



South Coast Air Quality Management District

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

LOCAL GOVERNMENT & SMALL BUSINESS ASSISTANCE ADVISORY GROUP MEETING

Advisory Group Members

Mayor Carlos Rodriguez, LGSBA Chair (Board Member)
Senator Vanessa Delgado (Board Member)
Supervisor Janice Rutherford (Board Member)
Felipe Aguirre
Council Member Rachele Arizmendi, City of Sierra Madre
Paul Avila, P.B.A. & Associates
Geoffrey Blake, Metal Finishers of Southern California
Todd Campbell, Clean Energy
LaVaughn Daniel, DancoEN
John DeWitt, JE DeWitt, Inc.
Bill LaMarr, California Small Business Alliance
Rita Loof, RadTech International
Eddie Marquez, Roofing Contractors Association
David Rothbart, Los Angeles County Sanitation Districts

Friday, June 10, 2022 ♦ 11:30 a.m.

Pursuant to Assembly Bill 361, a meeting of the South Coast Air Quality Management District Local Government & Small Business Advisory Group will only be conducted via videoconferencing and by telephone. Please follow the instructions below to join the meeting remotely.

ELECTRONIC PARTICIPATION (Instructions provided at bottom of the agenda)

Join Zoom Webinar Meeting – from PC or Laptop

<https://scagmd.zoom.us/j/92459924491>

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Teleconference Dial In

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One tap mobile

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**Audience will be allowed to provide public comment through Zoom connection or telephone.
PUBLIC COMMENT WILL STILL BE TAKEN**

Phone controls for participants: The following commands can be used on your phone's dial pad while in Zoom Webinar meeting:

- *6 - Toggle mute/unmute
- *9 - Raise hand

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 total for all items on the agenda.

CALL TO ORDER

1. Call to Order/Opening Remarks *Mayor Carlos Rodriguez*
(**No Motion Required**) *Committee Chair*

ACTION ITEM:

2. Approval of March 11, 2022 Meeting Minutes *Mayor Carlos Rodriguez*
(**Motion Required**) *Committee Chair*
[Attachment 1]

DISCUSSION ITEMS (Items 3 through 5):

3. Review of Follow-Up/Action Items *Derrick J. Alatorre*
Staff will review the follow-up/action items identified in the Deputy Executive Officer
previous meeting. Legislative, Public Affairs & Media
(**No Motion Required**)
4. 2022 Air Quality Management Plan (AQMP) Overview *Sarah Rees*
Staff will provide a brief summary of the overall process and Deputy Executive Officer
work completed to date on the 2022 AQMP. Planning, Rule Development &
(**No Motion Required**) *Implementation*
[Attachment 2]
5. Update on Technology Advancement Office Clean Fuels *Aaron Katzenstein*
Program, 2021 Annual Report and 2022 Clean Fuels Plan *Deputy Executive Officer*
Staff's presentation will describe the Clean Fuels Program, Science & Technology
outline the accomplishments made in 2021 and discuss the Advancement
Clean Fuels Plan for 2022.
(**No Motion Required**)
[Attachment 3]

OTHER MATTERS:

6. Other Business

Any member of this body, 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)

7. 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 Local Government and Small Business Assistance Committee's authority that is not on the agenda. Speakers may be limited to three (3) minutes each.

8. **Next Meeting Date** - Friday, August 12, 2022 at 11:30 a.m.

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 Van Doan at (909) 396-3117 or send the request to kdoan@aqmd.gov.

Americans with Disabilities Act and Language Accessibility

Disability and language-related accommodations can be requested to allow participation in the Local Government and Small Business Assistance Advisory Group 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 the South Coast AQMD. Please contact Van Doan at (909) 396-3117 from 7:00 a.m. to 5:30 p.m., Tuesday through Friday, or send the request to kdoan@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 Chair 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 “**Participants**” button on the bottom of the screen.
- A list of participants will appear on the right side of the screen. At the bottom of the list, please click on the grey “**Raise Hand**” button.
- 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 “**Participants**” button on the bottom of your screen.
- A new screen will pop up with the list of participants. Look for the “**Raise Hand**” button on the screen and click the button.
- 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.



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DRAFT

LOCAL GOVERNMENT & SMALL BUSINESS ASSISTANCE ADVISORY GROUP FRIDAY, MARCH 11, 2022 MEETING MINUTES

MEMBERS PRESENT:

Mayor Carlos Rodriguez, LGSBA Chair (Board Member)
Supervisor Janice Rutherford (Board Member)
Felipe Aguirre
Council Member Rachele Arizmendi, City of Sierra Madre
Paul Avila, P.B.A. & Associates
Todd Campbell, Clean Energy
John DeWitt, JE DeWitt, Inc.
Bill LaMarr, California Small Business Alliance
Rita Loof, RadTech International
Eddie Marquez, Roofing Contractors Association
David Rothbart, Los Angeles County Sanitation Districts

MEMBERS ABSENT:

Geoffrey Blake, Metal Finishers of Southern California
LaVaughn Daniel, DancoEN

OTHERS PRESENT:

