

MEETING
STATE OF CALIFORNIA
AIR RESOURCES BOARD

ZOOM PLATFORM

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
BYRON SHER AUDITORIUM
1001 I STREET
SACRAMENTO, CALIFORNIA

THURSDAY, OCTOBER 24, 2024
9:03 A.M.

JAMES F. PETERS, CSR
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APPEARANCES

BOARD MEMBERS:

Liane Randolph, Chair

John Balmes, MD

Hector De La Torre

John Eisenhut

Dean Florez (Remote)

Eric Guerra

Davina Hurt

Gideon Kracov

Tania Pacheco-Werner, PhD

Cliff Rechtschaffen

Susan Shaheen, PhD

Diane Takvorian

STAFF:

Steve Cliff, PhD, Executive Officer

Courtney Smith, Principal Deputy Executive Officer

Edie Chang, Deputy Executive Officer, Planning, Freight & Toxics

Chanell Fletcher, Deputy Executive Officer, Environmental Justice

Annette Hébert, Deputy Executive Officer, Southern California Headquarters & Mobile Source Compliance

Edna Murphy, Deputy Executive Officer, Internal Operations

APPEARANCES CONTINUED

STAFF:

Rajinder Sahota, Deputy Executive Officer, Climate Change and Research

Sydney Vergis, PhD, Deputy Executive Officer, Mobile Sources & Incentives

Ellen Peter, Chief Counsel

Paul Arneja, Air Resources Supervisor, In-Use Control Measures Section, Mobile Source Control Division(MSCD)

Analisa Bevan, Assistant Division Chief, MSCD

Richard Boyd, Assistant Division Chief, Transportation and Toxics Division(TTD)

Tony Brasil, Chief, Transportation and Clean Technology Branch, MSCD

Michelle Buffington, Vehicle Program Specialist, MSCD

Ian Cecere, Senior Attorney, Legal Office

Nathan Dean, Manager Emerging Technology and Programs Section, MSCD

Kim Heroy-Rogalski, Chief, Mobile Source Regulatory Development Branch, MSCD

Bonnie Holmes-Gen, Chief, Health and Exposure Assessment Branch, Research Division (RD)

Jack Kitowski, Division Chief, MSCD

Mitzi Magtoto, Staff Air Pollution Specialist, On-Road Heavy-Duty Diesel Section, MSCD

Lucina Negrete, Assistant Division Chief, MSCD

Nathan Paselk, Staff Air Pollution Specialist, MSCD

Evan Powers, Air Pollution Specialist, Emerging Technologies and Programs Section, MSCD

APPEARANCES CONTINUED

STAFF:

Elizabeth Scheele, Division Chief, RD

Dmitri Smith, Air Pollution Specialist, Freight Incentives
Section, TTD

Katherine Talamantez, Air Pollution Specialist, In-Use
Control Measures Section, MSCD

Alex Wang, Senior Attorney, Legal Office

Derek Winters, Manager, Carl Moyer Off-Road Section, MSCD

Pat Wong, Air Resources Engineer, RD

HAAGEN-SMIT AWARDEES:

Kofi Agyarko

Dr. Richard Flagan

Dr. Prashant Kumar

Vickie Patton

ALSO PRESENT:

Mark Baatz, Tow Industries

Brian Banks, Action Towing

Anthony Bento, California New Car Dealers Association

Christian Bisher, Central California Environmental Justice
Network

Kirk Blackburn, California Tow Truck Association

JR Cady, Firstline Environmental

Jorge Camacho, Mojave Desert Air Quality Management
District

APPEARANCES CONTINUED

ALSO PRESENT:

Omar Camacho, Titan Tow

Kristian Corby, California Electric Transportation
Coalition

Charles Costanzo, Curtin Maritime

Jacob DeFant, Agricultural Council of California

Tim DeMartini, DeMartini RV Sales

Todd DeYoung, San Joaquin Valley Air Pollution Control
District

Sean Edgar, Cleanfleets.net

Steven Fenaroli, California Farm Bureau Federation

Ken Franke, Sportfishing Association of California

Trevor Gasper, Thor Industries

Lee Howard, California Truck Centers

Gary Hughes, Biofuel Watch

Greg Hurner, Miller Industries

Ryan Kenny, Clean Energy

Steven King, Environment California

Melissa Koshlaychuk, Western Growers Association

Nicholas Lenz, Civic Center Towing Transport Road Service

Joshua Lovelace, Miller Industries

Bill Magavern, Coalition for Clean Air

Ken Mak, Bar Area Air Quality Management District

Jed Mandel, Truck and Engine Manufacturers Association

APPEARANCES CONTINUED

ALSO PRESENT:

Jason Mandly, Butte County Air Quality Management District

Cristina Marquez, International Brotherhood of Eletrical
Workers, Local 569

Michael McKay, Santa Barbara Air Pollution Control
District

Kimberly McCoy, Central California Asthma Collaborative

Kim Mesfin, Affinity Truck Center

John Moffatt, California Renewable Transportation Alliance

Lauren Moore, Placer County Air Pollution Control District

Brandon Neel, Truck Body Sales, Inc.

