

BOARD MEETING DATE: September 1, 2017

AGENDA NO. 25

REPORT: Technology Committee

SYNOPSIS: The Technology Committee held a meeting on Friday, July 21, 2017. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Sheila Kuehl, Vice Chair
Technology Committee

MMM:pmk

Committee Members

Present: Supervisor Sheila Kuehl (Vice Chair), Mayor Pro Tem Larry McCallon, Council Member Judith Mitchell, Council Member Dwight Robinson, Supervisor Janice Rutherford

Absent: Council Member Joe Buscaino (Chair)

Call to Order

Vice Chair Kuehl called the meeting to order at 12:00 p.m. and announced that Agenda Item #4 was withdrawn by staff.

ACTION ITEMS:

1. Approve Additional Funds for Replacement of Onboard CNG Fuel Tanks on School Buses

Since 2001, the SCAQMD has replaced over 1,600 pre-1994 diesel school buses primarily with CNG school buses. In April 2012, the Board issued a Program Announcement using \$3 million from the Carl Moyer Program AB 923 Fund (80) to replace onboard CNG fuel tanks on a first-come, first-served basis for public school buses at least 14 years old. In November 2016, the Board approved an additional \$2 million to continue the Program, and these funds are now exhausted. This action is to approve an additional \$3 million from the Carl Moyer Program AB 923 Fund (80)

to continue on a first-come, first-served basis the replacement of onboard CNG fuel tanks for public school buses.

Supervisor Rutherford asked how many CNG fuel tanks need to be replaced. Staff responded that we have funded about 1,600 CNG school buses under the Lower Emission School Bus Program, and we have replaced 250 CNG fuel tanks under the current program.

Council Member Robinson asked how many pre-1994 school buses remain in the South Coast Air Basin. Staff responded there are about 800 pre-1994 school buses remaining, of which about 200 of these are pre-1987. Council Member Robinson asked if these older buses can be prioritized to receive the funding. Staff responded the older buses are given priority for funding.

Supervisor Rutherford asked how we prevent one entity from using up the majority of funds, and staff responded that there are percentage limits on awards that can be received

Council Member Robinson commented that SCAQMD should seek additional funding to replace school buses at a faster rate. Staff explained the current efforts to obtain additional incentive funding, and mentioned the Carl Moyer Program has been updated to include school buses as an eligible category. Staff also commented that we plan to release a new Program Announcement for the Lower Emission School Bus Program in October to fund additional buses.

Supervisor Kuehl asked if there is a recycling program for the used tanks. Staff responded the tanks are subject to CHP requirements that prevent them from being re-used after expiration. Staff will contact the schools to verify what happens to the used tanks after they expire and are replaced.

Moved by Robinson; seconded by McCallon; unanimously approved by the committee.

2. Execute Contract to Cosponsor Versatile Plug-In Auxiliary Power Systems Demonstration

In December 2015, the Board awarded a contract to the Electric Power Research Institute, Inc., (EPRI) to cosponsor development and demonstration of a Versatile Plug-In Auxiliary (VAP) System. EPRI is now requesting to use the previously approved cost-share for the second phase of the VAP System demonstration to evaluate the benefits and impacts of electric auxiliary power on emissions and fuel usage in various onboard and stationary applications. Up to three units will undergo baseline tests at Southern California Edison's EV Technical Center prior to field demonstration within SCAQMD. This action is to execute a contract with EPRI to

demonstrate up to three VAP systems in various applications in an amount not to exceed \$125,000 from the Clean Fuels Program Fund (31).

Council Member Mitchell asked what applications can use the portable power unit. Staff replied that the design allows for a broad range of uses, including portable diesel gensets and power supplies for work tools, eliminating or minimizing engine idling. The mobile nature also allows for charging plug-in vehicles.

Supervisor Kuehl asked when LADWP or the other partner would be confirmed. Staff responded that the proponent is in discussion with LADWP, but has not yet executed an agreement. Staff would provide an update if agreement with LADWP or the other partner is reached before the September Board meeting.

Moved by Mitchell; seconded by Robinson; unanimously approved by the committee.

3. Execute Contract to Demonstrate Low NOx Combustion Technology on Refinery Boiler

The 2016 AQMP identifies development and implementation of new technologies to further reduce NOx emissions from stationary combustion sources as a key strategy. It is also equally important to assess new technologies to prevent or mitigate any negative impact on air quality and public health. ClearSign Combustion Corporation recently submitted an unsolicited proposal that addresses these needs using a low NOx, non-Selective Catalytic Reduction combustion technology. Staff recommends cost-sharing the proposed project to demonstrate retrofitting their Duplex low NOx combustion technology without the use of reagents, such as ammonia or urea, on a refinery boiler. This action is to execute a contract with ClearSign to cost-share this project in an amount not to exceed \$320,000 from the Rule 1118 Mitigation Fund (54).

Council Member Mitchell noted that the proposed funding for this project is from Rule 1118 mitigation funds from flaring operations at refineries, which are now going back to a refinery with a history of violations to demonstrate this technology. Executive Officer Wayne Nastri explained that this is a new technology that has shown potential to get deployed quickly and achieve more immediate emission reductions. While we could wait for other funding partners, the current benefit of moving forward with the demonstration outweighs waiting.

Moved by McCallon; seconded by Mitchell; unanimously approved.

