

**REVISED**



**South Coast  
Air Quality Management District**

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

**TECHNOLOGY COMMITTEE MEETING**

**Committee Members**

Council Member Joe Buscaino, Chair  
Supervisor Lisa Bartlett  
Board Member Gideon Kracov  
Council Member Judith Mitchell  
Council Member Carlos Rodriguez

**August 21, 2020 ♦ 12:00 p.m.**

**Pursuant to Governor Newsom's Executive Orders N-25-20 (March 12, 2020) and N-29-20 (March 17, 2020), the South Coast AQMD Technology Committee meeting will only be conducted via video conferencing and by telephone. Please follow the instructions below to join the meeting remotely.**

**INSTRUCTIONS FOR ELECTRONIC PARTICIPATION AT BOTTOM OF AGENDA**

*Join Zoom Meeting - from PC or Laptop*  
<https://scaqmd.zoom.us/j/95992426914>

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**Audience will be allowed to provide public comment through telephone or Zoom connection.**

**PUBLIC COMMENT WILL STILL BE TAKEN**

**AGENDA**

*Members of the public may address this body concerning any agenda item before or during consideration of that item (Gov't. Code Section 54954.3(a)). If you wish to speak, raise your hand on Zoom or press Star 9 if participating by telephone. All agendas for regular meetings are posted at South Coast AQMD Headquarters, 21865 Copley Drive, Diamond Bar, California, at least 72 hours in advance of the regular meeting. Speakers may be limited to three (3) minutes each.*

**CALL TO ORDER**

**ACTION ITEMS (Items 1-4):**

- 1. Adopt Resolution Recognizing Funds for FY 2019-20 Community Air Protection Program Incentives and Reimburse General Fund for Administrative Costs**  
*(Motion Requested)*

In June 2020, South Coast AQMD executed a grant agreement (G19-MCAP-03) with CARB to receive FY 2019-20 (Year 3) Community Air Protection Program (CAPP) incentive funds in the amount of \$69,824,849, including 6.25% in administrative funds. This action is to adopt a Resolution recognizing CAPP revenue up to \$70 million from CARB into the Community Air Protection AB 134 Fund (77). The revenue will be used to support incentive projects that reduce emissions and improve public health in communities with high burdens of cumulative pollutant exposure, consistent with the goals of AB 617, subject to Board approval. Eligible projects include those submitted under the Carl Moyer and Proposition 1B-Goods Movement Programs, projects consistent with Community Air Protection Incentives Guidelines, and other incentive projects and programs included in an approved Community Emissions Reduction Plan. This action is to also reimburse the General Fund for administrative costs incurred implementing the CAPP grant.

Walter Shen  
Program Supervisor
  
- 2. Establish Special Revenue Fund, Recognize Funds, Execute Contract for Installation and Maintenance of Air Filtration Systems and Reimburse General Fund for Administrative Costs**  
*(Motion Requested)*

In May 2019, the Board recognized \$7,100,000 into the Air Filtration Fund (75) from the Aliso Supplemental Environmental Project (SEP) Fund to install air filtration systems at schools in Environmental Justice communities in Los Angeles County. To facilitate program tracking and auditing, these actions are to establish the Aliso Canyon Air Filtration Special Revenue Fund (84), recognize \$7,100,000 into Fund 84 instead of Fund 75, authorize the Chairman to execute a contract with IQAir North America for installation and maintenance of air filtration systems at schools in an amount not to exceed \$6,745,000 from Fund 84, and reimburse the General Fund for administrative costs up to \$355,000 from Fund 84.

Maryam Hajbabaei  
AQ Specialist
  
- 3. Recognize Revenue, Transfer Funds and Approve Budget and Expenditures for California Natural Gas Vehicle Partnership Activities and Projects**  
*(Motion Requested)*

The Board established the California Natural Gas Vehicle Partnership (CNGVP) to promote greater deployment of natural gas vehicles in California. These actions are to: 1) recognize revenue up to \$170,000 in membership dues from participating and future members of the CNGVP into the Natural Gas Vehicle Partnership Fund (40); 2) transfer \$25,000 from the Clean Fuels Program Fund

Phil Barroca  
Program Supervisor

(31) into Fund 40 for South Coast AQMD's two-year membership for FYs 2020-21 and 2021-22; 3) approve the FYs 2020-21 and 2021-22 CNGVP Budget; 4) authorize the Executive Officer to approve individual expenditures, as approved by the CNGVP, for FYs 2020-21 and 2021-22 up to \$75,000 but not to exceed \$225,000 for each fiscal year; and 5) approve a two-year contract with Gladstein, Neandross and Associates LLC to develop and implement communication strategies for the CNGVP in an amount not to exceed \$192,000 from Fund 40.

**4. Recognize Revenue, Transfer Funds, Amend and Execute Contracts to Demonstrate Class 8 Battery Electric Trucks, Retrofit Ocean-Going Vessel, Deploy Fuel Cell Transit Buses and Reimburse General Fund**  
*(Motion Requested)*

Patricia Kwon  
Program Supervisor

South Coast AQMD has been awarded up to \$37,821,301 from U.S. EPA. These actions are to recognize revenue from the Clean Air Technology Initiative Program up to \$500,000 into the GHG Reduction Projects Special Revenue Fund (67), up to \$25,906,601 into Fund 17, and up to \$11,414,700 into the Clean Shipping Technology Demonstration Special Revenue Fund (83); recognize revenue from the San Pedro Bay Ports up to \$300,000 into Fund 83; transfer up to \$2,205,000 from Clean Fuels Program Fund (31) into Fund 17; and transfer up to \$300,000 from the Air Quality Investment Fund (27) into Fund 83. These actions are to also: amend a contract adding up to \$500,000 from Fund 67 and execute contracts for up to \$21,635,681 to demonstrate battery electric trucks and infrastructure and for administrative project implementation from Fund 17; execute an MOU with the San Pedro Bay Ports; execute a contract for up to \$11,474,000 to retrofit an ocean-going vessel from Fund 83; execute a contract for up to \$6,111,601 to deploy fuel cell transit buses from Fund 17; and reimburse the General Fund for administrative costs.

**OTHER MATTERS:**

**5. Other Business**

Any member of the Committee, or its staff, on his or her own initiative or in response to questions posed by the public, may ask a question for clarification, may make a brief announcement or report on his or her own activities, provide a reference to staff regarding factual information, request staff to report back at a subsequent meeting concerning any matter, or may take action to direct staff to place a matter of business on a future agenda. (Gov't. Code Section 54954.2)

**6. Public Comment Period**

At the end of the regular meeting agenda, an opportunity is provided for the public to speak on any subject within the Committee's authority that is not on the agenda. Speakers may be limited to three (3) minutes each.

**7. Next Meeting Date**

Friday, September 18, 2020 at 12:00 pm

## ADJOURNMENT

### **Document Availability**

*All documents (i) constituting non-exempt public records, (ii) relating to an item on an agenda for a regular meeting, and (iii) having been distributed to at least a majority of the Committee after the agenda is posted, are available by contacting Alejandra Vega at (909) 396-2264, or send the request to [avega@aqmd.gov](mailto:avega@aqmd.gov).*

### **Americans with Disabilities Act and Language Accessibility**

*Disability and language-related accommodations can be requested to allow participation in the Technology Committee meeting. The agenda will be made available, upon request, in appropriate alternative formats to assist persons with a disability (Gov't Code Section 54954.2(a)). In addition, other documents may be requested in alternative formats and languages. Any disability or language-related accommodation must be requested as soon as practicable. Requests will be accommodated unless providing the accommodation would result in a fundamental alteration or undue burden to South Coast AQMD. Please contact Alejandra Vega at 909.396.2264 from 7:30 a.m. to 6:00 p.m., Tuesday through Friday, or send the request to [avega@aqmd.gov](mailto:avega@aqmd.gov).*

## **INSTRUCTIONS FOR ELECTRONIC PARTICIPATION**

### **Instructions for Participating in a Virtual Meeting as an Attendee**

As an attendee, you will have the opportunity to virtually raise your hand and provide public comment.

Before joining the call, please silence your other communication devices such as your cell or desk phone. This will prevent any feedback or interruptions during the meeting.

**Please note:** During the meeting, all participants will be placed on Mute by the host. You will not be able to mute or unmute your lines manually.

After each agenda item, the Chairman will announce public comment.

A countdown timer will be displayed on the screen for each public comment.

If interpretation is needed, more time will be allotted.

**Once you raise your hand to provide public comment, your name will be added to the speaker list. Your name will be called when it is your turn to comment. The host will then unmute your line.**

### **Directions for Video ZOOM on a DESKTOP/LAPTOP:**

- If you would like to make a public comment, please click on the **“Raise Hand”** button on the bottom of the screen.
- This will signal to the host that you would like to provide a public comment and you will be added to the list.