Mike Neuenburg, Sacramento Metropolitan Air Quality
Management District

Taylor Norwood, Almond Alliance

Michael Ochs, RV Industry Association

Guillermo Ortiz, Natural Resources Defense Council

Ashley Porter, Tec Equipment

Timothy Post, College Oak Road Solutions

Taylor Roschen, Kahn, Soares, and Conway

Mark Rosenbaum, Mike Thompson RV

Mariela Ruacho, American Lung Association

William Salazar, Royal Coaches Towing

Tim Sasseen, Tim Sasseen New Energy Solutions

Kevin Shanahan

Chris Shimoda, California Trucking Association

APPEARANCES CONTINUED

ALSO PRESENT:

Joe Snyder, Freightliner Custom Chassis

Alex Spataru

Mark Stone, Burr Truck

Mandi Strella, Californians Against Waste

Tom Swenson, Cummins

Aaron Tarango, San Joaquin Valley Air Pollution Control District

Casey Tubman, Newmar Corporation

Mike Tunnell, American Trucking Associations

Adam VanderBee, Tec Equipment

Mei Wang, South Coast Air Quality Management District

Frank Wheeler, Municipal Maintenance Equipment

James Wheeler, Municipal Maintenance Equipment

Sam Wilson, Union of Concerned Scientists

Brandon Wong, CALSTART

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PROCEEDINGS

CHAIR RANDOLPH: Okay. All right. Good morning.
The October 24th, 2024 public meeting of the California
Air Resources Board will come to order.

Board Clerk, will you please call the roll.

BOARD CLERK MOORE: Yes.

Dr. Balmes.

BOARD MEMBER BALMES: Here.

BOARD CLERK MOORE: Mr. De La Torre.

Mr. Eisenhut.

Senator Flores.

BOARD MEMBER FLOREZ: Florez here.

BOARD CLERK MOORE: Assemblymember Garcia.

Mr. Guerra.

BOARD MEMBER GUERRA: Guerra here.

BOARD CLERK MOORE: Ms. Hurt.

BOARD MEMBER HURT: Hurt present.

BOARD CLERK MOORE: Mr. Kracov.

BOARD MEMBER KRACOV: Here.

BOARD CLERK MOORE: Dr. Pacheco-Werner.

BOARD MEMBER PACHECO-WERNER: Present.

BOARD CLERK MOORE: Supervisor Perez?

Mr. Rechtschaffen.

BOARD MEMBER RECHTSCHAFFEN: Here.

BOARD CLERK MOORE: Dr. Shaheen.

1 BOARD MEMBER SHAHEEN: Here.

2 BOARD CLERK MOORE: Senator Stern?

3 Ms. Takvorian.

4 BOARD MEMBER TAKVORIAN: Here.

5 BOARD CLERK MOORE: Supervisor Vargas.

6 Chair Randolph.

7 CHAIR RANDOLPH: Here.

8 BOARD CLERK MOORE: Madam Chair, we have a
9 quorum.

10 CHAIR RANDOLPH: All right. Thank you.

11 We will begin with our housekeeping items.

12 We are conducting today's meeting in person as
13 well as offering remote options for public participation
14 both by phone and in Zoom. Anyone who wishes to testify
15 in person should fill out a request-to-speak card
16 available in the foyer outside the Board room. Please
17 turn it into a Board assistant prior to the commencement
18 of the item. If you are participating remotely, you will
19 raise your hand in Zoom or dial star nine, if calling in
20 by phone. The Clerk will provide further details
21 regarding how public participation will work in just a
22 moment.

23 For safety reasons, please note the emergency
24 exit to the rear of the room through the foyer. In the
25 event of a fire alarm, we are required to evacuate this

1 room immediately and go down the stairs to the lobby and
2 out of the building. When the "All Clear" signal is
3 given, we will return to the auditorium and resume the
4 hearing.

5 A closed captioning feature is available for
6 those of you joining us in the Zoom environment. In order
7 to turn on subtitles, please look for a button labeled
8 "CC" at the bottom of the Zoom window as shown in the
9 example on the screen now. I would like to take this
10 opportunity to remind everyone to speak clearly and from a
11 quiet location, whether you are joining us in Zoom or
12 calling in by phone.

13 Interpretation services will be provided today in
14 Spanish for both in-person and Zoom attendees. If you are
15 joining us using Zoom, there is a button labeled
16 "Interpretation" on the Zoom screen. Click on that
17 interpretation button and select Spanish to hear the
18 meeting in Spanish. If you are joining us here in person
19 and would like to listen to the meeting in Spanish, please
20 speak to a Board assistant and they will provide you with
21 further instructions. I want to remind all of our
22 commenters to speak slowly and pause intermittently to
23 allow the interpreters the opportunity to accurately
24 interpret your comments.

25 (Interpreter translated in Spanish).

1 CHAIR RANDOLPH: Thank you. I will now ask the
2 Board Clerk to provide more details regarding public
3 participation.

4 BOARD CLERK MOORE: Thank you, Chair Randolph.

5 I will be providing additional information on how
6 public participation will be organized for today's
7 meeting.

8 We will first be calling on any in-person
9 commenters who have turned in a request-to-speak card and
10 then we will be calling on commenters who are joining us
11 remotely. If you are joining us remotely and wish to make
12 a verbal comment one of today's Board items or during the
13 open comment period at the end of today's meeting, you
14 must be using Zoom webinar or calling in by telephone. If
15 you are currently watching the webcast on CAL-SPAN, but
16 you wish to comment remotely, please register for the Zoom
17 webinar or call in. Information for both can be found on
18 the public agenda for today's meeting.

