

BOARD MEETING DATE: September 4, 2026

AGENDA NO. 29

REPORT: Technology Committee

SYNOPSIS: The Technology Committee held a hybrid meeting on Friday, August 21, 2026. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Carlos Rodriguez,
Committee Chair
Technology Committee

AK:kr

Call to Order

Committee Chair Carlos Rodriguez called the meeting to order at 12:00 p.m.

Roll Call

Committee Members

Present: Carlos Rodriguez, Committee Chair
Vice Chair Larry McCallon
Supervisor Janet Nguyen
Board Member Veronica Padilla-Campos

Absent: Supervisor Curt Hagman
Mayor Patricia Lock Dawson

For additional details of the Technology Committee Meeting, please refer to the [Webcast](#).

ACTION ITEMS:

1. Issue Program Announcement for Zero-Emission Trucks and Zero-Emission Infrastructure for Year 2026 Warehouse Actions and Investments to Reduce Emissions Mitigation Program

Ian MacMillan, Assistant Deputy Executive Officer, presented on the Warehouse Actions and Investments to Reduce Emissions (WAIRE) Mitigation Program which was established with the adoption of Rule 2305 – Warehouse Indirect Source Rule. One of the compliance options available to warehouse operators under Rule 2305 is to pay mitigation fees. This first year of the WAIRE Mitigation Program is designed to use these fees to incentivize zero-emission Class 4 to 8 trucks, yard trucks, and electric charging or hydrogen fueling infrastructure projects that reduce emissions from warehousing activities. Up to \$73,135,300 in funding will be directed to the areas near warehouses that paid the mitigation fee, which must be spent within the same Source Receptor Area where the fees were collected. These actions are to: 1) issue a Program Announcement to solicit projects under the WAIRE Mitigation Program that reduce emissions from warehousing activities and; 2) reimburse the General Fund up to \$4,570,956 from the Rule 2305 Mitigation Fee Alternate Compliance Special Revenue Fund (86) for administrative costs incurred in implementing the program. For additional details, please refer to the [Webcast](#) beginning at 3:05.

Whitney Amaya, public member, expressed support for the program and appreciation that funding is directed toward communities most impacted by warehousing activities. For additional details, please refer to the [Webcast](#) beginning at 11:06.

Ranji George, public member, expressed concern that the program does not establish a minimum funding allocation for hydrogen projects. For additional details, please refer to the [Webcast](#) beginning at 12:03.

Vice Chair McCallon asked whether the approximately \$73 million available in the first year is expected to decrease in future years. Mr. MacMillan responded that funding may fluctuate and is expected to decline over time as more zero-emission vehicles are deployed and mitigation fee revenues decrease. For additional details, please refer to the [Webcast](#) beginning at 13:35.

Committee Chair Rodriguez asked about potentially including Class 2b and 3 vehicles in future program years. Mr. MacMillan noted that staff would need to ensure funded vehicles are used for warehouse-related activities. Chair Rodriguez recommended that staff monitor the first year and return with recommendations for future inclusion. For additional details, please refer to the [Webcast](#) beginning at 15:10.

Committee Chair Rodriguez asked when the program is expected to launch. Dr. Aaron Katzenstein, Deputy Executive Officer, Technology Advancement Office,

responded that, pending Governing Board approval, the program is expected to open for solicitations in October. For additional details, please refer to the [Webcast](#) beginning at 18:51.

Moved by McCallon; seconded by Padilla-Campos; unanimously approved.

Ayes: McCallon, Nguyen, Padilla-Campos, Rodriguez

Noes: None

Abstain: None

Absent: Hagman, Lock Dawson

2. Issue Program Announcement and Execute Contracts for Proposition 1B – Goods Movement Emission Reduction Program

Krystle Martinez, Program Supervisor, presented that in 2008, \$1 billion in bond funding was authorized under the Proposition 1B – Goods Movement Emission Reduction Program (Prop 1B). The majority of funding under Prop 1B has been allocated; however, funds remain from withdrawn Prop 1B projects. A Program Announcement (PA) is needed to award remaining Prop 1B funds towards locomotive, cargo handling equipment, transport refrigeration unit, and ships at-berth projects. These actions are to: 1) issue and, if necessary, reissue, a PA for locomotive, cargo handling equipment, transport refrigeration unit, and ships at-berth projects under Prop 1B; and 2) authorize the Executive Officer to execute contracts for eligible projects resulting from the PA until all funds are exhausted from the Prop 1B Fund (81) and funds from At-Berth Regulation Remediation Special Revenue Fund (88). For additional details, please refer to the [Webcast](#) beginning at 19:35.