**Directions for Video Zoom on a SMARTPHONE:**

- If you would like to make a public comment, please click on the **“Raise Hand”** button on the bottom of your screen.
- This will signal to the host that you would like to provide a public comment and you will be added to the list.

**Directions for TELEPHONE line only:**

- If you would like to make public comment, please **dial \*9** on your keypad to signal that you would like to comment.

**Technology Committee Agenda #1**

BOARD MEETING DATE: September 4, 2020

AGENDA NO.

**PROPOSAL:** Adopt Resolution Recognizing Funds for FY 2019-20 Community Air Protection Program Incentives and Reimburse General Fund for Administrative Costs

**SYNOPSIS:** In June 2020, South Coast AQMD executed a grant agreement (G19-MCAP-03) with CARB to receive FY 2019-20 (Year 3) Community Air Protection Program (CAPP) incentive funds in the amount of \$69,824,849, including 6.25% in administrative funds. This action is to adopt a Resolution recognizing CAPP revenue up to \$70 million from CARB into the Community Air Protection AB 134 Fund (77). The revenue will be used to support incentive projects that reduce emissions and improve public health in communities with high burdens of cumulative pollutant exposure, consistent with the goals of AB 617, subject to Board approval. Eligible projects include those submitted under the Carl Moyer and Proposition 1B-Goods Movement Programs, projects consistent with Community Air Protection Incentives Guidelines, and other incentive projects and programs included in an approved Community Emissions Reduction Plan. This action is to also reimburse the General Fund for administrative costs incurred implementing the CAPP grant.

**COMMITTEE:** Technology, August 21, 2020; Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Adopt the attached Resolution recognizing, upon receipt, up to \$70 million of FY 2019-20 CAPP incentive funds from CARB into the Community Air Protection AB 134 Fund (77); and
2. Reimburse the General Fund up to 6.25% of the CAPP Grant amount from the Community Air Protection AB 134 Fund (77).

Wayne Nastri  
Executive Officer

## **Background**

In June 2019, the Governor approved the Budget Act of 2019 (AB 74), which under Schedule 3 of the Bill appropriated \$245 million for financial incentives to reduce mobile and stationary sources of criteria air pollutants or toxic air contaminants, consistent with community emissions reduction programs pursuant to AB 617. In June 2020, South Coast AQMD executed a grant agreement (G19-MCAP-03) with CARB to receive FY 2019-20 (Year 3) Community Air Protection Program (CAPP) incentive funds in the amount of \$69,824,849, including 6.25% in administrative funds. A Board Resolution is required by CARB prior to the disbursement of these funds.

As specified by the Year 3 grant, the revenue will be used to support incentive projects that reduce emissions and improve public health in communities with high burdens of cumulative pollutant exposure, consistent with the goals of AB 617, subject to Board approval. Eligible projects include those submitted under the Carl Moyer and Proposition 1B-Goods Movement Programs, projects consistent with Community Air Protection Incentives Guidelines, and other incentive projects and programs included in an approved Community Emissions Reduction Program. The grant also includes statewide targets to benefit priority populations, including SB 535 disadvantaged communities AB 1550 communities.

## **Proposal**

These actions are to adopt the attached Resolution recognizing up to \$70 million from CARB into the Community Air Protection AB 134 Fund (77) and reimburse the General Fund up to 6.25% of the CAPP Grant amount from the Community Air Protection AB 134 Fund (77).

## **Benefits to South Coast AQMD**

The implementation of incentive projects funded by the Year 3 CAPP funds will reduce emissions of criteria and toxic air pollutants in communities with high burdens of cumulative pollutant exposure. The CAPP incentive funds will be used for projects that meet or exceed the statewide targets specified by the CAPP incentives grant agreement, including at least 70 percent of the funds for projects in SB 535 disadvantaged communities and at least 80 percent of the funds for projects benefiting AB 1550 communities.

The funds will be used for projects that reduce emissions beyond what is required by existing regulations, and these reductions will continue throughout the life of the projects, resulting in long-term emissions reduction and public health benefits.

## **Resource Impacts**

South Coast AQMD will receive up to \$70 million from CARB for FY 2019-20 (Year 3) CAPP incentive funds, which will be recognized into the Community Air Protection AB 134 Fund (77). Administrative costs will not exceed 6.25%.

**Attachment**

A Resolution of the South Coast AQMD Governing Board Recognizing FY 2019-20  
Community Air Protection Incentive Funds



**RESOLUTION NO. 20-XXX**

**A Resolution of the South Coast Air Quality Management District Governing Board  
Recognizing FY 2019-20 Community Air Protection Incentive Funds**

WHEREAS, under Health & Safety Code §40400 *et seq.*, the South Coast Air Quality Management District (South Coast AQMD) is the local agency with the primary responsibility for the development, implementation, monitoring and enforcement of air pollution control strategies, clean fuels programs and motor vehicle use reduction measures; and

WHEREAS, the South Coast AQMD is authorized by Health & Safety Code §§40402, 40440, and 40448.5 as well as the Carl Moyer Memorial Air Quality Standards Attainment Program (§§44275 *et seq.*) to implement programs to reduce transportation emissions, including programs to encourage the use of alternative fuels, zero and low emission vehicles, to develop and implement other strategies and measures to reduce air contaminants, and achieve the state and federal air quality standards; and

WHEREAS, the Governing Board has adopted several programs to reduce emissions from on-road and off-road vehicles, as well as emissions from other equipment, including infrastructure from the Carl Moyer Program, the Proposition 1B-Goods Movement Program, and projects included in approved Community Emissions Reduction Programs; and

WHEREAS, the Governing Board directs staff to prioritize funding of zero emission vehicles and equipment whenever feasible, including charging/fueling infrastructure for medium- and heavy-duty vehicles, in disadvantaged and low-income communities; and

WHEREAS, the South Coast AQMD is designated as an extreme non-attainment area for ozone and as such is required to utilize all feasible means to meet national ambient air quality standards.

THEREFORE, BE IT RESOLVED that the Governing Board of the South Coast AQMD, State of California, in regular session assembled on September 4, 2020, does hereby recognize up to \$70 million in FY 2019-20 (Year 3) Community Air Protection Program incentive funds from CARB.

BE IT FURTHER RESOLVED that the Executive Officer is authorized and directed to take all steps necessary to carry out this Resolution.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Faye Thomas, Clerk of the Board

# Agenda Item #1

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Walter Shen

Adopt Resolution Recognizing Funds for  
FY 2019-20 Community Air Protection Program  
Incentives and Reimburse General Fund

# Background

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- In June 2019, the Governor approved the Budget Act of 2019 (AB 74), appropriating \$245M for projects pursuant to AB 617 – Community Air Protection Program (CAPP)
- CARB awarded South Coast AQMD \$69.8M in FY 2019-20 (including 6.25% for administrative costs)
- In June 2020, a Grant Agreement with CARB was executed
- Revenue will be used to fund eligible projects under the Carl Moyer Program, CAPP Incentives, Proposition 1B and other projects and programs in the approved AB 617 Community Emissions Reduction Program

# Proposal

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- Adopt Resolution recognizing CAPP revenue
- Funding will be used for projects that meet or exceed:
  - 70% in SB 535 disadvantaged communities
  - 80% in AB 1550 communities
  - Support incentive projects that reduce emissions and improve public health in communities with high burdens of cumulative pollutant exposure (i.e., AB 617)
- Reimburse administrative costs

# Recommended Actions

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- Adopt Resolution recognizing up to \$70M in FY 2019-20 CAPP incentive funds from CARB into the Community Air Protection AB 134 Fund (77)
- Reimburse the General Fund up to 6.25% of the CAPP Grant from Fund 77

**Technology Committee Agenda #2**

BOARD MEETING DATE: September 4, 2020

AGENDA NO.

**PROPOSAL:** Establish Special Revenue Fund, Recognize Funds, Execute Contract for Installation and Maintenance of Air Filtration Systems and Reimburse General Fund for Administrative Costs

**SYNOPSIS:** In May 2019, the Board recognized \$7,100,000 into the Air Filtration Fund (75) from the Aliso Supplemental Environmental Project (SEP) Fund to install air filtration systems at schools in Environmental Justice communities in Los Angeles County. To facilitate program tracking and auditing, these actions are to establish the Aliso Canyon Air Filtration Special Revenue Fund (84), recognize \$7,100,000 into Fund 84 instead of Fund 75, authorize the Chairman to execute a contract with IQAir North America for installation and maintenance of air filtration systems at schools in an amount not to exceed \$6,745,000 from Fund 84, and reimburse the General Fund for administrative costs up to \$355,000 from Fund 84.