19 To make a verbal comment, we will be using the
20 "Raise Hand" feature in Zoom. If you wish to speak on a
21 Board item, please virtually raise your hand as soon as
22 the item has begun to let us know you wish to speak. To
23 do this, if you are using a computer or tablet, there is a
24 raise-hand button. And if you are calling in on the
25 telephone, dial star nine to raise your hand. Even if you

1 previously indicated which item you wish to speak on when
2 you registered, you must raise your hand at the beginning
3 of the item, so that you can be added to the queue.

4 And for anyone giving verbal comment today in
5 Spanish and require an interpreter's assistance, please
6 indicate so at the beginning of your testimony and our
7 translator will assist you.

8 When the comment period starts, the order of
9 commenters will be determined by who raises their hand
10 first. We will call each commenter by name and will
11 activate each commenter's audio when it is their turn to
12 speak. For those calling in, we will identify you by the
13 last three digits of your phone number. We will not show
14 a list of remote commenters, however, we will be
15 announcing the next three or so commenters in the queue,
16 so you are ready to testify and know who is coming up
17 next. Please note, you will not appear by video during
18 your testimony. I would also like to remind everyone to
19 please state your name for the record before you speak.
20 This is especially important for those calling in by phone
21 to testify on an item.

22 We will have a time limit for each commenter and
23 we will begin the comment period with a two-minute time
24 limit, although this could change at the Chair's
25 discretion. During public testimony, you will see a timer

1 on the screen. For those calling in by phone, we will run
2 the timer and let you know when you have 30 seconds left
3 and when your time is up. If you require Spanish
4 interpretation for your comment, your time will be
5 doubled.

6 If you wish to submit written comments today,
7 please visit CARB's "Send Us Your Comments" page or look
8 at the public agenda on our webpage. Written comments
9 will be accepted on each item until the Chair closes the
10 record for that Board item.

11 If you experience any technical difficulties,
12 please call (805)772-2715 so an IT person can assist.

13 Thank you. I'll turn the microphone back to
14 Chair Randolph.

15 CHAIR RANDOLPH: Thank you so much.

16 (Slide presentation).

17 CHAIR RANDOLPH: The first item on the agenda is
18 Item number 24-5-1, the 2023 Haagen-Smit Clean Air Awards.
19 If you are here with us in the room and wish to comment on
20 this item, please fill out a request-to-speak card as soon
21 as possible and submit it to a Board assistant. If you
22 are joining us remotely and wish to comment on this item,
23 please click the raise hand button or dial star nine now.
24 We will first call on in-person commenters followed by any
25 remote commenters when we get to the public comment

1 portion of this item.

2 For over 20 years, the Board has annually
3 bestowed the distinguished Haagen-Smit Clean Air Awards
4 upon extraordinary individuals whose career
5 accomplishments in air quality and climate change have
6 been exceptional, transformative, widespread, and novel.
7 The awards are named in honor of Professor Haagen-Smit,
8 because of his important contribution to air pollution
9 science and the significance of his career as the first
10 Chair of the Air Resources Board.

11 [SLIDE CHANGE]

12 CHAIR RANDOLPH: Arie Haagen-Smit was a professor
13 at the California Institute of Technology in Pasadena for
14 16 years. In 1948, he embarked on air pollution research
15 when he was asked by the County of Los Angeles to
16 investigate the chemical nature of what we call smog. His
17 research found that most of California's smog resulted
18 from photochemistry, when emissions react with sunlight to
19 create ozone. This break-through provided the scientific
20 foundation for the development of California's and the
21 nation's air pollution control programs. This work
22 continues to impact air pollution efforts across the
23 globe.

24 [SLIDE CHANGE]

25 CHAIR RANDOLPH: Dr. Haagen-Smit continued

1 working in the field of air pollution research and, when
2 he became CARB's first Chair in 1968, directly addressed
3 the smog problem in Los Angeles. In 1973, he received the
4 National Medal of Science, the United States highest
5 scientific honor. Although Dr. Haagen-Smith passed away
6 in 1977, his work continues to inspire scientists and
7 policymakers alike.

8 [SLIDE CHANGE]

9 CHAIR RANDOLPH: Over the last 22, years 79
10 acclaimed scientists, educators, and policymakers have
11 received the prestigious Haagen-Smit award for their
12 contributions to clean air.

13 Four recipients are being added to the list
14 today, the 22nd year of the awards. I will now ask Dr.
15 Cliff to announce each 2023 Haagen-Smit Clean Air awardee,
16 along with the Board member who will introduce the
17 awardee.

18 Dr. Cliff, will you please introduce the item.

19 [SLIDE CHANGE]

20 EXECUTIVE OFFICER CLIFF: Thank you, Chair
21 Randolph.

22 We're very pleased to honor the recipients of the
23 2023 Haagen-Smit Clean Air Awards today. As you noted,
24 each of the winners will be introduced by a Board member
25 and each winner will have an opportunity to provide a few

1 remarks at the podium after being handed their award.

