or Capital Outlays Major Object		\$29,963
Salaries and Benefits		\$153,469
Total Grant Award for South Coast AQMD		\$183,432

*Expenditures may be appropriated to Services and Supplies or Capital Outlays Major Object, as warranted.