**COMMITTEE:** Technology, August 21, 2020; Recommended for Approval

**RECOMMENDED ACTIONS:**

- 1) Establish the Aliso Canyon Air Filtration Special Revenue Fund (84) and recognize, upon receipt, up to \$7,100,000 into the new fund (84) instead of the Air Filtration Fund (75);
- 2) Authorize the Chairman to execute a contract with IQAir North America for installation and maintenance of air filtration systems at schools in an amount not to exceed \$6,745,000 from the Aliso Canyon Air Filtration Special Revenue Fund (84) instead of the Air Filtration Fund (75);
- 3) Authorize the Chairman to amend, as needed, the contract with IQAir North America to purchase additional filters using unspent administrative funds; and
- 4) Reimburse the General Fund up to \$355,000 from the Aliso Canyon Air Filtration Special Revenue Fund (84) instead of Fund (75) for the administrative costs necessary to implement the air filtration projects.

**Background**

In May 2019, the Board recognized up to \$7,100,000 from the Aliso Supplemental Environmental Project (SEP) Fund for a SEP being administered on behalf of the City and County of Los Angeles and the California Attorney General’s Office, which comprise the Aliso Fund Committee, as a result of the Aliso Canyon natural gas leak. The Board recognized the funds into the Air Filtration Fund (75) and authorized the Chairman to execute a contract out of Fund 75 with IQAir North America to install and maintain the air filtration systems at public schools in environmental justice (EJ) communities, to reimburse the General Fund for administrative costs and to use any unspent administrative funds for additional air filters. In July 2020, the Aliso Fund Committee determined that the SEP revenue must be received into a separate special revenue fund to track expenditures and interest generated from the Aliso Fund SEP.

The May 2019 board letter also authorized the Executive Officer to execute an agreement with the City and County of Los Angeles and the California Attorney General’s Office to implement the SEP and to execute or amend agreements with local school districts for the purpose of implementing the SEP. These authorizations remain unchanged.

**Proposal**

These actions are to create the Aliso Canyon Air Filtration Special Revenue Fund (84), recognize \$7,100,000 into Fund 84 instead of Fund 75 and authorize the Chairman to execute a contract with IQAir North America for installation and maintenance of air filtration systems at schools in an amount not to exceed \$6,745,000 from Fund 84 instead of Fund 75. A sole source justification was included in the May 2019 Board letter for the IQAir contract.

An updated proposed schedule for installation and maintenance of air filtration systems at Los Angeles City and County schools in EJ communities is as follows:

<b>Date</b>	<b>Event</b>
Sept 2020	Board Approval
Sept – Nov 2020	Anticipated Execution of Contracts
Dec 2020 -Jan 2021	Selection of Schools, Site Assessments
Jan 2021– December 2021	Installation
October 2021–October 2031	Maintenance (varies by school)
March 2022	Final Installation Report (thereafter with annual updates through 2031)

This action is to also reimburse the General Fund up to \$355,000 from the Aliso Canyon Air Filtration Special Revenue Fund (84) instead of Fund 75 for administrative costs necessary to implement the air filtration projects and to allow any unspent administrative funds be used to purchase additional filters.

**Benefits to South Coast AQMD**

This project will reduce children’s exposure to criteria and toxic pollutants and ultrafine PM. Health studies have determined that fine and ultrafine PM, including diesel PM, present the greatest air pollution health risk to sensitive receptors in Environmental Justice communities identified in the SEP agreement.

**Resource Impacts**

Up to \$7,100,000, upon receipt, will be recognized into the Aliso Canyon Air Filtration Special Revenue Fund (84). The contract with IQAir North America to install air filtration systems will not exceed \$6,745,000 and reimbursement of administrative costs will not exceed \$355,000.



# Agenda Item #2

## Maryam Hajbabaee

Establish Special Revenue Fund, Recognize Funds, Execute Contract for Installation and Maintenance of Air Filtration Systems and Reimburse General Fund

# Background

In May 2019, the Board

- Recognized funds from Aliso Supplemental Environmental Project (SEP) into the Air Filtration Fund (75)
- Approved a contract with IQAir North America (IQAir) for installation and maintenance of air filtration systems at schools



# Proposal

- For program tracking and audit purposes, establish the Aliso Canyon Air Filtration Special Revenue Fund (84)
- Recognize Aliso SEP funds and execute the contract with IQAir North America (IQAir) from the new fund
- Reimburse the General Fund for administrative costs from the new fund and allow unspent administrative funds to purchase additional filters



# Proposed Schedule

Date	Action
Sept 2020	Board approval
Sept-Nov 2020	Anticipated execution of contracts
Dec 2020 – Jan 2021	School selection/site assessments
Jan – Dec 2021	Installation at schools
Oct 2021 – Oct 2031	Maintenance (varies by school)
March 2022	Final installation reports (thereafter with annual updates through 2031)

# Recommended Actions

- Establish the Aliso Canyon Air Filtration Special Revenue Fund (84) and recognize up to \$7.1M into the new fund (84) instead of the Air Filtration Fund (75)
- Execute a contract with IQAir North America for installation and maintenance of air filtration systems at schools in an amount not to exceed \$6.745M from the new fund (84)
- Authorize the Chairman to amend, as needed, the contract with IQAir North America to purchase additional filters using unspent administrative funds
- Reimburse the General Fund up to \$355,000 from the new fund (84)

**Technology Committee Agenda #3**

BOARD MEETING DATE: September 4, 2020

AGENDA NO.

**PROPOSAL:** Recognize Revenue, Transfer Funds and Approve Budget and Expenditures for California Natural Gas Vehicle Partnership Activities and Projects

**SYNOPSIS:** The Board established the California Natural Gas Vehicle Partnership (CNGVP) to promote greater deployment of natural gas vehicles in California. These actions are to: 1) recognize revenue up to \$170,000 in membership dues from participating and future members of the CNGVP into the Natural Gas Vehicle Partnership Fund (40); 2) transfer \$25,000 from the Clean Fuels Program Fund (31) into Fund 40 for South Coast AQMD's two-year membership for FYs 2020-21 and 2021-22; 3) approve the FYs 2020-21 and 2021-22 CNGVP Budget; 4) authorize the Executive Officer to approve individual expenditures, as approved by the CNGVP, for FYs 2020-21 and 2021-22 up to \$75,000 but not to exceed \$225,000 for each fiscal year; and 5) approve a two-year contract with Gladstein, Neandross and Associates LLC to develop and implement communication strategies for the CNGVP in an amount not to exceed \$192,000 from Fund 40.

**COMMITTEE:** Technology, August 21, 2020; Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Recognize, upon receipt, up to \$170,000 in membership dues from participating and future members of the CNGVP into the Natural Gas Vehicle Partnership Fund (40);
2. Transfer \$25,000 from the Clean Fuels Program Fund (31) into the Natural Gas Vehicle Partnership Fund (40) for South Coast AQMD's two-year membership for FYs 2020-21 and 2021-22;
3. Approve the CNGVP budget for FYs 2020-21 and 2021-22;
4. Authorize the Executive Officer to approve individual expenditures, as approved by the CNGVP, for FYs 2020-21 and 2021-22 up to \$75,000 but not to exceed \$225,000 for each fiscal year; and

5. Approve a two-year contract with Gladstein, Neandross and Associates LLC to develop and implement communication strategies for the CNGVP in an amount not to exceed \$192,000 from the Natural Gas Vehicle Partnership Fund (40).

Wayne Natri  
Executive Officer

MMM:NB:JI:PMB

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### **Background**

In 2002, the Board established the California Natural Gas Vehicle Partnership (CNGVP or the Partnership) to accelerate development of advanced natural gas vehicle technologies, establish a benchmark for lowering emissions from petroleum-based engines, and provide a pathway for transitioning towards fuel cells in the future. The CNGVP is comprised of state and federal air quality agencies, transportation and energy agencies, vehicle and engine manufacturers, fuel providers, transit organizations and refuse haulers.

The Partnership is overseen by a Steering Committee and is comprised of Voting and Associate Members. All members participate in the activities of the Steering Committee and the working groups and sub-committees created by the Steering Committee. Voting Members contribute for a two-year membership and participate on the Steering Committee and working groups. Steering Committee dues are \$25,000 or \$10,000 for private end-users and/or fleet operators. CARB and the U.S. DOE are also a Voting Member, participating as ‘non-dues paying’ environmental organization.