2 [SLIDE CHANGE]

3 EXECUTIVE OFFICER CLIFF: With that, the first
4 2023 Haagen-Smith Clean Air Award winner today is Mr. Kofi
5 Agyarko -- Agyarko, excuse me, in the category of
6 Environmental Justice. Mr. Agyarko will be introduced by
7 Board Member Dr. Pacheco-Werner.

8 BOARD MEMBER PACHECO-WERNER: I'm honored to
9 introduce Mr. Kofi Agyarko who has been a leader in energy
10 efficiency and energy conservation policies and programs
11 in Ghana for decades, with expertise and impact that
12 transcends international borders, including building an
13 alliance of 54 countries. Mr. Agyarko has worked
14 tirelessly to advance energy conservation initiatives that
15 benefit communities and the planet. As Director of
16 Renewable Energy, Energy Efficiency and Climate Change at
17 the Ghana Energy Commission, Mr. Agyarko has led the Ghana
18 delegation at the 35th Montreal Protocol meeting of the
19 parties in Nairobi, Kenya in October 2023.

20 His expertise and negotiating skills led to a
21 groundbreaking decision on environmental dumping by the
22 signatories of the protocol. The decision urges countries
23 exporting inefficient cooling appliances with obsolete
24 refrigerants to institute measures to prohibit the export
25 of such appliances that are not permitted in their

1 markets. This decision ensures that accessibility of the
2 best energy efficient technologies using more climate
3 friendly refrigerants to Africa and other developing
4 countries. This landmark decision was the first time the
5 Montreal Protocol parties took treaty action on this
6 important environmental justice issue.

7 In a domestic role, Mr. Agyarko has been strongly
8 involved in building successful energy efficiency,
9 compliance, and monitoring programs within the Ghana
10 energy industry, making Ghana a regional leader in the
11 field. These efforts have led to Ghana to be included on
12 the global map of nations pursuing energy efficiency
13 economies.

14 Mr. Agyarko is being honored today for his
15 steadfast work in advancing energy efficiency and energy
16 conservation, and the positive impacts his work has had on
17 improving air quality. This work supports the efforts
18 around the world of mitigating the climate crisis and
19 addressing environmental justice inequities. The
20 California Air Resources Board is honored to bestow Mr.
21 Agyarko with the 2023 Haagen-Smit Clean Air Award in the
22 category of Environmental Justice.

23 (Applause).

24 KOFI AGYARKO: Honorable Board Members of the
25 California Air Resources Board, executives, and members of

1 the Board, I feel very honored and proud today to be
2 recognized by CARB for the work that I have been doing for
3 the past two decades. Undoubtedly, today will go down as
4 one of my proudest days on earth. So to the Board and
5 everyone who is connected with this award, I'd off my hat.

6 For the past 48 hours, I have been showered with
7 congratulation messages from around the world, from France
8 and family members. But one of the messages nearly got me
9 weeping. It came from one of my friends and I quote,

10 "Kofi, your efforts have finally been recognized.

11 Ayekoo." Ayekoo in my language means, "well done". And I
12 was touched emotionally, because I have been doing this
13 battle for a long time and I have become the public enemy
14 to some people who think that what I am doing amounts to
15 taking bread out of their table. But today, I'm happy
16 that far away from Africa, in California, Sacramento to be
17 precise, I am being recognized. And thank you very much.

18 (Applause).

19 KOFI AGYARKO: I will be very excited to see the
20 kind of binoculars that the CARB uses to be able to
21 identify somebody like me far away, thousands of
22 kilometers away from America. I'll be glad to see the
23 binoculars. It must be a very powerful one.

24 On the other hand, if it is a roaring mouse voice
25 that got to you, then you must have very sensitive ears,

1 because I've been roaring for long. I don't have the
2 emotional strength to prolong my message this morning. I
3 have two things to say, one is a request and one is a
4 pledge.

5 CARB, I want to tell you that the harvest is
6 plenty, but the laborers are few. In this time, where
7 time is almost running out before we hit climate tipping
8 points, a lot of institutions and individuals pretend to
9 protect the earth. They do so by paying lip service.
10 CARB remains one of the finest hoops to either delay or
11 prevent a catastrophe. That is climate tipping point. So
12 keep soaring, against all the odds. Keep soldiering on,
13 because you are an inspiration to some of us.

14 The second is a pledge. With this honor done me,
15 it marks the beginning of a new face in my determination
16 to extricate Africa from the shackles of the corporate
17 demons whose business is to dump cooling appliances that
18 have obsolete refrigerants in Africa. The mouse is going
19 to roar the loudest.

20 Thank you very much and may the creator of the
21 earth for who we fight to protect his creation continue to
22 bless us all. I am humbled.

23 Thank you.

24 (Applause).

25 [SLIDE CHANGE]

1 EXECUTIVE OFFICER CLIFF: The second Haagen-Smit
2 Clean Air Award recipient today is Dr. Richard Flagan in
3 the category of Research. Dr. Flagan will be introduced
4 by Board Member Dr. Susan Shaheen.

5 BOARD MEMBER SHAHEEN: It's my great pleasure to
6 introduce Dr. Richard Flagan, who is a globally recognized
7 innovative experimentalist and researcher in aerosol
8 science and instrumentation. Throughout his career, he
9 has made transformative contributions to the field of
10 aerosol science, developing innovative measurement
11 techniques, and advancing the understanding of aerosol
12 dynamics and their environmental impacts.

