

BOARD MEETING DATE: September 4, 2026

AGENDA NO. 4

PROPOSAL: Execute Contract to Deploy Class 8 Hydrogen Fuel Cell Drayage Trucks

SYNOPSIS: In June 2023, the Board recognized a \$5 million U.S. EPA FY22 Targeted Airshed Grant award and approved \$800,000 as the cost share from the Clean Fuels Program Fund (31) to partner with Daimler Truck North America, LLC (DTNA) to deploy and demonstrate six Class 8 hydrogen fuel cell trucks. DTNA has since withdrawn from the project. Subsequently, South Coast AQMD staff received a proposal from Symbio North America (Symbio) to develop and deploy fifteen hydrogen fuel cell drayage trucks with Savage Services Corporation (Savage). Under the proposed project, Symbio will develop the trucks, and Savage will operate them as part of its refinery transport operations in the San Pedro Ports area. Contingent upon U.S. EPA's final award approval, staff recommends the following actions: 1) transfer up to \$400,000 from the Clean Fuels Program Fund (31) to the Advanced Technology, Outreach and Education Fund (17) to increase the cost-share for the additional trucks; and 2) execute a contract with Symbio for \$6,000,000 from the Advanced Technology, Outreach and Education Fund (17) for the deployment of fifteen hydrogen fuel cell drayage trucks.

COMMITTEE: Technology; August 21, 2026; Recommended for Approval

RECOMMENDED ACTIONS:

Contingent upon U.S. EPA's final award approval:

1. Transfer up to \$400,000 from the Clean Fuels Program Fund (31) to the Advanced Technology, Outreach and Education Fund (17) as additional cost-share for the heavy-duty fuel cell truck deployment project; and
2. Authorize the Executive Officer to execute a contract with Symbio North America for \$6,000,000, consisting of \$4,800,000 of EPA TAG funds and \$1,200,000 of Clean Fuels Fund from the Advanced Technology, Outreach and Education Fund (17) for the deployment of fifteen hydrogen fuel cell drayage trucks.

Wayne Nastri
Executive Officer

Background

In 2022, the U.S. EPA awarded South Coast AQMD \$5 million under the Targeted Airshed Grant Program to demonstrate heavy-duty hydrogen fuel cell electric trucks in the South Coast Air Basin. The original proposed project was to deploy six Class 8 trucks through a partnership with Daimler Trucks North America, Cummins, and Penske Truck Leasing. However, after the award was made, the original project was withdrawn. South Coast AQMD subsequently worked with U.S. EPA to develop a revised work plan that maintains the program objectives while replacing the original project partners and vehicle platform with a commercially viable alternative.

Symbio North America (Symbio) has developed a lightweight hydrogen fuel cell electric powertrain by repowering Mack Anthem 4×2 Class 8 truck chassis for Savage Services Corporation (Savage) drayage applications. The truck uses a dual 150-kW Symbio fuel cell stack, an approximately 160-kWh battery, and onboard hydrogen storage to provide an estimated 300-mile operating range while maintaining a curb weight of less than 17,000 pounds, substantially lighter than other fuel cell and battery electric trucks. The reduced vehicle weight enables payload capacity comparable to conventional diesel trucks while providing zero tailpipe emissions and fast hydrogen refueling, meeting Savage's high vehicle utilization needs for its demanding goods movement operations at the ports.

Proposal

Symbio proposes to develop and deploy 15 Class 8 hydrogen fuel cell electric trucks through a partnership with Savage. Under the proposed project, Savage will purchase Mack Anthem Class 8 chassis, which Symbio will repower with hydrogen fuel cell electric powertrains. The project will leverage \$4.8 million from U.S. EPA funding to expand deployment of commercially viable hydrogen fuel cell technology, collect operational and performance data, support workforce training, and accelerate commercialization of zero-emission heavy-duty trucks.

Savage will operate the repowered hydrogen fuel cell trucks on a 24-hour, seven-day-per-week schedule, transporting petroleum coke between Southern California refineries and the Ports of Los Angeles and Long Beach. The project will demonstrate the performance, reliability, and commercial viability of hydrogen fuel cell technology under real-world, high-demand freight operations while generating operational data to support broader market adoption of zero-emission heavy-duty trucks.

Sole Source Justification

Section VIII.B.3 of the Procurement Policy and Procedure identifies four major provisions under which contracts funded as a whole or in part with federal funds may be made as a sole source award. The request for sole source award for the Symbio contract is made under provision B.3.c, which states that awarding a contract is infeasible under small purchase procedures, sealed bids or competitive proposals and that the awarding federal agency or pass-through entity expressly authorizes non-competitive proposals in response to a written request from the non-Federal entity. The nature of these projects makes them infeasible under small purchase procedures, sealed bids or competitive

proposals. The project is specifically designed for Class 8 hydrogen fuel cell trucks, for which commercially available providers are very limited, and following extensive outreach, staff identified Symbio as the most viable provider. Hyundai, the only other commercially available Class 8 fuel cell truck OEM identified, is already participating in a separate U.S. EPA project with South Coast AQMD. U.S. EPA has expressly authorized sole-source award to this entity.

Benefits to South Coast AQMD

The South Coast Air Basin is classified as an “extreme” nonattainment area for ozone and is in nonattainment for PM2.5 under the Federal Clean Air Act. Class 8 fuel cell truck deployment is in the Technology Advancement Office Clean Fuel Program 2026 Plan Update under the category of “Hydrogen/Mobile Fuel Cell Technologies.” Successful demonstration of this project helps reduce ozone and PM2.5 air pollution, as well as diesel particulate matter, a known carcinogen, while reducing emissions in overburdened communities and along major freight corridors. The fifteen fuel cell trucks will reduce up to 3.1 tons of NOx per year and 0.01 tons of PM2.5 per year, respectively.

Resource Impacts

The contract with Symbio will not exceed \$6 million from the Advanced Technology, Outreach and Education Fund (17), which consists of \$4.8 million of U.S. EPA funds and \$1.2 million of South Coast AQMD cost-share. Up to \$200,000 was also allocated through the EPA grant for administrative costs necessary to implement the project. Sufficient funds are available in Clean Fuels Program Fund (31) for our cost share which will be transferred into the Advanced Technology, Outreach and Education Fund (17). The total project cost is \$12.75 million, with funding sources as shown below:

Funding Source	Funding Amount	Percent
U.S. EPA FY22 Targeted Airshed Grant	\$5,000,000*	39
Savage (cost-share)	\$6,182,500	49
Symbio (cost-share)	\$367,500	3
South Coast AQMD (cost-share)	\$1,200,000	9
Total	\$12,750,000	100

*Pending EPA Final Approval

Sufficient funds are available from the Clean Fuels Program Fund (31), established as a special revenue fund resulting from the state-mandated Clean Fuels Program. The Clean Fuels Program, under Health and Safety Code Sections 40448.5 and 40512 and Vehicle Code Section 9250.11, establishes mechanisms to collect revenues from mobile sources to support projects to increase the utilization of clean fuels, including the development of the necessary advanced enabling technologies. Funds collected from motor vehicles are restricted, by statute, to be used for projects and program activities related to mobile sources that support the objectives of the Clean Fuels Program.