The Partnership’s Steering Committee meets on a periodic basis with high-level representation from each participating member. South Coast AQMD’s representation on the CNGVP includes three South Coast AQMD Board Members. Routine activities of the Partnership include members and invited guests providing and receiving updates on industry, legislative and regulatory activities. They also discuss and plan programs and projects that help promote the Partnership’s goals and objectives, which include the use of low carbon intensity renewable natural gas as a transportation fuel that can contribute to regional and global air quality issues. The Partnership communicates its message through the CNGVP website ([cngvp.org](http://cngvp.org)), which is currently maintained under a contract with Gladstein, Neandross & Associates LLC (GNA). The website promotes the activities of the CNGVP and the natural gas vehicle industry in general.

Over the past two years, the Partnership has made significant strides towards improving and increasing the effectiveness of communicating its message on the multiple benefits of using renewable natural gas (RNG) to power ultra-low NOx heavy-duty natural gas-

powered vehicles. During this period, the Partnership also initiated transitioning the CNGVP to a self-administrated entity contracting third-party (non-member) services from GNA, to help reduce South Coast AQMD’s role in these activities.

**Proposal**

The CNGVP operates on a two-year budget cycle. These actions are to: 1) recognize revenue from participating and future CNGVP Members for FYs 2020-21 and 2021-22 into the Natural Gas Vehicle Partnership Fund (40); 2) transfer funds from the Clean Fuels Program Fund (31) into Fund 40 for South Coast AQMD’s two-year membership for FYs 2020-21 and 2021-22; 3) approve the FYs 2020-21 and 2021-22 CNGVP budget; 4) authorize the Executive Officer to approve individual expenditures, as approved by the CNGVP, for FYs 2020-21 and 2021-22; and 5) approve a two-year contract with GNA to develop and implement communication strategies for the CNGVP.

The following two tables list the CNGVP Steering Committee Members and Associate Members.

**Table 1. CNGVP Steering Committee Members**

Agility Fuel Solutions
CARB*
Clean Energy Fuels
CR&R Inc.**
Cummins Inc.
Sempra Energy Utilities
Trillium CNG
U.S. DOE*
Waste Management, Inc.**
South Coast AQMD

\*Non-paying members

\*\*Fleet operators/end users (reduced fee)



**Table 2. CNGVP Associate Members**

CEC City of Los Angeles Coalition for Clean Air Colton Unified School District Foothill Transit Los Angeles County Metropolitan Transportation Authority Natural Resources Defense Council Orange County Transportation Authority San Joaquin Valley Air Pollution Control District SunLine Transit Agency Union of Concerned Scientists U.S. EPA University of California Davis
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Revenues and expenditures for FYs 2018-19 and 2019-20 are summarized in Table 3.

**Table 3. CNGVP Fund Revenues and Expenditures**

Available Funds (as of July 1, 2018)	\$434,397
Membership Dues Received	92,500
Interest Earned	\$16,565
<b>Revenues (July 2018 – June 2020)</b>	<b>\$543,462</b>
Website Maintenance	(\$30,000)
GameChanger Video	(\$30,000)
ACT 2018	(\$12,500)
Rethink Methane 2018 s	(\$10,000)
SJVCC “Trucking With Clean Fuels”	(\$10,000)
Renewable 360 (2019)	(\$10,000)
GNA Administration	(\$27,652)
GNA Communications Strategy	(\$48,000)
<b>Expenditures (July 2018 – June 2020)</b>	<b>(\$178,152)</b>
GNA Administration	(\$3,948)
GNA Communications Strategy	(\$16,000)
In-State RNG	(\$10,000)
RG 360 Webinar	(\$10,000)
<b>Obligations as of June 30, 2020</b>	<b>(\$39,948)</b>
<b>Available Fund Balance for start FY 2020-21</b>	<b>\$325,362</b>

The CNGVP Steering Committee two-year membership dues are currently up for renewal. If all current members renew their memberships, the Natural Gas Vehicle Partnership Fund (40) would be replenished with revenues totaling \$170,000 over the next two years. Projected revenues and proposed expenditures for FYs 2020-21 (July 1, 2020 to June 30, 2021) and 2021-22 (July 1, 2021 to June 30, 2022) are outlined in Table 4, which has been reviewed and approved by the CNGVP Steering Committee Members, pending South Coast AQMD Board consideration.

**Table 4. Proposed FYs 2020-21 and 2021-22 CNGVP Budget**

Available Funds for FYs 2020-21 and 2021-22	\$325,362
Anticipated Membership Dues	\$170,000
<b>Total Anticipated Available Funds</b>	<b>\$495,362</b>
GNA: CNGVP Administration (two-year; not-to-exceed)	(\$71,200)
GNA: CNGVP Communications Strategies (two year; not to exceed)	(\$192,000)
Special Consultation and Activity Coordination	(\$50,000)
Conference/Exhibition Sponsorships	(\$50,000)
<b>Proposed Budget Expenditures</b>	<b>(\$363,200)</b>
<b>Estimated Unallocated Fund Balance</b>	<b>\$132,162</b>

For FYs 2020-21 and 2021-22, the CNGVP membership will be directing their efforts toward furthering consumer and public awareness of the benefits of RNG and its use as a transportation fuel in heavy-duty vehicle applications that employ engines certified to CARB’s optional low NOx exhaust emissions standard of 0.02 gNOx/bhp-hr. The CNGVP plans to continue cosponsoring relevant conferences, identifying projects and studies to further the deployment of next-generation natural gas engines, and advancing the local production and use of low carbon intensity RNG as a transportation fuel for both on- and off-road mobile sources.

**Benefits to South Coast AQMD**

The implementation of this Partnership has brought public and private stakeholders together to assist in the development and deployment of advanced natural gas vehicles and refueling infrastructure expansion. The CNGVP will continue its leadership role to work with original equipment manufacturers, government and the public towards the advancement of natural gas vehicles in the marketplace to further address criteria pollutant emissions as well as greenhouse gases and energy needs. Natural gas used in in ultra-low NOx engines is a low emissions transportation fuel that can displace or augment petroleum fuel where economically feasible. In addition, the use of RNG can increase domestic fuel supply, help address landfill diversion efforts and waste biomass challenges, and concurrently reduce greenhouse gas emissions associated with waste

biomass. These activities are included in the *Technology Advancement Office Clean Fuels Program 2020 Plan Update* under “Infrastructure and Deployment (NG/RNG)” and “Assess and Support Advanced Technologies and Disseminate Information”.

### **Sole Source Justification**

Section VIII.B.2 of the Procurement Policy and Procedure identifies four major provisions under which a sole source award may be justified. This request for sole source award is made under provision B.2.d.: Other circumstances exist which in the determination of the Executive Officer requires such waiver in the best interest of the South Coast AQMD. Specifically, these circumstances are B.2.d.(1): Projects involving cost-sharing by multiple sponsors; the CNGVP is a non-profit whose Steering Committee is collectively approving and funding this project with Gladstein, Neandross and Associates (GNA); and, B.2.d.(2): Time extension of an existing contract; the proposed work is an extension of the original work that GNA developed and delivered to the CNGVP; this project relies on the experience gained during the original work.

### **Resource Impacts**

The current fund balance totaling \$325,362 plus anticipated membership fees over the next two years of \$170,000, which will be received into the Natural Gas Vehicle Partnership Fund (40), are sufficient to cover projected CNGVP expenditures, budgeted at \$363,200 for FYs 2020-21 and 2021-22. South Coast AQMD’s two-year membership for FYs 2020-21 and 2021-22 will not exceed \$25,000 from the Clean Fuels Program Fund (31). The Executive Officer will approve individual expenditures, as approved by the CNGVP, for FYs 2020-21 and 2021-22 up to \$75,000 but not to exceed \$225,000 for each fiscal year until such time the CNGVP is fully positioned and registered to assume full budget responsibilities of their organization. The contract with GNA for communication strategies will not exceed \$192,000 from Fund 40.

The Clean Fuels Program Fund (31) was 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 the mechanism 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.