13 One of Dr. Flagan's most remarkable contributions
14 to clean air is the development of novel aerosol
15 measurement instruments and techniques. These have
16 dramatically improved the accuracy and scope of
17 atmospheric studies, such as nanoparticle collection, and
18 determination of size distribution for submicron
19 particles.

20 His invention of the scanning mobility particle
21 sizer has been revolutionary, because it increased the
22 resolution and sensitivity of aerosol measurements. Since
23 its introduction, the design has been commercialized and
24 today the scanning mobility particle sizer has become a
25 standard in the field of aerosol research. He also

1 refined his instruments and developed a technique to
2 enable airborne operation. Because of his work, direct
3 measurements of atmospheric aerosols can now be used to
4 validate satellite based remote sensing measurements.

5 Dr. Flagan's influence extends beyond his
6 groundbreaking research. He has authored over 450
7 peer-reviewed publications, is highly cited, and holds 28
8 patents. He even managed to regain the copyright for his
9 foundational text book, *Fundamental of Air Pollution*
10 *Engineering*, and has made it free to the community
11 resulting in over 375,000 downloads and significantly
12 expanding its impact.

13 In addition to his research, Dr. Flagan is
14 celebrated for his leadership in the scientific community,
15 guiding numerous early career scientists, and fostering
16 the next generation of leaders in aerosol science, and
17 environmental engineering.

18 For his pioneering contributions to the field of
19 aerosol science, his leadership in environmental research,
20 and his dedication to mentoring future scientists, CARB is
21 honored to bestow Richard Flagan with 2023 Haagen-Smit
22 Clean Air Award in the category of Research.

23 (Applause).

24 DR. RICHARD FLAGAN: Thank you, CARB -- the
25 Committee, CARB that has bestowed this honor. This is a

1 particularly difficult one to me. I was fortunate enough,
2 early in my career, to meet Arie Haagen-Smit, who is one
3 of my heroes. Though I only knew him briefly, he laid the
4 foundation for CARB and for an entire field of study that
5 has become extremely important around the world. I'm
6 humbled by the other recipients today and those in the
7 past whose contributions are truly immense.

8 I would like to thank Caltech, who almost 50
9 years ago took a chance on a young faculty member who'd
10 never done any work on particles, had never studied
11 anything about the environment, to join the faculty and
12 start working in an area for which he had no formal
13 preparation, but with somehow a vision that I might rise
14 to the occasion.

15 The reason I rose to that occasion was a large
16 cadre of students over now 49 years of research at
17 Caltech, students at Caltech and around -- and colleagues
18 around the world with whom I've worked on trying to
19 understand what is going on into the atmosphere. We've
20 often been stymied by the lack of tools to get the data
21 that is needed. And what I found was my contribution was
22 finding ways to answer the questions the science was
23 raising, and put that into practice, and ultimately to
24 make certain that the rest of the world could use those
25 tools as well.

1 I'd especially like to thank a couple of my
2 mentors, one with whom I've worked for the entire time
3 I've been at Caltech, John Seinfeld, who is a previous
4 recipient of this award, and Sheldon Friedlander. But
5 really, it's the students who have done the work. I'd
6 like to -- the people who have put up with all this work,
7 of course, has been my wife, Aulikki, who has put up with
8 the long days and extensive travel, my children.

9 But most important, the work that is being done
10 to try to clean the air, that's for our grandchildren. I
11 have two, Fiia and Miles, and it's for them that I
12 continue to work in this arena, but it's for the
13 grandchildren of all of you in this room and around the
14 world. That's the people that we're working for. Those
15 are the people that we're trying to protect as we go
16 forward, continuing to look at the atmosphere, understand
17 the science, guide the science towards answering the
18 questions that we thought we had answered.

19 One of the things that the measurements have
20 taught us is every time we make a measurement, we learn
21 something that we didn't know and we make more questions,
22 more questions than answers. So thank you so much for
23 this fantastic honor.

24 (Applause).

25 [SLIDE CHANGE]

1 EXECUTIVE OFFICER CLIFF: The third 2023
2 Haagen-Smit Clean Air Awardee today is Dr. Prashant Kumar
3 in the category of International Education. Dr. Kumar
4 will be introduced by Board Member Guerra.

5 BOARD MEMBER GUERRA: It's my honor to introduce
6 Dr. Prashant Kumar, a distinguished international
7 researcher and public educator with more than 370
8 publications and over 20,000 citations. Dr. Kumar has
9 made substantial contributions in the areas of air
10 quality, climate, and public health. He has an act for
11 taking his research from the journal to real results in
12 the public sphere.

13 His work has international reach, spanning
14 Brazil, China, Egypt, India, and the United Kingdom. Dr.
15 Kumar's notable work includes developing resources, which
16 are used by school, public transportation, and land use
17 sectors to mitigate exposures to air pollution increasing
18 urban greening, and improving indoor air quality.

19 Dr. Kumar's exceptional leadership is
20 demonstrated by the establishment of a renowned air
21 quality institution, such as the Guildford Living Lab, a
22 global center for clean air research at the University of
23 Surrey in the United Kingdom. The Guildford Lab has more
24 than 150 collaborators across four continents and has
25 quickly become an international hub for global clean air

1 efforts.