Mark Abramowitz
Troy Cowan, IUVA
Ramine Cromartie
Harvey Eder
Matt Holder, Board Member Consultant (*Rodriguez*)
Mike Idacavage, RadTech International
Debra Mendelson, Board Member Consultant (*Rutherford*)
Rock Reiser
Mark Taylor, Board Member Consultant (*Rutherford*)

SOUTH COAST AQMD STAFF:

Susan Nakamura, Chief Operating Officer
Derrick Alatorre, Deputy Executive Officer
Sarah Rees, Deputy Executive Officer
Jason Aspell, Deputy Executive Officer
Lisa Tanaka O'Malley, Assistant Deputy Executive Officer
Victor Yip, Assistant Deputy Executive Officer
Daphne Hsu, Principal Deputy District Counsel
Michael Morris, Planning & Rules Manager
Philip Crabbe III, Senior Public Affairs Manager

Denise Peralta-Gailey, Public Affairs Manager
Van Doan, Air Quality Specialist
Elaine Hills, Air Quality Specialist
Anthony Tang, Information Technology Supervisor
Paul Wright, Senior Information Technology Specialist

Agenda Item #1 – Call to Order/Opening Remarks

Chair Carlos Rodriguez called the meeting to order at 11:32 a.m.

Agenda Item #2 – Approval of February 11, 2022 Meeting Minutes

Chair Rodriguez called for approval of the February 11, 2022 meeting minutes.

No public comment.

Motion to approve minutes made by Mr. Todd Campbell; seconded by Mr. Eddie Marquez; unanimously approved.

Ayes: Aguirre, Arizmendi, Campbell, LaMarr, Loof, Marquez, Rothbart, Rutherford, Rodriguez

Noes: None

Abstain: None

Absent: Avila (during voting), Blake, Daniel, DeWitt (during voting)

Agenda Item #3 – Review of Follow-Up/Action Items

Mr. Derrick Alatorre reviewed the follow-up and action items from the previous meeting. Mr. Alatorre indicated that staff is reaching out to California Air Resources Board (CARB) regarding old engine scrapping guidelines and that Mr. Wayne Nastri will be discussing potential reinstatement of Home Rule Advisory Group with Chair Ben Benoit.

No public comment.

Agenda Item #4 – Information on Ultraviolet (UV)/Electron Beam (EB)/Light-Emitting Diode (LED) Technology and Disinfection Systems

Mr. Mike Idacavage and Mr. Troy Cowan, representatives from RadTech International and IUVA, respectively, provided information on recent technological developments for UV/EB/LED technology and disinfection systems.

Mr. Harvey Eder commented on high-efficiency particulate air filters and the integration of small businesses working on control technologies.

Supervisor Janice Rutherford referenced slide #7 and asked for clarification on regulatory concerns on VOC emissions “in most cases.” Ms. Rita Loof stated since they are global companies, a claim that all coatings produced contain zero VOC could not be made and has agreed with the limit of less than 50 grams per liter (g/L). Typically, a photo initiator is added to a conventional solvent UV system to cure the coatings and this portion does not emit VOCs. However, the solvent UV systems do emit VOCs and are being regulated.

Mr. Michael Morris stated that there was a previous request for a full exemption from Rule 1115 – Motor Vehicle Assembly Line Coating Operations for all UV products. He explained that the concern is that there are VOC emissions from some solvent systems, which need to be properly regulated. Mr. Jason Aspell stated that in addition to product VOC contents, the total VOC emissions are important for compliance evaluation. Since photo initiators decrease coatings curing time, there could potentially be an increase throughput, leading to higher VOC emissions.

Mr. Bill LaMarr commented that there are many different types of photo initiators with different properties and understood staff's concerns. Mr. LaMarr referenced slide #12 and commented on ink types. Ms. Loof commented that she has not seen coatings containing toxic and hazardous air pollutants and would not support exemptions for materials that do. Chair Rodriguez inquired how the limit of 50 g/L relates to exemption thresholds. Mr. Aspell stated that there are two different limits: coating VOC contents and daily total usage. The 50 g/L is the VOC content and there is a 6 gallon per day usage limit for permitting exemption.

Ms. Susan Nakamura stated that two topics were previously brought up by RadTech: exemption from permitting and exemption for UV/EB coatings. Rule 1401 evaluations are completed through permitting, which provides an opportunity for review of the materials and its use. In 2014, as part of the amendment process for Rule 1130 – Graphic Arts, there was evaluation of UV/EB inks, coatings, and solvents and staff found that there were some materials being used containing greater than 50 g/L VOC. Chair Rodriguez asked for confirmation that 6 gallons per day is the exemption limit. Ms. Nakamura responded yes and both the VOC content and usage have been incorporated into several exemptions, ensuring not to exceed 1 pound per day of emissions. Ms. Loof clarified that the solvent process that is part of any coating operation is associated with clean-up materials, which are subject to Rule 1171.

Agenda Item #5 – Updates on the 2022 State Legislative Priorities

Mr. Philip Crabbe III provided updates on the 2022 State legislative priorities.

Mr. Eder commented on exposure to toxic materials and that particulate matter 2.5 (PM_{2.5}) is a criteria air contaminant, but not listed as a toxic air contaminant under the Clean Air Act.