# Agenda #3

## Phil Barroca

Recognize Revenue from  
Participating Members of CNGVP,  
Transfer Funds for SCAQMD Membership,  
Approve Budget and Expenditures for  
FYs 2020-21 and 2021-22

# Background



CALIFORNIA  
NATURAL GAS VEHICLE  
PARTNERSHIP

- Creation of CNGVP in 2002
- Mission
  - accelerate development of clean, advanced NGV technologies
  - establish a lower emission threshold for petroleum-based engines
  - promote production and use of renewable natural gas transportation fuel
  - promote pathway to H<sub>2</sub> fuel cell transportation
- Steering Committee
  - Elected Chair & Vice-Chair
  - Voting Members - pay dues (CARB and DOE excluded)
  - Associate Members - provide in-kind contributions



# Background (cont'd)

## Steering Committee Members



# Proposal

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- Recognize revenue from participating and future CNGVP Members for FYs 2020-21 and 2021-22
- Transfer funds from the Clean Fuels Program Fund (31) into the Natural Gas Vehicle Partnership Fund (40) for SCAQMD's two-year membership for FYs 2020-21 and 2021-22
- Approve the FYs 2020-21 and 2021-22 CNGVP budget
- Authorize the Executive Officer to approve individual expenditures, as approved by the CNGVP for FYs 2020-21 and 2021-22
- Approve a two-year contract with Gladstein, Neandross, and Associates (GNA) for communications strategies

# Proposed Operating Budget FYs 2020-21 & 2021-22

<b>Available Funds for FYs 2020-21 and 2021-22</b>	\$325,362
<b>Anticipated Membership Dues</b>	\$170,000
<b>Total Anticipated Available Funds</b>	\$495,362
<b>GNA Administrative (two-year; not to exceed)</b>	(\$71,200)
<b>GNA Communications Extended (two-year; not to exceed)</b>	(\$192,000)
<b>Special Consultation and Activity Coordination</b>	(\$50,000)
<b>Conference/Exhibition Sponsorships</b>	(\$50,000)
<b>Proposed Budget Expenditures</b>	(\$363,200)
<b>Estimated Unallocated Fund Balance</b>	\$132,162



# Recommended Actions

- Recognize up to \$170,000 in membership dues over a two-year period from participating and future members into the CNGVP Fund (40)
- Authorize the transfer of \$25,000 from the Clean Fuels Program Fund (31) to the CNGVP Fund (40) for SCAQMD's FYs 2020-21 and 2021-22 membership dues
- Approve the CNGVP Budget for FYs 2020-21 & 2021-22
- Authorize Executive Officer to approve expenditures from the CNGVP Fund (40) for activities and projects selected by the CNGVP to meet Partnership goals up to \$75,000 per expenditure and upon availability of funds
- Approve a two-year contract with GNA for communications strategies not to exceed \$192,000 from Fund (40)

**Technology Committee Agenda #4**

BOARD MEETING DATE: September 4, 2020

AGENDA NO.

**PROPOSAL:** Recognize Revenue, Transfer Funds, Amend and Execute Contracts to Demonstrate Class 8 Battery Electric Trucks, Retrofit Ocean-Going Vessel, Deploy Fuel Cell Transit Buses and Reimburse General Fund

**SYNOPSIS:** South Coast AQMD has been awarded up to \$37,821,301 from U.S. EPA. These actions are to recognize revenue from the Clean Air Technology Initiative Program up to \$500,000 into the GHG Reduction Projects Special Revenue Fund (67), up to \$25,906,601 into Fund 17, and up to \$11,414,700 into the Clean Shipping Technology Demonstration Special Revenue Fund (83); recognize revenue from the San Pedro Bay Ports up to \$300,000 into Fund 83; transfer up to \$2,205,000 from Clean Fuels Program Fund (31) into Fund 17; and transfer up to \$300,000 from the Air Quality Investment Fund (27) into Fund 83. These actions are to also: amend a contract adding up to \$500,000 from Fund 67 and execute contracts for up to \$21,635,681 to demonstrate battery electric trucks and infrastructure and for administrative project implementation from Fund 17; execute an MOU with the San Pedro Bay Ports; execute a contract for up to \$11,474,000 to retrofit an ocean-going vessel from Fund 83; execute a contract for up to \$6,111,601 to deploy fuel cell transit buses from Fund 17; and reimburse the General Fund for administrative costs.

**COMMITTEE:** Technology, August 21, 2020; Recommend for Approval

**RECOMMENDED ACTIONS:**

1. Recognize revenue, upon receipt, of up to \$500,000 from the U.S. EPA FY 20 Section 105 Clean Air Technology Initiative Program into the GHG Reduction Projects Special Revenue Fund (67) to demonstrate additional Class 8 battery electric trucks for the Volvo LIGHTS project.
2. Recognize revenue, upon receipt, into the Advanced Technology, Outreach and Education Fund (17) as follows:

- a. Up to \$20,000,000 from the U.S. EPA FY 19 Targeted Airshed Grant Program to deploy 70 Class 8 battery electric trucks for the Volvo Switch-On project; and
  - b. Up to \$5,906,601 from the U.S. EPA FY 20 Targeted Airshed Grant Program to deploy up to five fuel cell transit buses.
3. Recognize revenue, upon receipt, into the Clean Shipping Technology Demonstration Special Revenue Fund (83) to develop and demonstrate selective catalytic reduction retrofit technology for an ocean-going vessel as follows:
  - a. Up to \$11,414,700 from the U.S. EPA FY 20 Targeted Airshed Grant Program; and
  - b. Up to \$300,000 from the San Pedro Bay Ports' Technology Advancement Program.
4. Transfer up to \$2,205,000 from the Clean Fuels Program Fund (31) for South Coast AQMD's project cost-share to the Advanced Technology, Outreach and Education Fund (17):
  - a. Up to \$2,000,000 to deploy battery electric trucks and infrastructure for the Volvo Switch-On project; and
  - b. Up to \$205,000 to deploy fuel cell transit buses.
5. Transfer any unspent Clean Fuels Program funds from the Advanced Technology, Outreach and Education Fund (17) to the Clean Fuels Program Fund (31) upon project completion.
6. Transfer up to \$300,000 from the Air Quality Investment Fund (27)-Rule 1111 for South Coast AQMD's project cost-share into the Clean Shipping Technology Demonstration Special Revenue Fund (83) to retrofit an ocean-going vessel (OGV).
7. Authorize the Chairman to amend a contract with Volvo Group North America, LLC, for up to \$500,000 to demonstrate additional battery electric trucks for the Volvo LIGHTS project from the GHG Reduction Projects Special Revenue Fund (67).
8. Authorize the Chairman to execute the following contracts from the Advanced Technology, Outreach and Education Fund (17):
  - a. Volvo Group North America, LLC, for up to \$21,460,000 to deploy up to 70 Class 8 battery electric trucks and EV infrastructure for the Switch-On project;
  - b. Green Paradigm, Inc., for up to \$175,681 for administrative project implementation support for the Switch-On project; and
  - c. SunLine Transit Agency for up to \$6,111,601 to deploy up to five fuel cell transit buses.
9. Authorize the Executive Officer to execute an MOU with the Ports of Long Beach and Los Angeles to accept cost-share of up to \$300,000 for retrofit of an OGV.

10. Authorize the Chairman to execute a contract with MAN Energy Solutions USA Inc. for up to \$11,474,000 to retrofit an OGV from the Clean Shipping Technology Demonstration Special Revenue Fund (83).
11. Reimburse the General Fund up to \$1,061,620, comprising up to \$364,319 from the Advanced Technology, Outreach and Education Fund (17), \$540,700 from the Clean Shipping Technology Demonstration Special Revenue Fund (83) and \$156,601 from the Clean Fuels Program Fund (31), for administrative costs necessary to implement the above-mentioned projects.

Wayne Natri  
Executive Officer

MMM:NB:JI:PSK:MW:MH

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### **Background**

The 2016 AQMP identifies the need for NO<sub>x</sub> reductions in meeting upcoming national ambient air quality standards. On-road diesel trucks and ocean-going vessels (OGVs) are major contributors to NO<sub>x</sub> emissions in the South Coast Air Basin. Significant increases in NO<sub>x</sub>, PM and GHG emissions from these sources are expected due to increased demand in goods movement activities. Accelerating the deployment of zero emission Class 8 battery electric trucks to the Ports and freight handling facilities, demonstrating and potentially deploying lower-emitting technologies from OGVs serving the Ports and implementing zero emission buses will reduce NO<sub>x</sub> emissions. CARB has also adopted regulations requiring the manufacture and implementation of zero emission trucks and transit buses.

Staff submitted multiple applications to the U.S. EPA for Targeted Airshed Program grants, each for up to \$20 million, for deploying heavy-duty zero emission battery electric trucks, retrofitting Tier II OGVs and replacing CNG transit buses with zero emission transit buses. In June 2020, U.S. EPA notified staff that three of the five projects had been selected for \$37,321,301 in funding. In a separate action, U.S. EPA, using Clean Air Technology Initiative (CATI) funds, awarded an additional \$500,000 to a current battery electric project.

### Volvo LIGHTS Project

Volvo Group North America, LLC, (Volvo) has partnered with South Coast AQMD on the Volvo LIGHTS (Low Impact Green Heavy Transport Solutions) project to develop and demonstrate Class 8 battery electric trucks and off-road equipment and install charging infrastructure and solar. Based on the current incremental cost of battery electric trucks, additional funding is critical to enable the purchase of zero emission trucks to comply with CARB's Advanced Clean Trucks Regulation.