2 He has also led and continues to lead RECLAIM
3 Network Plus. It's a network of 550 individuals from 45
4 countries, which is one -- which is a one-stop shop
5 enabling towns and cities to install blue and green
6 infrastructure to help their communities. Dr. Kumar
7 helped influence the World Health Organization to
8 recognize the importance of using face masks and
9 ventilation measures critical to reducing the spread
10 COVID-19.

11 For his global influential work,
12 transdisciplinary leadership, pragmatic solutions, and
13 impactful approach to public education and engagement, the
14 California Air Resources Board is honored to bestow upon
15 Dr. Kumar the 2023 Haagen-Smit Clean Air Awards in the
16 category of International Education. Dr. Prashant Kumar,
17 please, welcome.

18 (Applause).

19 DR. PRASHANT KUMAR: Good morning, everyone.
20 It's a great honor and privilege to accept this award. As
21 a previous speaker said, I would like to see that
22 binoculars as well, but how you find the people far away
23 from this country.

24 Growing up in a small village in India, and
25 that's called Sapnawat with a small kind of farming

1 background, I'm basically the first in my family to go to
2 the university. My upbringing, as you can imagine, has
3 shaped who I am today for the better and for the worse.
4 It is why I'm passionate about tackling disparities and
5 inequities.

6 I witnessed my family members coughing and
7 struggling to breathe while cooking with cow dung, wood,
8 and coal. At the time, I did not understand the causes of
9 their suffering from asthma, TB. However, it became
10 apparent that it was air pollution as a invisible killer.
11 While my immediate focus was to support my family, I
12 became determined to choose the path that can make a
13 meaningful contribution to save lives. This is why clean
14 air for all is not just a statement for me, it's a
15 mission.

16 The journey has its challenges and I could not
17 have made it without my parents, my mother, Maheshwari
18 Devi, her unwavering support, and my father, Nepal Singh,
19 his dedication to serving the marginalized communities.
20 They gave me the confidence to push forward and the unique
21 ability to prioritize public benefit in all my work. And
22 their belief was in me was greater than my own, and I owe
23 who I am to their sacrifices.

24 There is a saying that, you know, there is a
25 woman after -- behind every successful man. And that's

1 certainly true in my case. I owe a heartfelt thanks to my
2 wife, Sadhana, who is sitting behind me and has been a
3 steadfast support for me nearly 26 years. She's inspired
4 me in my work and my life, and I'm grateful to all my
5 three children, Swasti, Sachika and Sashant, and my
6 sisters, Neeti and Poonam, and several of my family
7 members and friends like Kaushal and Sunil Mittal, who
8 embraced our journey together.

9 No matter how skilled you are, opportunities and
10 mentorships are very important. My Master Supervisor at
11 IIT Delhi, Professor Mukesh Khare, and my PhD Advisor at
12 Cambridge, Professor Rex Britter, they have been
13 instrumental in shaping my research in clean air.
14 Professor Khare always encouraged me by saying that,
15 "Prashant, you can do anything", where Professor Rex
16 Britter constantly challenged me by saying, "What's new in
17 it, Prashant?" And their influence instilled in me the
18 self-criticism necessary to strive for meaningful
19 improvements. Without their support, my research journey
20 would have never -- would not have been possible.

21 While I may be the face of this work, it's truly
22 the result of hard work and contribution over 80 PhD
23 students, post-doctoral researchers, and visiting
24 scholars. I'm grateful for the opportunity to collaborate
25 with so many mind -- brilliant minds. I would like to

1 mention a few, Rana, Thiago, Sisay, Arvind, Abhijith,
2 Sarkawt, Sachit, Jeet, Ioar, Mateo, Ana, Huaiwen, Mamatha,
3 Anju, Farhad, Abdullah, Sanjay, Halla, Parya, Priyanka
4 deSouza, Allison Patton, Ashish, Gopinath, Charlotte and
5 Hamid, who is basically at CARB, is one of your
6 colleagues, for their outstanding contributions.

7 Collaborator -- collaboration is essential for
8 innovation. And I've been fortunate to work with
9 colleagues worldwide across Asia, Africa, Middle East,
10 Latin America, U.S., and Australia. I sincerely thank all
11 my collaborators and supporters and those who nominated me
12 for this award. While the list is long, I must highlight
13 a few: Lidia Morawska, Maria de Fatima Andrade, Shi-Jie
14 Cao, Chris Pain, Paul Fennell, Aonghus McNabola, Silvana
15 di Sabatino, Runming Yao, Bhola Ram Gurjar, Suresh Jain,
16 Abdus Salam, Adamson Mulla, Philip Osano, Richard Baldauf,
17 John Gallagher, Vera Ngowi, Shiva Nagendra, Chris Frey,
18 Neyval Reis, Ravindra Khaiwal, Fang Wang, Clare Murphy,
19 Araya Asraf, Yris Olaya, Kosar Hama Aziz, Taciana Telodo,
20 Kostas, Laurence Jones, Marina Neophytou, and Ahmed
21 El-Gandy.