Mr. LaMarr requested documents referenced in Mr. Crabbe's presentation on Assembly Bill (AB) 617 and relevant agencies and AB 8. Mr. LaMarr mentioned that CARB is in the process of developing zero-emission forklift rule and asked if South Coast AQMD coordinates with CARB. Dr. Sarah Rees replied that South Coast AQMD coordinates with CARB on incentive programs and upcoming regulatory developments.

Action Item #1: Provide advisory group with AB 617 and AB 8 information.

Mr. David Rothbart mentioned the 2016 Air Quality Management Plan (AQMP) and asked if South Coast AQMD considers cost-effectiveness. Mr. Crabbe replied that all options are considered to determine which are most cost-effective and would bring the soonest emission reductions. Dr. Rees stated there is an obligation to take all feasible emission reductions as soon as possible; part of that is utilizing the incentive funds available in the most cost-effective way by supporting near-zero emission vehicles and promoting zero-emission technology.

Mr. Paul Avila asked whether replacing engines or purchasing new vehicles would be more cost-effective. Dr. Rees replied that currently, near-zero emission vehicles are more cost-effective, but both near-zero and zero-emission technologies should be considered.

Agenda Item #6 – Other Business

Council Member Rachelle Arizmendi asked if future meetings will continue to be held virtually. Ms. Nakamura stated that we are transitioning to a hybrid format.

Agenda Item #7 – Public Comment

Mr. Eder expressed opposition to Dr. Rees' comment on near-zero emission technology and indicated that zero-emission technology is available and should be used now.

Agenda Item #8 – Next Meeting Date

The next regular LGSBA Advisory Group meeting is scheduled for Friday, April 8, 2022 at 11:30 a.m.

Adjournment

The meeting adjourned at 12:59 p.m.



DRAFT 2022 AIR QUALITY MANAGEMENT PLAN

Local Government & Small Business Assistance Advisory Group

June 10, 2022

Sarah Rees, Ph.D.
Deputy Executive Officer
South Coast Air Quality Management District



1

South Coast AQMD

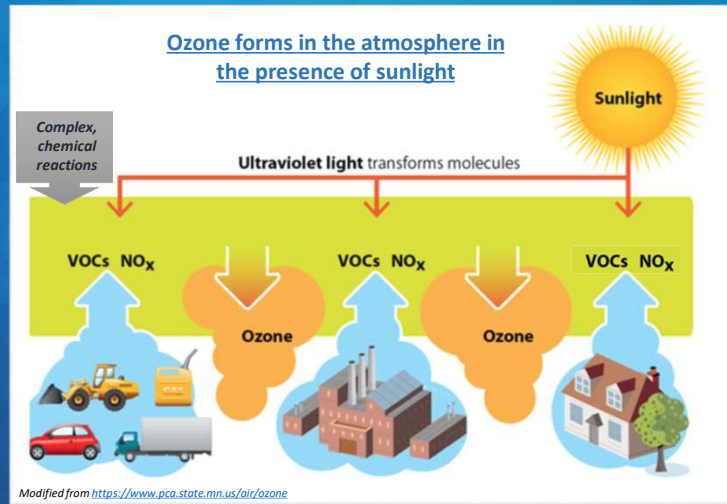
Cleaning The Air That We Breathe...

- Local air pollution control agency
 - Largest of the 35 local air agencies in CA and in the U.S.
 - 10,743 square miles
 - 17 million residents
- Key Responsibilities
 - Regulate emissions from stationary sources
 - Develop and implement plans to meet national ambient air quality standards
 - Permit and inspect 28,400 affected businesses
 - Administer over \$200 million of incentive funding annually



2

What is Ozone



3

Health Impacts of Ozone and PM2.5

Health Impacts of Ozone Exposure



Coughing
and Sore
Throat



Aggravation of
Emphysema
and Chronic
Bronchitis



Increased
Susceptibility to
Infection



Airway Inflammation
and Damage



Asthma Attacks

- The pollutants that form ozone also increase PM2.5 pollution
- PM2.5 can cause **premature death** in addition to other serious health effects

4

Our Challenge

Our region has historically suffered from some of the worst air quality in the United States



Los Angeles 2017



Los Angeles c. 1950

We have made significant progress, but still suffer from poor air quality

- Worst ozone (smog) in the country
- Second-worst fine particulate matter (PM_{2.5})

5

National Ambient Air Quality Standards*



U.S. EPA sets health-based standards for the criteria pollutants

Areas that fail to meet standards must develop plans to meet the standards by specific timelines