### Switch-On Project

The Switch-On project is the next phase of the Volvo LIGHTS project and will deploy commercial Class 8 battery electric trucks which have been certified by CARB for sale in California. This 70-truck deployment is one of the largest single deployments of commercial Class 8 battery electric trucks and will provide additional data on how these trucks perform in revenue service in drayage and freight applications. Volvo and the fleets will each provide cash and in-kind cost-share towards each truck.

### Ocean-Going Vessel Retrofit

OGVs are mainly regulated by the International Maritime Organization (IMO), with current requirements for vessels built after January 1, 2016 required to meet Tier III emission standards. Based on Port studies, few IMO Tier III vessels are expected until late 2030, so retrofit technologies are a promising strategy to achieve NOx reductions, especially since OGVs remain in service for 25 years or more, whereas building a new OGV requires significant capital investment. South Coast AQMD and MAN Energy Solutions USA Inc. (MAN) have initiated a retrofit project for Water-In-Fuel technology to lower NOx emissions and have identified other promising retrofit technologies, such as selective catalytic reduction (SCR), that can achieve IMO Tier III NOx levels on two-stroke, slow-speed diesel engines.

### Fuel Cell Transit Bus Deployment

SunLine Transit Agency provides transit services to the Coachella Valley, an ozone non-attainment area, including Eastern Coachella Valley, which is a Year 2 Community under South Coast AQMD's AB 617 Program. SunLine has recently commissioned their onsite renewable hydrogen fueling station at a 900 kg per day capacity, which is the largest onsite hydrogen generation station at any U.S. transit agency, and their existing fleet includes 20 zero emission transit buses (16 fuel cell and 4 battery electric transit buses). SunLine's goal is to accelerate the transition to a fully zero emission bus fleet by 2035 to comply with CARB's Innovative Clean Transit (ICT) regulation.

## **Proposal**

### Volvo LIGHTS Project

Volvo will produce and demonstrate additional production Class 8 battery electric trucks in their Volvo LIGHTS project utilizing funds from a U.S. EPA CATI Grant. Five pilot trucks have already been deployed to California through the LIGHTS project. These actions are to recognize revenue up to \$500,000 from the U.S. EPA FY 2020 Section 105 CATI Program into the GHG Reduction Projects Special Revenue Fund (67) and amend a contract with Volvo Group North America, LLC, for the Volvo LIGHTS project.

### Switch-On Project

The Switch-On project will deploy up to 70 commercial Class 8 battery electric trucks and EV infrastructure with up to five fleets located in the Inland Empire and the San Fernando Valley in the City of Los Angeles. The trucks will be owned by the fleets and will continue in commercial service beyond the initial data collection period of up to two years. The trucks will be available in various configurations including Class 7 and 8 rigid frame trucks, as well as Class 8 tractors from 65,000 to 80,000 lbs., depending on fleet needs. These trucks will be produced and deployed in several phases in 2021 and 2022.

In addition, through a competitive bid process, Green Paradigm, Inc., (formerly Clean Fuel Connection, Inc.) has been providing the South Coast AQMD with technical expertise and project implementation assistance on various projects with electric vehicles, charging and fueling infrastructure. Staff proposes to utilize their services similarly for the Switch-On project.

These actions are to: 1) recognize revenue up to \$20,000,000 into Advanced Technology, Outreach and Education Fund 17; 2) transfer up to \$2,000,000 from the Clean Fuels Program Fund (31) for South Coast AQMD's project cost-share into Fund (17); 3) execute contracts with Volvo Group North America, LLC, and Green Paradigm, Inc., for the Switch-On project; and 4) reimburse the General Fund up to \$364,319 from Fund 17 for project implementation support.

### Ocean-Going Vessel Retrofit

South Coast AQMD is partnering with MAN to retrofit an IMO Tier II OGV, which will be the first SCR retrofit of an older IMO Tier II OGV to address emission reductions and functionalities below 25% engine load conditions. MAN will design and oversee the manufacturing of the SCR based on the vessel's operational profiles for the main and auxiliary engines, with an SCR for each engine. The SCRs will be manufactured specifically for the vessel. Vessel selection is being finalized.

These actions are to: 1) recognize revenue up to \$11,414,700 from U.S. EPA FY 20 Targeted Airshed Grant Program and up to \$300,000 from the San Pedro Bay Ports' Technology Advancement Program into the Clean Shipping Technology Demonstration Special Revenue Fund (83); 2) transfer up to \$300,000 from the Air Quality Investment Fund (27)-Rule 1111 for South Coast AQMD's project cost-share into the Fund 83; 3) authorize the Executive Officer to execute an MOU with the Ports of Long Beach and Los Angeles to accept cost-share of up to \$300,000; 4) execute a contract with MAN for up to \$11,474,000; and 5) reimburse the General Fund up to \$540,700 from Fund 83 for project implementation support.

### Fuel Cell Transit Bus Deployment

South Coast AQMD will partner with SunLine Transit Agency to purchase and deliver up to five fuel cell transit buses. The newly upgraded hydrogen fueling station has a

capacity for 30 buses, with a total of 16 buses now utilizing the station. Buses will operate on several routes in disadvantaged communities and replace older model year CNG transit buses. SunLine expects to operate up to five fuel cell transit buses for their 12-year equipment lifetime.

These actions are to: 1) recognize revenue of up to \$5,906,601 from the U.S. EPA FY 20 Targeted Airshed Grant Program into the Advanced Technology, Outreach and Education Fund (17); 2) transfer up to \$205,000 from the Clean Fuels Program Fund (31) into Fund 17; 3) execute a contract with SunLine for up to \$6,111,601 to deploy up to five fuel cell transit buses; and 4) reimburse the General Fund up to \$156,601 from the Clean Fuels Program Fund (31) for project implementation support.

### **Sole Source Justification**

Section VIII.B.3 of the Procurement Policy and Procedure identifies four major provisions under which contracts funded in whole or in part with federal funds may be made as a sole source award. The request for sole source awards for the Volvo, Green Paradigm, MAN and SunLine contracts are made under the provisions B.3.c, which states the awarding federal agency or pass-through entity expressly authorizes non-competitive proposals in response to a written request from the non-Federal entity.

### **Benefits to South Coast AQMD**

Projects to support development and demonstration of battery electric trucks, freight handling equipment and infrastructure are included in the *Technology Advancement Office Clean Fuels Program 2020 Plan Update* under the categories of “Develop and Demonstrate Electric and Hybrid Vehicles,” “Develop and Demonstrate Electric Container Transport Technologies,” and “Develop and Demonstrate Electric Charging Infrastructure.” These projects are to develop and demonstrate zero emission heavy-duty trucks, freight handling equipment and infrastructure. Successful demonstrations of such projects will contribute to the attainment of national ambient air quality standards in the South Coast Air Basin by eliminating PM and NOx emissions from replaced diesel heavy-duty trucks and off-road freight handling equipment.

Projects to support development and demonstration of OGVs are included in the *Technology Advancement Office Clean Fuels Program 2020 Plan Update* under the categories of “Engine Systems/Technologies.” This project is to retrofit an IMO Tier II OGV with SCR, an exhaust gas treatment capable of reducing NOx emission by at least 75% from actual Tier II OGV emissions. Successful development and demonstration of SCR retrofit technology for Tier II OGVs can provide nearer-term NOx reductions until more IMO Tier III vessels are deployed closer to 2030.

Projects to support deployment of fuel cell transit buses and infrastructure are included in the *Technology Advancement Office Clean Fuels Program 2020 Plan Update* under the categories of “Hydrogen/Mobile Fuel Cell Technologies and Infrastructure.” This

project is to deploy zero emission fuel cell transit buses and infrastructure. Successful deployment of fuel cell transit buses will contribute to the attainment of national ambient air quality standards in the South Coast Air Basin by eliminating PM and NOx emissions from replaced CNG transit buses. These projects also assist transit agencies to transition towards zero emission fleets and comply with CARB’s ICT regulation.

**Resource Impacts**

Volvo LIGHTS Project

The contract amendment to demonstrate additional trucks under the Volvo LIGHTS project will not exceed \$46,091,592 from the GHG Reduction Projects Special Revenue Fund (67). This includes previously recognized CARB funding of \$41,591,592, \$4,000,000 in South Coast AQMD cost-share previously approved by the Board from the Clean Fuels Program Fund (31), and the \$500,000 in U.S. EPA CATI funding being recognized in this Board letter. Funding for this project is detailed in the table below.