22 Early in my academic career, I realized that
23 research must benefit people and the environment. While
24 we produce valuable findings, they remain inaccessible due
25 to technical jargon. This prompted me to ask how I could

1 simplify complex science into actionable methods for the
2 community and policymakers, leading to the establishment
3 of the Guildford Living Lab, along with various tools,
4 guidances, and policy briefs.

5 I'm grateful to the local community groups like
6 the Sandfield Primary School, their head teacher Kate
7 Collins, and colleagues like Ben, Steph, David from the
8 Zero Carbon Guildford charity, where I serve as a trustee,
9 for collaborating and co-designing locally impactful
10 solutions with global significance.

11 Finally, I'm deeply grateful to the University of
12 Surrey for the support that enabled me to establish the
13 Global Center for Clean Air Research. I thank the entire
14 Institute for Sustainability, our global engagement and
15 the research funders for providing opportunities to
16 contribute to the meaningful initiatives and foster global
17 collaborations.

18 Last but not the least, thank you, CARB, for this
19 exceptional opportunity and honor. Your support fuels my
20 journey towards achieving clean air for all with renewed
21 enthusiasm and purpose.

22 Thank you very much.

23 (Applause).

24 [SLIDE CHANGE]

25 EXECUTIVE OFFICER CLIFF: The fourth and final

1 Haagen-Smith Clean Air Award winner today is Ms. Vickie
2 Patton, in the category of Policy. Ms. Patton will be
3 introduced by Board Member De La Torre.

4 BOARD MEMBER DE LA TORRE: It is my great honor
5 today to introduce Ms. Vickie Patton, a life-long leader
6 who has worked tirelessly to help secure landmark federal
7 and State protections that address clean air and climate
8 policies. Ms. Patton is a skilled litigator whose work
9 with partners for over 30 years has secured environmental
10 victories, and strengthened the capabilities of the United
11 States EPA, CalEPA, CARB, and countless non-profit
12 organizations.

13 She has been a powerful California ally when the
14 State's waivers and authorizations have been under legal
15 and political attack. Early in her career with the U.S.
16 EPA, Ms. Patton was recognized for her outstanding
17 achievement in leadership in forging a landmark agreement
18 with one of the largest coal plants in the western United
19 States at the time. The agreement called for reducing
20 sulfur emissions by 90 percent from the Navajo Generating
21 Station to protect the health of the Navajo Nation.

22 During her 25 years with the Environmental
23 Defense Fund, where she currently serves as general
24 counsel. Ms. Patton secured two landmark victories. In
25 the case of the landmark -- of the Environmental Defense

1 versus Duke Energy Corporation, Ms. Patton convinced the
2 Supreme Court to take the case despite rulings against it.
3 The Supreme Court ruled unanimously in favor of requiring
4 power plants to take steps to prevent a significant
5 deterioration of air pollution. And in the important case
6 of Massachusetts versus EPA, under the leadership of Ms.
7 Patton, the Supreme court ruled in favor of the United
8 States Environmental Protection Agency's authority to
9 regulate greenhouse gas emissions under the federal Clean
10 Air Act.

11 To add to her list of achievements, Ms. Patton is
12 also the co-founder of the Moms Clean Air Force. It is a
13 community of 1.5 million parents that unite against
14 sources of air pollution so all children can breathe clean
15 air.

16 I reached out to a couple of folks who have
17 worked with Ms. Patton over time, so I'm going to read
18 their reactions to her being recognized here today. "She
19 is a great strategic thinker. EDF has been leading the
20 NGO world in defending CARB's mobile source regulations
21 for years, and today, we need her more than ever before."
22 That's David Pettit from NRDC, and a fellow attorney,
23 who's been fighting those fights with you.

24 Next, "Vickie is an exceptionally tenacious
25 advocate, who is also collegial and modest. She is one of

1 a handful of public interest attorneys who have made the
2 Clean Air Act the most effective environmental statute
3 ever, based at EDF's Rocky Mountain office, where she has
4 trained and mobilized a generation of lawyers, who keep
5 the skies blue and the air clean against a never ending
6 array of challenges." That is from our former Chair Mary
7 Nichols.

8 Ms. Patton's impact, innovation, and leadership
9 have left an incredible and lasting positive impact on
10 environmental justice and clean air policy. CARB is
11 honored to award Vickie Patton the 2023 Haagen-Smit Clean
12 Air Award in the category of Policy.

13 (Applause).

14 VICKIE PATTON: I am extremely grateful. Thank
15 you so, so much for those incredibly generous words and
16 for the recognition, and to be here with these courageous
17 people who have come from, you know, all over the world
18 and lead the way. So thank you all for all that you've
19 done. You know, a through line in my -- the privilege
20 I've had of doing this work for over 30 years is the
21 leadership that comes from California, that is this
22 innovation, this forward-leading leadership, that has
23 really catalyzed progress for millions and millions of
24 people in California communities and people all across
25 this State and much further reaching.

1 And I just want to touch on one example of the
2 ways in which California catalyzes, inspires. California
3 really pioneered this duality of forward-leaning policy in
4 addressing the harmful pollutants from motor vehicles
5 paired with investments and incentives. And that kind of
6 duality of -- has helped address one of the single largest
7 sources of harmful pollution that afflicts, you know,
8 millions of people in California and millions worldwide
9 through new technologies, new advancements.