Ranji George, public member, commented that South Coast AQMD should set aside at least 30% for hydrogen projects. For additional details, please refer to the [Webcast](#) beginning at 22:00.

Whitney Amaya, public member, commented that she is encouraged to hear that there is more funding going towards zero emission electric equipment. For additional details, please refer to the [Webcast](#) beginning at 22:55.

Kevin Fairweather, public member, commented regarding amount of time taken for grantee payout and contract closures, stating that the delays create negative impact on relationships with investees. For additional details, please refer to the [Webcast](#) beginning at 23:56.

Christian Tapia, public member, comment in support of funding particularly for shore power. For additional details, please refer to the [Webcast](#) beginning at 25:15.

Alex M., public member, commented in support of funding particularly for shore power. For additional details, please refer to the [Webcast](#) beginning at 26:15.

Moved by McCallon; seconded by Padilla Campos; unanimously approved.

Ayes: McCallon, Nguyen, Padilla-Campos, Rodriguez
Noes: None
Abstain: None
Absent: Hagman, Lock Dawson

Due to concerns that the Committee would lose a quorum, Committee Chair Rodriguez recommended to waive presentations on the Action Items 3, 4, 5 and 6.

3. Recognize Revenue, Execute Contracts for Battery Electric Class 8 Trucks and Charging Infrastructure to Implement INVEST CLEAN and Transfer Funds for ELECTRIC

In September 2024, the Board recognized an award of \$499,997,415 from the U.S. EPA CPRG program titled INVEST CLEAN. Additionally, in January 2025, the Board recognized an award of \$33,898,522 from the U.S. EPA Clean Heavy-Duty Vehicles Grant program titled ELECTRIC. For INVEST CLEAN, the Ports of Los Angeles and Long Beach committed to contributing \$10,000,000 in Clean Truck Fund Rate dollars collected by the ports to support the implementation of a Battery Electric Freight Vehicle Deployment Incentive Program and a Charging Infrastructure Deployment Incentive Program. For ELECTRIC, South Coast AQMD proposed providing a cost share of up to \$3,096,720. These actions are to: 1) execute MOUs with the Cities of Los Angeles and Long Beach acting by and through their respective Boards of Harbor Commissioners to implement INVEST CLEAN; 2) recognize revenue up to \$10,000,000 into the U.S. EPA CPRG Special Revenue Fund (90), upon receipt from the Ports of Los Angeles and Long Beach; 3) execute contracts under INVEST CLEAN in an amount not to exceed \$54,246,495 from the U.S. EPA CPRG Special Revenue Fund (90) with a backup project list in the event of project fall through; and 4) transfer up to \$3,096,720 from Clean Fuels Program Fund (31) to Advanced Technology, Outreach and Education Fund (17) for South Coast AQMD cost-share to implement ELECTRIC.

Moved by Nguyen; seconded by McCallon; unanimously approved.

Ayes: McCallon, Nguyen, Padilla-Campos, Rodriguez
Noes: None
Abstain: None
Absent: Hagman, Lock Dawson

4. Execute Contract to Deploy Class 8 Hydrogen Fuel Cell Drayage Trucks

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 (Daimler Truck) to deploy and demonstrate six Class 8 hydrogen fuel cell trucks. Daimler Truck 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.

Ranji George, public member, commented that staff should further engage with additional OEMs beyond those currently proposed. For additional details, please refer to the [Webcast](#) beginning at 30:05

Vice Chair McCallon inquired about the reason for Daimler's withdrawal. Staff responded that the originally proposed Daimler-Cummins partnership did not move forward, resulting in Daimler's withdrawal from the project. For additional details, please refer to the [Webcast](#) beginning at 31:05.

Moved by Nguyen; seconded by McCallon; unanimously approved.

Ayes: McCallon, Nguyen, Padilla-Campos, Rodriguez
Noes: None
Abstain: None
Absent: Hagman, Lock Dawson

5. Execute Contract to Study Durable Fuel Cell Membrane Electrode Assemblies for Heavy-Duty Vehicles

The University of California, Irvine (UCI) proposes to develop, integrate, and validate an advanced fuel cell membrane to improve the durability, efficiency, and operational life of fuel cell stacks for heavy-duty truck applications. Fuel cell membranes are critical components that enable the electrochemical conversion of hydrogen to electricity, and improvements in membrane materials can reduce fuel cell costs as well as increase performance. This action is to execute a contract with UCI to develop and study durable fuel cell membrane electrode assemblies for heavy-duty vehicles in an amount not to exceed \$125,000 from the Clean Fuels Program Fund (31).