**Proposed Volvo LIGHTS Project Costs**

Source	Amount	Percent
CARB	\$41,591,592	45%
Volvo and partners (cash & in-kind)	\$45,855,308	50%
South Coast AQMD (approved Nov 2018)	\$4,000,000	4%
U.S. EPA CATI (new)	\$500,000	1%
<b>Total</b>	<b>\$91,946,900</b>	<b>100%</b>

Switch-On Project

The contracts with Volvo and Green Paradigm, Inc., will not exceed \$21,460,000 and \$175,681, respectively, for the Switch-On project from the Advanced Technology, Outreach and Education Fund (17). This includes U.S. EPA funding of \$20,000,000, of which \$540,000 is allocated towards project implementation support for South Coast AQMD staff time and contractual support, and \$2,000,000 in South Coast AQMD cost-share from the Clean Fuels Program Fund (31). Additional co-funding is actively being sought by staff, Volvo and its project partners through multiple sources including the Mobile Source Air Pollution Reduction Review Committee (MSRC), utility charger rebate programs, CEC and other funding sources. South Coast AQMD’s cost-share from the Clean Fuels Program Fund (31) may decrease if additional co-funding is realized. Any unspent funds will be transferred back to the Clean Fuels Program Fund (31) after project completion. Reimbursement of administrative costs will not exceed \$364,319 from Fund 17. Funding for this project is detailed in the table below:



**Proposed Switch-On Project Costs**

<b>Source</b>	<b>Amount</b>	<b>Percent</b>
U.S. EPA FY 19 Targeted Airshed Grant	\$19,460,000	62%
Volvo and fleets (cash & in-kind)	\$10,080,000	32%
South Coast AQMD ( <i>requested</i> )	\$2,000,000	6%
<b>Total</b>	<b>\$31,540,000</b>	<b>100%</b>

Ocean-Going Vessel Retrofit

The contract with MAN for the retrofit of an OGV will not exceed \$11,474,000 from the Clean Shipping Technology Demonstration Special Revenue Fund (83). This includes U.S. EPA FY 20 Targeted Airshed Grant funding of \$11,414,700, of which \$540,700 is for project implementation support, as well as \$300,000 cost-share from the San Pedro Bay Ports and \$300,000 in South Coast AQMD cost-share from the Air Quality Investment Fund (27). Funding for this project is detailed in the table below:

**Proposed OGV Retrofit Project Costs**

<b>Source</b>	<b>Amount</b>	<b>Percent</b>
U.S. EPA FY 20 Targeted Airshed	\$10,874,000	94.0%
San Pedro Bay Ports	\$300,000	2.5%
MAN (in-kind)	\$100,000	1.0%
South Coast AQMD ( <i>requested</i> )	\$300,000	2.5%
<b>Total</b>	<b>\$11,574,000</b>	<b>100%</b>

Fuel Cell Transit Bus Deployment

The contract with SunLine for fuel cell transit buses will not exceed \$6,111,601 from the Advanced Technology, Outreach and Education Fund (17). This includes U.S. EPA funding of \$5,906,601 and \$205,000 in South Coast AQMD cost-share from the Clean Fuels Program Fund (31). Funding for this project is detailed in the table below:

**Proposed Fuel Cell Transit Bus Project Costs**

<b>Source</b>	<b>Amount</b>	<b>Percent</b>
U.S. EPA FY 20 Targeted Airshed	\$5,906,601	85%
SunLine Transit Agency	\$806,204	12%
South Coast AQMD ( <i>requested</i> )	\$205,000	3%
<b>Total</b>	<b>\$6,917,805</b>	<b>100%</b>

Sufficient funds will be available to execute the Volvo, Green Paradigm, Inc., MAN, and SunLine contracts in the GHG Reduction Projects Special Revenue Fund (67), Advanced Technology, Outreach and Education Fund (17) and Clean Shipping Technology Demonstration Special Revenue Fund (83), once the U.S. EPA CATI and Targeted Airshed grant funds are recognized.

Sufficient funds are available in the Clean Fuels Program Fund (31). The Clean Fuels Program Fund was 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 revenue 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.

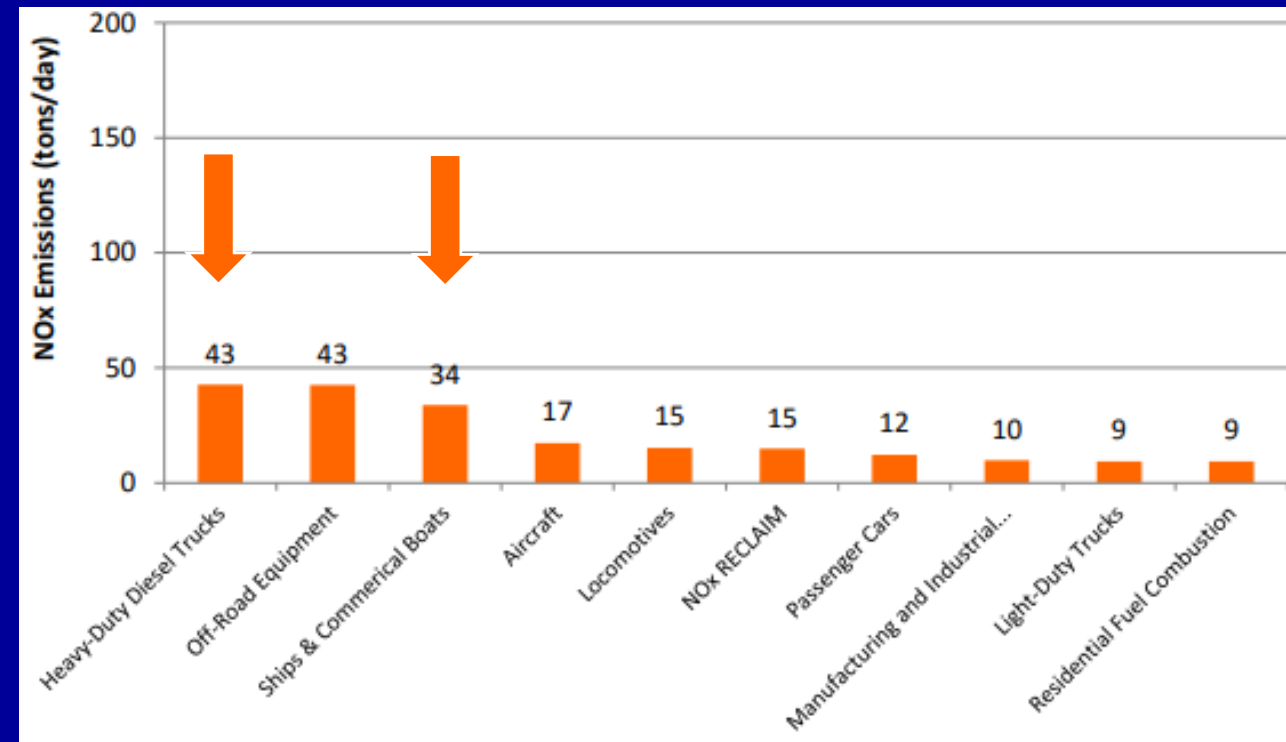
# Agenda Item #4

Patricia Kwon

Recognize Revenue, Transfer Funds,  
Amend and Execute Contracts,  
and Reimburse General Fund

# Background

- Top NOx emissions categories in 2023: Heavy-Duty Diesel Trucks and Ocean-Going Vessels (2016 AQMP)
- In May/June 2020, South Coast AQMD awarded four U.S. EPA grants totaling \$37.8M:
  - \$20.5M for Volvo Class 8 battery electric trucks
  - \$11.4M for ocean-going vessel retrofit
  - \$5.9M for fuel cell transit buses



# Background – Volvo LIGHTS

- Develop and demonstrate Class 8 battery electric trucks
- Through Volvo LIGHTS project:
  - 5 pilot trucks deployed in South Coast
  - 3 pilot tractors and 15 production trucks to be deployed in 2020
  - Charging infrastructure, battery electric off-road equipment, and solar at fleets
  - Applied for certification for sale in California
  - Drive down price of battery electric trucks





# Proposal – Volvo LIGHTS

- Demonstrate additional Volvo LIGHTS trucks utilizing CATI funds
- Deploy at freight/logistics facilities in Inland Empire
- Available for rental/leasing by fleets at Volvo dealerships



Volvo battery electric trucks at DHE in Ontario

# Proposed Project Costs – Volvo LIGHTS

<b>Funding Source</b>	<b>Amount</b>	<b>Percent</b>
CARB <i>(recognized Nov 2018)</i>	\$41,591,592	45
Volvo and partners	\$45,855,308	50
South Coast AQMD <i>(approved Nov 2018)</i>	\$ 4,000,000	4
U.S. EPA FY 20 CATI	\$ 500,000	1
<b>Total</b>	<b>\$91,946,900</b>	<b>100%</b>