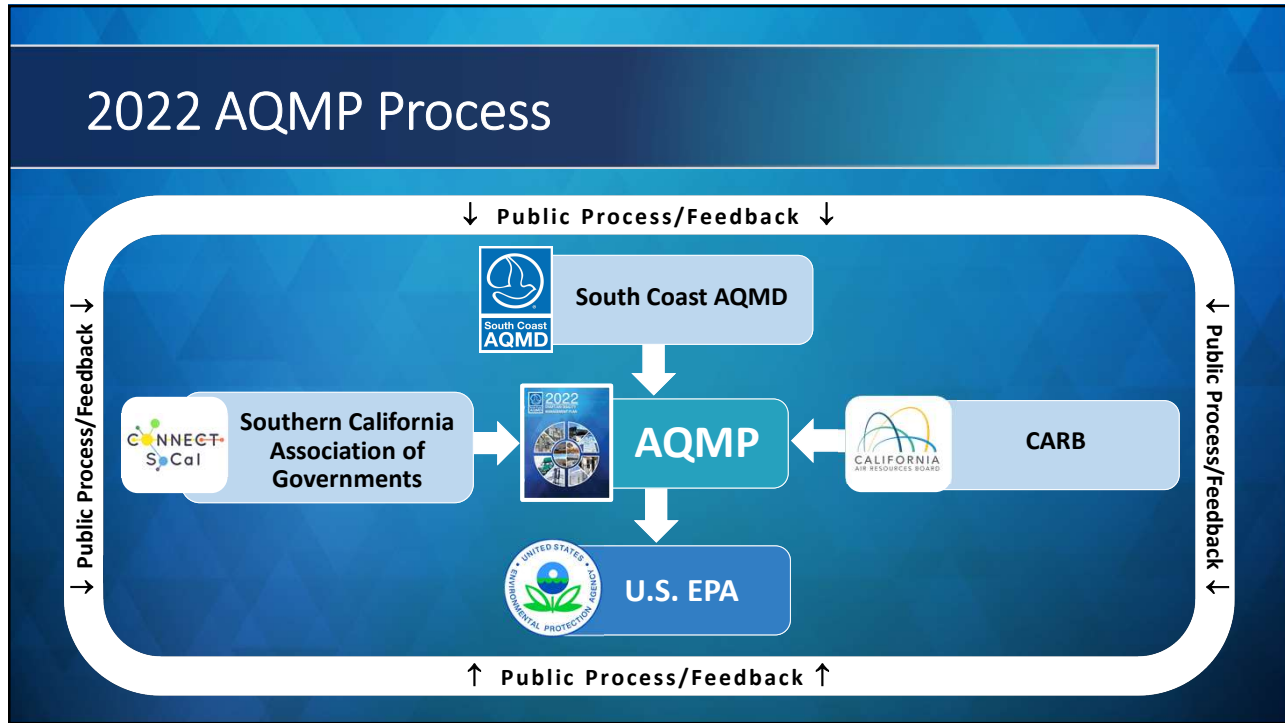
Areas that ultimately fail to meet the standards by the given timeline are potentially subject to sanctions and draconian federal regulations

The latest standard was set as 70 ppb for 8-hour ozone in 2015

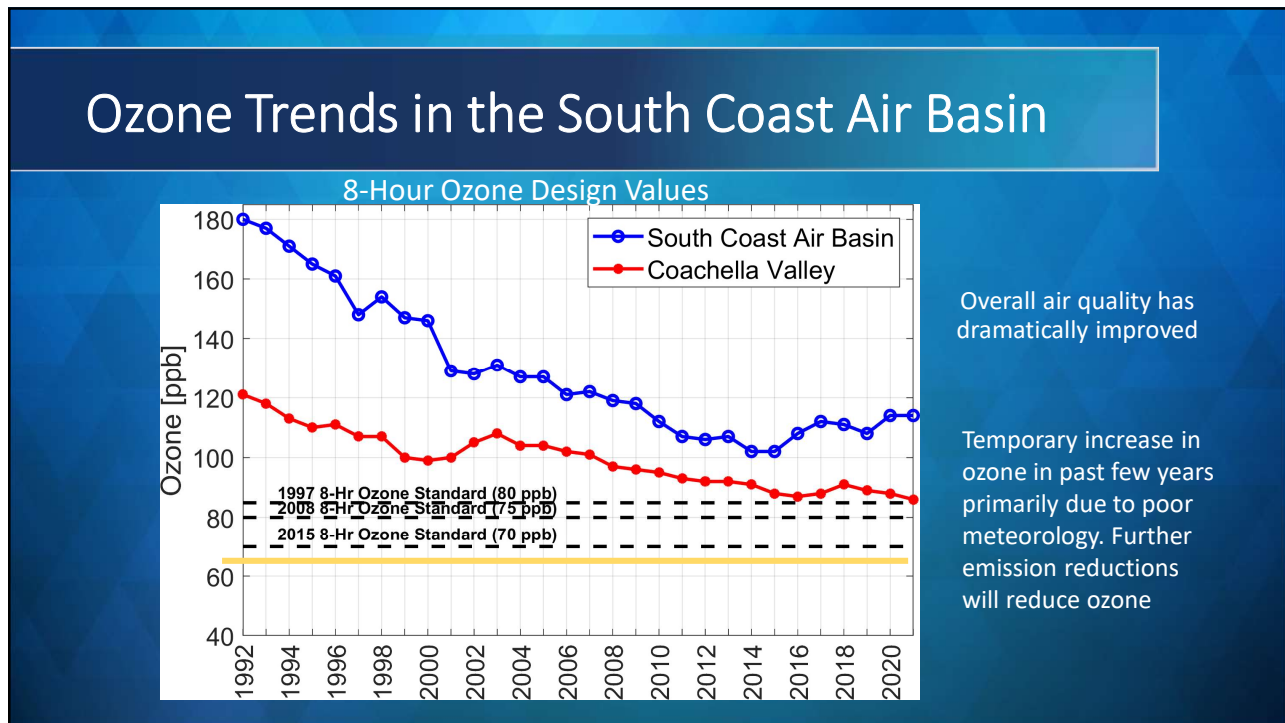
2022 AQMP addresses strategy to meet the ozone standard by 2037