4. Recognize and Transfer Funds, Execute Agreements for Installation of Air Filtration Systems, and Reimburse General Fund for Administrative Costs

This item was withdrawn by staff. There were no public comments.

5. **Amend Contracts to Continue Implementation of Enhanced Fleet Modernization Program and Transfer Funds**

In February 2017, the Board recognized an additional \$5 million from CARB to continue implementation of the Enhanced Fleet Modernization Program (EFMP). The Board also approved contracts with consulting firms to provide assistance with implementation of the EFMP including case management, outreach and vehicle emissions testing. The Program has been highly successful in incentivizing voluntary retirement of older vehicles. Consequently, this action is to amend contracts with consulting firms in an amount not to exceed \$500,000 from the HEROS II Special Revenue Fund (56) to continue program implementation, including the addition of a new outreach strategy involving vehicle emissions monitoring in disadvantaged communities to identify high-emitting vehicles for potential voluntary replacement with cleaner, more fuel-efficient vehicles. These actions are to also transfer up to \$850,000 (comprising the above amendments and a prior \$350,000 amendment for Opus Inspection approved in February 2017) as a temporary loan from the Clean Fuels Program Fund (31) into the HEROS II Special Revenue Fund (56), until receipt of the CARB revenue.

Supervisor Kuehl expressed concerns that the public may view community monitoring as intrusive, and the invitations to participate in the program sent to the vehicle owners may be discarded. Mayor Pro Tem McCallon asked if the invitations sent to vehicle owners will be multilingual, and staff confirmed they would be.

Mayor Pro Tem McCallon also questioned whether it would be more strategic to obtain emission reductions from heavy-duty trucks. Council Member Mitchell offered background information on CARB's perspective for this program and indicated the program is intended to deploy the cleanest cars in disadvantaged communities. Council Member Robinson asked whether the proposed remote sensing technology could be used for heavy-duty trucks. Staff responded that this remote sensing technology was successfully demonstrated in a five-year study that examined in-use emissions from heavy-duty drayage trucks at the Port of Los Angeles and at a weigh station along the 91 freeway. This study showed the fleet was getting cleaner over time and identified isolated high-emitting HD trucks. Staff indicated that they could recommend the remote sensing technology be part of the Port's Clean Air Action Plan.

Supervisor Kuehl asked if there is any evaluation of the effectiveness of outreach efforts. Staff identified the various outreach efforts that have been used for this program, including weekend events and media announcements, and confirmed we are tracking which strategies are working best. Staff explained this is still considered a pilot program, and we will continue to monitor its progress over time.

Supervisor Rutherford asked if staff is coordinating with the Bureau of Automotive Repair (BAR). Staff explained that both BAR and CARB are supportive of the proposed community monitoring program. Mayor Pro Tem McCallon asked if we

know the amount of NOx reductions achieved for the dollars expended. Staff explained that the majority of funding for this program is coming from the state's GHG cap and trade program. CARB is tracking the data and reporting the amount of GHG reductions achieved by this program. Staff indicated that they can check the criteria pollutant reduction benefits.

Moved by Mitchell; seconded by Robinson; unanimously approved.

OTHER MATTERS:

6. **Other Business**

There was no other business.

7. **Public Comments**

There were no public comments.

8. **Next Meeting Date**

The next regular Technology Committee meeting is scheduled for Friday, September 15, 2017 at noon.

Adjournment

The meeting adjourned at 12:47 p.m.

Attachment

Attendance Record

ATTACHMENT

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT TECHNOLOGY COMMITTEE MEETING

Attendance – July 21, 2017

Supervisor Sheila Kuehl	SCAQMD Board Member
Mayor Pro Tem Larry McCallon.....	SCAQMD Board Member
Council Member Judith Mitchell.....	SCAQMD Board Member
Council Member Dwight Robinson.....	SCAQMD Board Member
Supervisor Janice Rutherford	SCAQMD Board Member
Mark Abramowitz	Board Consultant (Lyou)
David Czamanske	Board Consultant (Cacciotti)
Ron Ketcham	Board Consultant (McCallon)
Andrew Silva	Board Consultant (Rutherford)
Mark Taylor.....	Board Consultant (Rutherford)
Tom Gross	Southern California Edison
Timothy Lippman	County of Los Angeles
Jordan Smith	Southern California Edison
Al Baez	SCAQMD Staff
Lori Berard	SCAQMD Staff
Naveen Berry.....	SCAQMD Staff
Tribrina Brown	SCAQMD Staff
Nancy Cole	SCAQMD Staff
Marjorie Eaton.....	SCAQMD Staff
Kelly Gamino	SCAQMD Staff
Evan Keith	SCAQMD Staff
Pat Krayser	SCAQMD Staff
Joseph Lopat	SCAQMD Staff
Fred Minassian	SCAQMD Staff
Lisa Mirisola.....	SCAQMD Staff
Matt Miyasato.....	SCAQMD Staff
Wayne Natri	SCAQMD Staff
Dean Saito	SCAQMD Staff
Dominic Tung.....	SCAQMD Staff
Veera Tyagi	SCAQMD Staff
Mei Wang	SCAQMD Staff
Vicki White	SCAQMD Staff
Jill Whynot	SCAQMD Staff
Vasken Yardemian	SCAQMD Staff