# Background – Switch-On

- Next phase of Volvo LIGHTS project
- Certified by CARB
- Largest single commercial truck deployment
- Additional performance data in drayage and freight applications
- Volvo and fleets provide cash and in-kind cost share





# Proposal – Switch-On

- Deploy 70 commercial Class 8 battery electric trucks in 2021-2022
- Up to five fleets in Inland Empire and San Fernando Valley in City of Los Angeles
- Data collection up to two years
- Trucks owned by fleets and in commercial service
- Green Paradigm, Inc., with technical expertise and past experience on EV and charging infrastructure, will provide project implementation assistance



NFI fleet in Chino is demonstrating Volvo LIGHTS trucks and will deploy trucks as part of Switch-On project



Volvo trucks will be serviced at TEC Fontana and La Mirada dealerships

# Proposed Project Costs – Switch-On

<b>Funding Source</b>	<b>Amount</b>	<b>Percent</b>
U.S. EPA FY 19 TAG	\$19,460,000	62
Volvo and fleets	\$10,080,000	32
South Coast AQMD <i>(requested)</i>	\$ 2,000,000	6
<b>Total</b>	<b>\$31,540,000</b>	<b>100%</b>

# Background - MAN

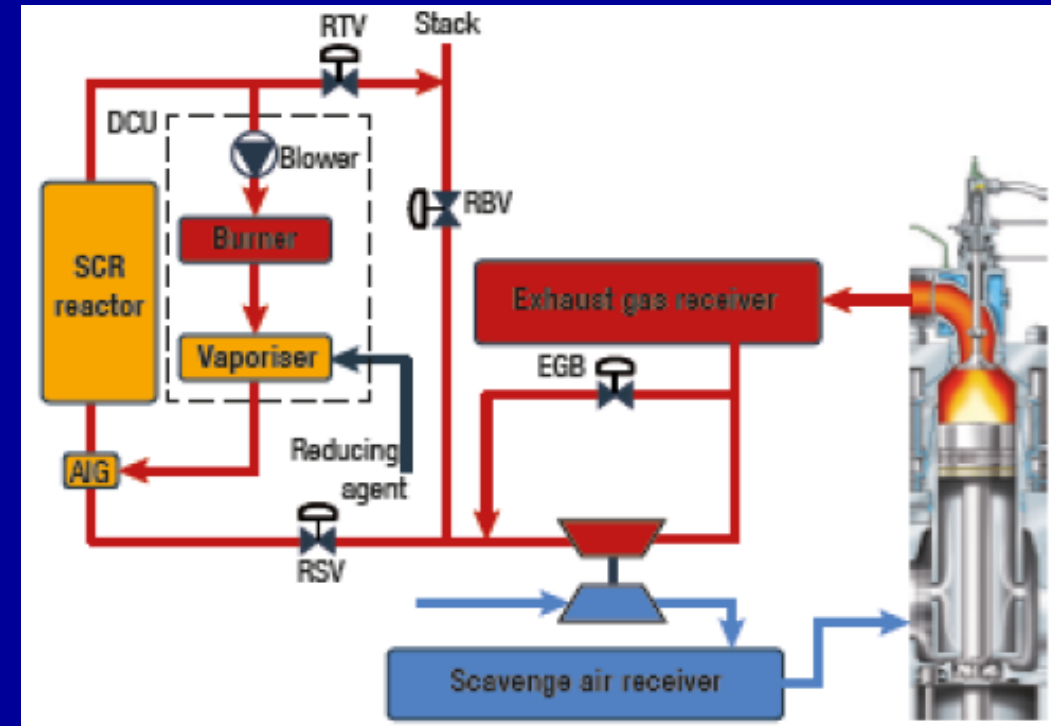
- MAN, one of largest marine vessel manufacturers, will develop selective catalytic reduction (SCR) retrofit technology
- Few IMO\* Tier II vessels expected until 2030
- SCR most suitable retrofit option to achieve significant NOx reductions for older vessels
- Collaborating with MAN on another OGV project

\* (International Maritime Operation)



# Proposal - MAN

- Retrofit IMO Tier II OGV
- Address emission reductions and SCR functionalities <25% engine load conditions
- Design and oversee manufacturing of SCR based on vessel operation profiles for main and auxiliary engines
- SCR custom manufactured for each vessel
- Vessel selection being finalized



# Proposed Project Costs - MAN

<b>Funding Source</b>	<b>Amount</b>	<b>Percent</b>
U.S. EPA FY 20 TAG	\$10,874,000	94
San Pedro Bay Ports	\$ 300,000	2.5
MAN (in-kind)	\$ 100,000	1
South Coast AQMD <i>(requested)</i>	\$ 300,000	2.5
<b>Total</b>	<b>\$11,574,000</b>	<b>100%</b>



# Background - SunLine

- Existing fleet of 16 fuel cell and 4 battery electric buses
- Newly upgraded 900 kg/day hydrogen station
- SunLine's goal is to be 100% zero emission fleet by 2035
- Started West Coast Center of Excellence in Zero Emission Technology



SunLine Transit West Coast Center of Excellence in Zero Emission Technology

# Proposal - SunLine

- Build and deploy five fuel cell transit buses
- Station has capacity for 30 buses
- Eastern Coachella Valley designated as AB 617 Year 2 community
- Buses operate on routes in DACs
- Replace older model year CNG buses
- SunLine expects to operate buses for 12 year equipment lifetime



# Proposed Project Costs - SunLine

<b>Funding Source</b>	<b>Amount</b>	<b>Percent</b>
U.S. EPA (TAG)	\$5,906,601	85
SunLine	\$ 806,204	12
South Coast AQMD <i>(requested)</i>	\$ 205,000	3
<b>Total</b>	<b>\$6,917,805</b>	<b>100%</b>

\*



# Recommended Actions

- Recognize revenue, upon receipt, of up to \$500,000 from U.S. EPA FY 20 Section 105 Clean Air Technology Initiative (CATI) Program into GHG Reduction Projects Special Revenue Fund (67) to demonstrate trucks for Volvo LIGHTS Project
- Recognize revenue, upon receipt, into Advanced Technology, Outreach and Education Fund (17):
  - Up to \$20,000,000 to deploy 70 trucks for Volvo Switch-On project; and
  - Up to \$5,906,601 to deploy five fuel cell transit buses.

# Recommended Actions (cont'd)

- Recognize revenue, upon receipt, into Clean Shipping Technology Demonstration Special Revenue Fund (83):
  - Up to \$11,414,700 to develop and demonstrate retrofit technology for an ocean-going vessel; and
  - Up to \$300,000 from San Pedro Bay Ports' Technology Advancement Program.
- Transfer from Clean Fuels Fund (31) for South Coast AQMD's cost-share to Advanced Technology, Outreach and Education Fund (17):
  - Up to \$2,000,000 to deploy battery electric trucks and infrastructure for Volvo Switch-On project; and
  - Up to \$205,000 to deploy fuel cell transit buses.

# Recommended Actions (cont'd)

- Transfer any unspent funds from Advanced Technology, Outreach and Education Fund (17) to Clean Fuels Fund (31) upon completion
- Transfer up to \$300,000 from Air Quality Investment Fund (27)- Rule 1111 for South Coast AQMD cost-share into Clean Shipping Technology Demonstration Special Revenue Fund (83)
- Amend contract with Volvo Group North America, LLC for \$500,000 for Volvo LIGHTS project from GHG Reduction Projects Special Revenue Fund (67)

# Recommended Actions (cont'd)

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- Execute contracts from Advanced Technology, Outreach and Education Fund (17):
  - Volvo Group North America, LLC for \$21,460,000 for Switch-On project;
  - Green Paradigm, Inc. for \$175,681 for administrative project implementation support for Switch-On project; and
  - SunLine Transit Agency for \$6,111,601 to deploy fuel cell transit buses.
- Execute MOU with Ports of Long Beach and Los Angeles to accept cost share of up to \$300,000 to retrofit OGV

# Recommended Actions (cont'd)

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- Execute contract with MAN Energy Solutions USA, Inc. for \$11,474,000 to retrofit OGV from Clean Shipping Technology Demonstration Special Revenue Fund (83)
- Reimburse General Fund for staff time to implement projects:
  - Up to \$364,319 from Advanced Technology, Outreach and Education Fund (17);
  - Up to \$540,700 from Clean Shipping Technology Demonstration Special Revenue Fund (83); and
  - Up to \$156,601 from Clean Fuels Program Fund (31)