* NAAQS cover ozone, particulate matter, lead, carbon monoxide, sulfur dioxide, and nitrogen dioxide

6



7

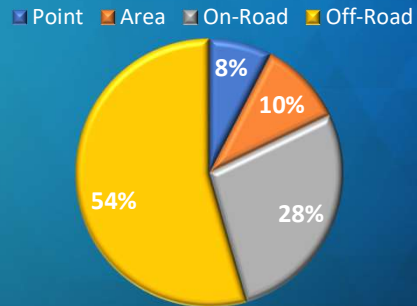


8

Key Pollutants for Ozone Attainment

- NOx reduction is key to attain ozone standards
- Limited VOC reductions will also improve air quality

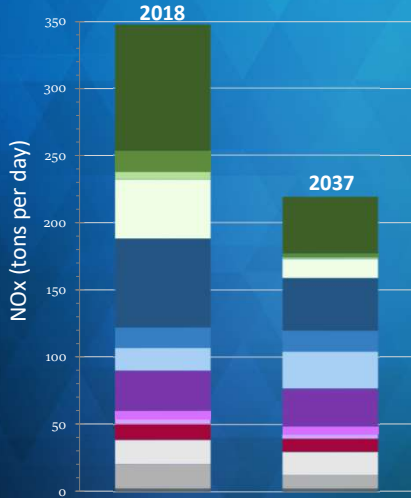
Where NOx Emissions Come From (2037)



9

NOx Reductions Needed for Attainment

Basin Total NOx Emissions in Tons Per Day



Total Reductions from 2018 to Attainment

Carrying Capacity is approximately 63 tons per day

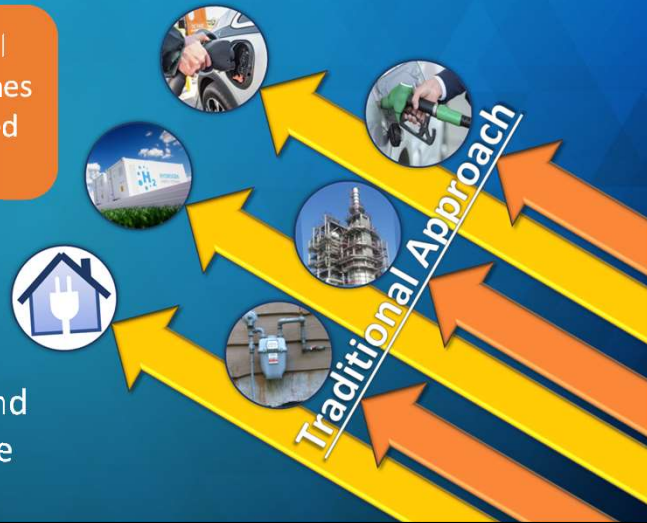
- Heavy-Duty Diesel Trucks
- Medium-Duty & Heavy-Duty Gas Trucks
- Buses
- Cars/Light-Duty Trucks/SUVs/Motorcycles
- Off-Road Equipment and Vehicles
- Locomotives
- Aircraft
- Ocean Going Vessels
- Commerical Harbor Craft
- Recreational Boats
- Residential Fuel Combustion
- Industrial/Commercial Fuel Combustion
- Larger Industrial Facilities
- Other Stationary

10

Air Quality Planning Approach Must Evolve

Traditional approach relies on additional tailpipe/exhaust stack controls, new engines technology, or fuel improvements tailored to individual use cases

These traditional approaches on already highly controlled sources cannot achieve additional $\approx 71\%$ reduction in the South Coast Basin and must be bypassed wherever possible



11

Key Considerations for a Zero Emissions Approach

- What does the pathway look like through time?



- Which fuels for which applications?