Vice Chair McCallon asked about the membrane electrode. Dr. Maryam Hajbabaei, Program Supervisor, explained that the Membrane Electrode Assembly (MEA) is the core component of a fuel cell stack. She noted this study will develop and test a more durable MEA suitable for heavy-duty vehicle applications to help make this technology commercially competitive. For additional details, please refer to the [Webcast](#) beginning at 32:45.

Moved by McCallon; seconded by Nguyen; unanimously approved.

Ayes: McCallon, Nguyen, Padilla-Campos, Rodriguez
Noes: None
Abstain: None
Absent: Hagman, Lock Dawson

6. Approve Additional Funds for Residential Electric Lawn and Garden Equipment Rebate Program

The Residential Electric Lawn and Garden Equipment Rebate Program provides rebates to residents for the purchase of new battery-electric lawn and garden equipment. Since 2017, the program has helped residents replace gasoline-powered equipment with zero-emission alternatives, resulting in emission reductions throughout the South Coast AQMD jurisdiction. In September 2024, the Board approved the addition of \$500,000 and the expansion of the program to include additional equipment categories, including battery-electric leaf blowers, trimmers, chainsaws, and edgers. Continued interest and participation in the program have increased demand for available rebate funding, and program funds are nearly exhausted. Staff recommends allocating up to \$500,000 from the Rule 2202 Air Quality Investment Fund (27) to continue the Residential Electric Lawn and Garden Equipment Rebate Program.

Moved by McCallon; seconded by Nguyen; unanimously approved.

Ayes: McCallon, Nguyen, Padilla-Campos, Rodriguez
Noes: None
Abstain: None
Absent: Hagman, Lock Dawson

OTHER MATTERS:

7. Other Business

No other business.

8. Public Comment Period

Ranji George, public member, expressed his concerns for battery disposal. For additional details, please refer to the [Webcast](#) beginning at 36:05.

9. Next Meeting Date

The next regular Technology Committee meeting is scheduled for Friday, September 18, 2026, at 12:00 p.m.

Adjournment

The meeting adjourned at 12:36 p.m.

Attachment

Attendance Record

ATTACHMENT

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT TECHNOLOGY COMMITTEE MEETING

Attendance Record – August 21, 2026

Councilmember Larry McCallon South Coast AQMD Board Member
Supervisor Janet Nguyen South Coast AQMD Board Member
Board Member Veronica Padilla-Campos South Coast AQMD Board Member
Mayor Carlos Rodriguez South Coast AQMD Board Member

Tom Gross Board Consultant (Dawson)

Whitney Amaya Public Member
Spencer Bienstock Public Member
Capucine Dumont Public Member
Ranji George Public Member
Alex M Public Member
Phoebe Mullen Public Member
Jessica Mendoza Public Member
Marven Norman Public Member
Jesse Shroyer Public Member
Catherin Smith Public Member
Christian Tapia Public Member
Vanessa Rivas Villanueva Public Member

Debra Ashby South Coast AQMD Staff
Dana Bernard South Coast AQMD Staff
Cindy Bustillos South Coast AQMD Staff
Sam Cao South Coast AQMD Staff
David Chen South Coast AQMD Staff
Penny Shaw Cedillo South Coast AQMD Staff
Scott Gallegos South Coast AQMD Staff
Carlos Gonzalez South Coast AQMD Staff
Maryam Hajbabaei South Coast AQMD Staff
Sheri Hanizavareh South Coast AQMD Staff
Eugene Kang South Coast AQMD Staff
Aaron Katzenstein South Coast AQMD Staff
Angela Kim South Coast AQMD Staff
Mikaela Lim South Coast AQMD Staff
Alicia Lizarraga South Coast AQMD Staff
Krystle Martinez South Coast AQMD Staff
Ian MacMillan South Coast AQMD Staff
Ghislain Muberwa South Coast AQMD Staff
Susan Nakamura South Coast AQMD Staff

Wayne Natri	South Coast AQMD Staff
Vasileios Papapostolou	South Coast AQMD Staff
Cynthia Ravenstein	South Coast AQMD Staff
Sarah Rees	South Coast AQMD Staff
Kristin Remy	South Coast AQMD Staff
Annie Shin	South Coast AQMD Staff
Lisa Tanaka	South Coast AQMD Staff
Alejandra Vega	South Coast AQMD Staff
Mei Wang	South Coast AQMD Staff
Fan Xu	South Coast AQMD Staff