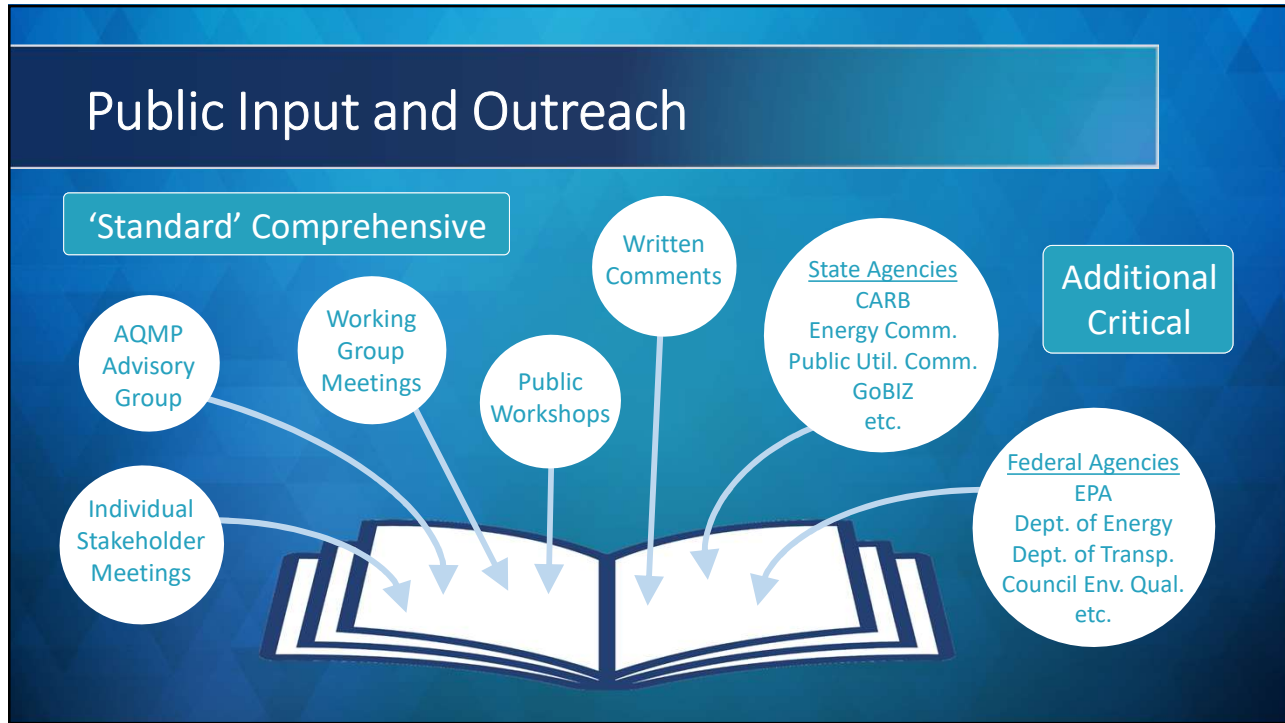


- How can this be made most affordable?

- Ensures adoption at scale, and available equitably



12



13

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2022 AQMP Interested Parties

14

Supporting Documents

The Draft AQMP and all supporting documents are available on the 2022 AQMP website:

<http://www.aqmd.gov/2022AQMP>



15

Submission of Documents or Comments

Please address questions, comments, documents, or other relevant information to:



Internet Submission: <https://forms.office.com/g/PV2q42uBjy>



Email: aqmp@aqmd.gov



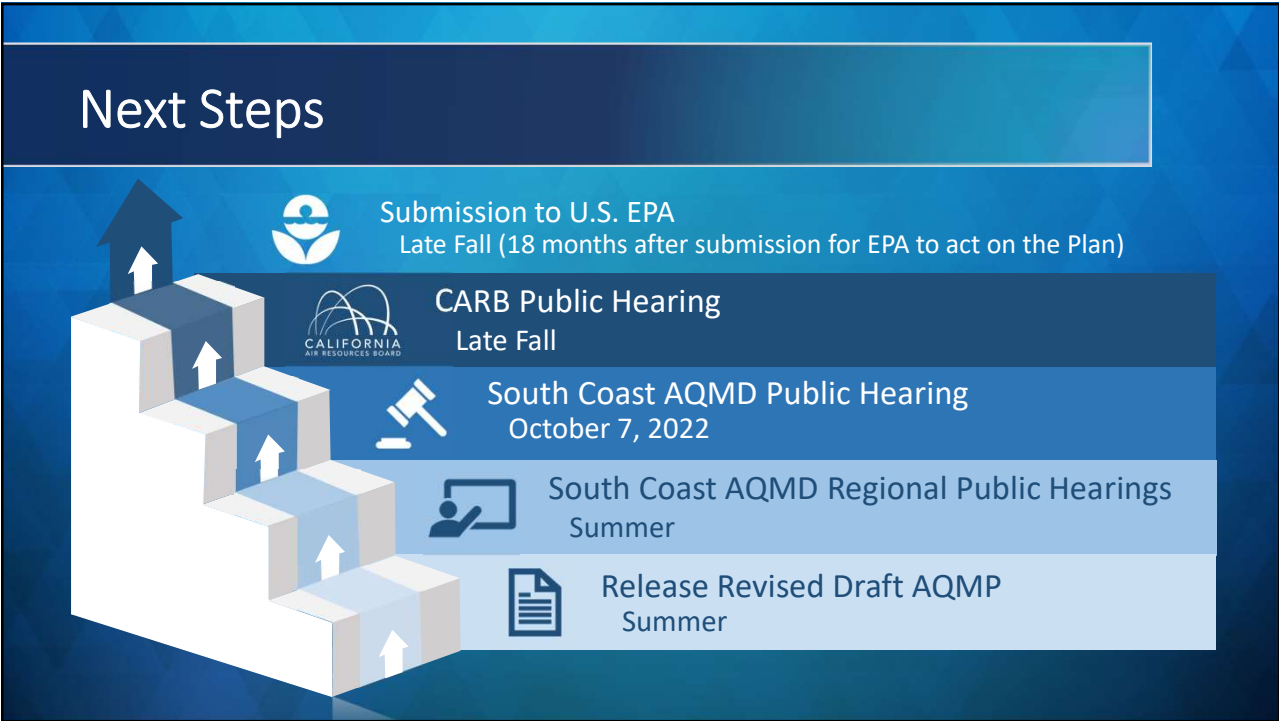
Sang-Mi Lee, Ph.D.
 Planning & Rules Manager
 South Coast AQMD
 21865 Copley Drive
 Diamond Bar, CA 91765

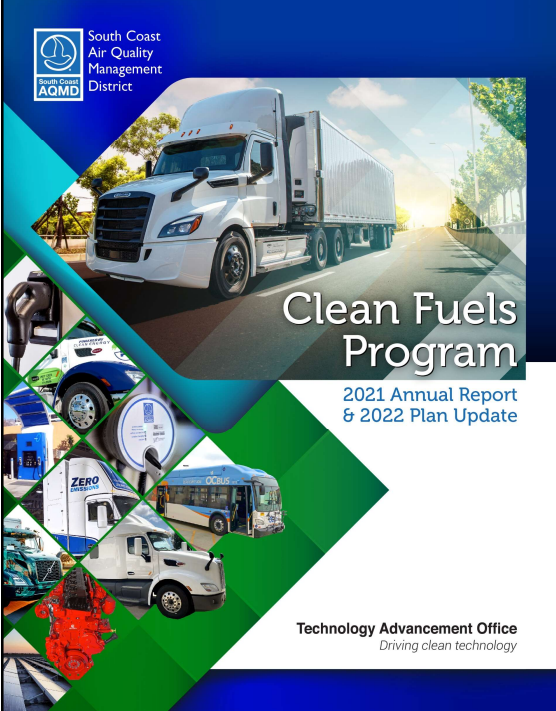


Telephone: (909) 396-3169

Responses to comments received by **June 21, 2022**

16





South Coast Air Quality Management District

Clean Fuels Program

2021 Annual Report & 2022 Plan Update

Technology Advancement Office
Driving clean technology

Local Government & Small Business Assistance Advisory Group
June 10, 2022

Aaron Katzenstein, Ph.D.
Deputy Executive Officer
Technology Advancement Office

1

Clean Fuels Program Fund

- Established 1988
- \$1 from DMV registrations
- From 1988 to 2020, the Clean Fuels Program leveraged \$231.6 million into \$1.14 billion in projects
- Historically Clean Fuels Program has leveraged each dollar funds with \$4 of outside investment
- Program works with public-private partnerships in conjunction with private industry, technology developers, academic institutions, research institutions and government agencies



2

Background

2021 Annual Report and 2022 Plan Update

- Annual Report on Clean Fuels Program (HSC 40448.5.1)
- Technology Advancement Plan (Update) (HSC 40448.5)
- 2022 Plan Update (draft) submitted to Technology Committee November 19, 2021
- Annual public hearing to approve Annual Report and adopt (final) Plan Update March, 4 2022 Governing Board
- Submit to Legislature by March 31 every year

3

3

Input and Feedback

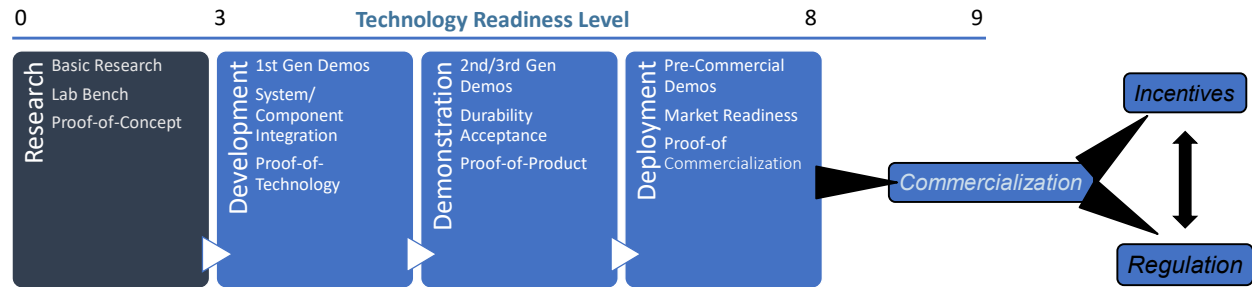
- **Advisory group meetings**
 - September 2021 and February 2022
 - Technology Advancement/Clean Fuels
 - Invited Technical Experts
- **Meetings - agencies, industry groups, technology providers and other stakeholders**
- **Symposiums and conferences**
 - ACT Expo Conference (August 2021)
 - ICEPAG Hydrogen: Fueling the Sustainable Future (September 2021)
 - DOE Annual Merit Reviews (June 2021)
- **Clean tech partnerships**
 - CNGVP
 - CaFCP



4

4

Clean Fuels Program - Overview



5

Emissions Benefit from Technology Development

South Coast AQMD Incentive Programs	NZE (# of Trucks)	ZE (# of Trucks)	NOx Reductions (tpy)
VW	47	93	28
Lower Emission School Bus	280	95	70
Proposition 1B	925	112	444
Carl Moyer	255	10	109
Total	1,507	310	651

6

Clean Fuels Program – Core Technologies

- Hydrogen/Fuel Cell Technologies and Infrastructure
- Engine Systems/Technologies (ultra-low emission NG HDVs)
- Electric/Hybrid Technologies and Infrastructure
- Infrastructure and Deployment (CNG/RNG)
- Stationary Clean Fuel Technologies
- Fuels/Emissions Studies
- Emission Control Technologies
- Health Impacts Studies
- Technology Assessment/Transfer and Outreach



7

2021 – Key Funding Partners

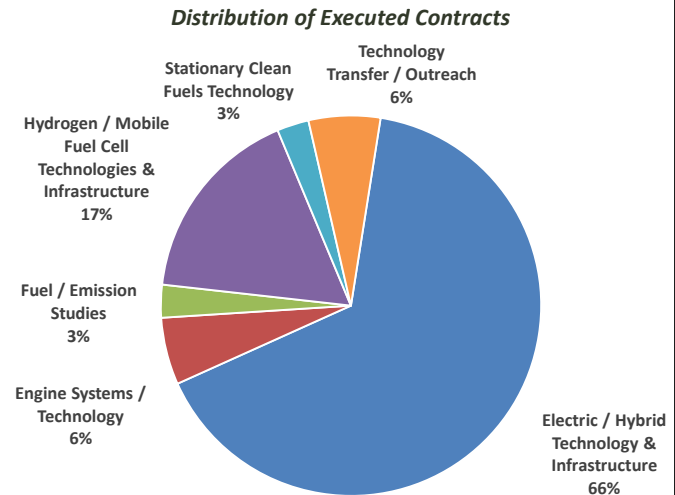
Total = \$53M



8

CY 2021 Accomplishments

- Clean Fuels Program executed 19 new projects or studies and modified 5 continuing contracts
- Sponsored research, development, demonstration and deployment (RD³) projects
 - Technology assessment and transfer contracts for alternative and clean fuel technologies
- Funded \$10.6M, with total project costs of \$253M
 - \$253M includes coordinated funding from other governmental agencies, private sector, academia and research institutions
 - \$10.6M includes approximately \$4.3M recognized into the Clean Fuels Fund to facilitate project administration by the Clean Fuels Program



9

2021 Key Contracts Executed

- POLB START Zero Emissions Operations
- POLA Shore 2 Store Zero Emission Freight
- SunLine Fuel Cell Transit Buses
- Volvo Switch-On Battery Electric Vehicles
- DTNA Zero Emission Electric Delivery Trucks
- UCR Study of E15 Gasoline Fuel Effects



FCET Fueling @ H2 Station



SunLine Fuel Cell Buses



Volvo VNR Electric Truck

10

2021 Key Projects Completed

- Electric/Hybrid Technologies
 - Zero Emission Fuel Cell Electric Buses
- Hydrogen/Fuel Cell Technologies and Infrastructure
 - Installation of 8 Hydrogen Stations
 - ZECT II – Fuel Cell Range Extended Drayage Truck
 - Renewable Electrolytic Fuel (H2) Production
- Fuel/Emission Studies
 - Alternative Diesel Blends in Off-Road Engines



Fuel Cell Bus

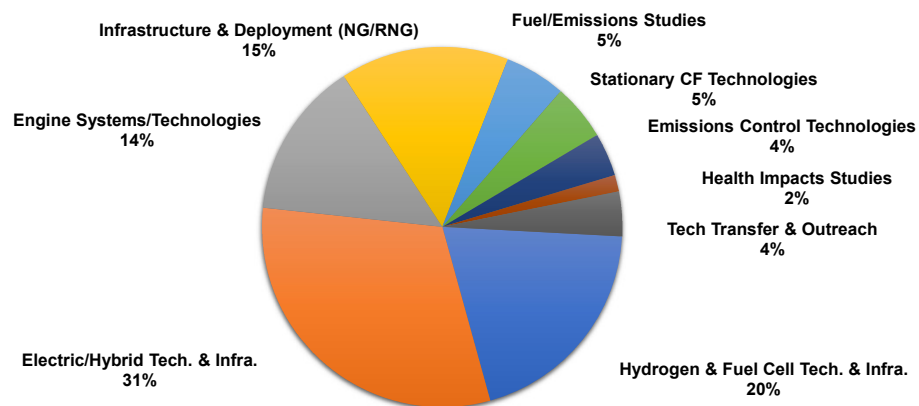


Range Extended Fuel Cell Truck



La Canada H2 Station

2022 Plan Distribution



\$23.8M

New Advisory Group Members

Clean Fuels Advisory Group (13 members):

- Ken Kelly, NREL replacing Kevin Walkowicz, NREL

Technology Advancement Advisory Group (14 members):

- Bill Robertson, CARB replacing Steve Cliff, CARB