10 And just recently, we took a look at, a colleague
11 of mine, just the progress we're making in the United
12 States due to this kind of duality, the incentives, and
13 the forward-leaning policy that really is California's
14 leadership and innovation of many, many examples. And the
15 analysis which we released in August shows that there are
16 over 200,000 jobs being created in the just the last
17 handful of years, over \$200 billion of investments. And
18 those jobs in electric vehicles zero-emitting solutions,
19 zero-emitting vehicles are being created in geopolitically
20 diverse states all across our country. They're being
21 created in California, and Michigan, and Ohio, and
22 Kentucky, and Tennessee, and Nevada, and Arizona, North
23 Carolina, Georgia. States all across our country are
24 seeing a manufacturing renaissance, and one that is
25 generational. And you can trace its genesis and its

1 through line to kind of the catalytic vision, the
2 catalytic leadership that California provides.

3 And what's so important about those solutions is
4 you're slashing a suite of harmful pollutants, you're
5 addressing the pollutants that have afflicted communities
6 for far too long, you're providing greater community
7 health, and you're helping to address the climate crisis,
8 all while creating thousands, and thousands, and thousands
9 of new jobs, and new opportunity that we haven't seen
10 really in generations.

11 And so I just want to join my fellow award winner
12 in saying keep soaring, and thank you to California for
13 your leadership, and your innovation. You, you are a
14 beacon for a better, brighter world. So thank you.

15 (Applause).

16 [SLIDE CHANGE]

17 EXECUTIVE OFFICER CLIFF: That concludes the very
18 distinguished and highly deserving list of Haagen-Smith
19 Clean Air Award recipients. Before I conclude my summary
20 of this item, I would like to let everyone know that staff
21 has already begun work on next year's program and we will
22 be soon releasing next year's Haagen-Smit award
23 solicitation. That will be on November 1st, you'll see
24 information. So we encourage everyone to submit
25 nominations for next year's clean air award leaders.

1 Thank you.

2 CHAIR RANDOLPH: All right. Thank you.

3 Clerks, do we have any public commenters on this
4 item.

5 BOARD CLERK MOORE: There are no public
6 commenters on this item.

7 CHAIR RANDOLPH: All right. Thank you.

8 Board members, do you all have any questions or
9 comments on this item?

10 I think everybody is just feeling so thankful for
11 all the amazing work that you all do.

12 BOARD MEMBER TAKVORIAN: Well done.

13 CHAIR RANDOLPH: All right. Thank you.

14 (Applause).

15 CHAIR RANDOLPH: All right. Thank you, again,
16 for your amazing work. And thank you all to -- I just
17 wanted to thank you Jim and Catherine Haagen-Smit for
18 being here as well and having the opportunity to celebrate
19 his legacy.

20 So, Board Member De La Torre. I didn't see you.

21 BOARD MEMBER DE LA TORRE: No I'm sorry. It took
22 me a second to think about the -- obviously, on a personal
23 level, thank you individually. You're doing all this
24 wonderful work. But what's always impressive to me about
25 this award every year is some of you may professionally

1 interact. Most of you probably don't. And so it reminds
2 me of something I remember hearing when I was at a
3 college, you know, speaking to students. When they find
4 other like-minded students or people who are doing
5 wonderful work in whatever capacity, that they felt it was
6 like finding out there are other mutants, if you know
7 X-Men, out there. And so just -- I was just thinking
8 about this for you, not in a negative way. You have super
9 powers.

10 And so, you know, that's what this is. Every
11 year, we have this gathering of folks from different
12 aspects of the clean air world and climate champions all
13 around the world and we bring them together, and we
14 recognize you. And, you know, you all can see, there's
15 other people fighting those fights you're fighting on a
16 daily basis. And so thank you all for being here, for
17 making a long trek for a couple of you. And, you know,
18 just keep fighting that fight, because it needs to be
19 fought. Thank you.

20 CHAIR RANDOLPH: Okay. We are now going to take
21 about a 10-minute break and we are going to have an
22 opportunity to do some photos with our honorees. So thank
23 you very much.

24 (Off record: 9:53 a.m.)

25 (Thereupon a recess was taken.)

1 (On record: 10:02 a.m.)

2 CHAIR RANDOLPH: Okay. We are going to come back
3 to the dais and get started on the rest of our meeting.

4 EXECUTIVE OFFICER CLIFF: Okay. We're going to
5 get started again, everyone.

6 Exec staff.

7 CHAIR RANDOLPH: Okay. All right. Welcome back
8 from our break. The next item on the agenda is Item
9 number 24-5-2, an informational update on federal
10 transportation funding programs. If you are here with us
11 in the room and wish to comment on this item, please fill
12 out a request-to-speak card as soon as possible and submit
13 it to a Board assistant. If you are joining us remotely
14 and wish to comment on this item, please click the
15 raise-hand button or dial star nine now. We will first
16 call on in-person commenters followed by anyone remote
17 commenters when we get to the public comment portion of
18 this item.

19 CARB has been a leader in developing programs
20 designed to ambitiously reduce emissions from mobile
21 sources while pursuing a zero-emission transportation
22 system. We use a number of policy strategies, as Ms.
23 Patton mentioned earlier, to advance this work, including
24 funding programs to assist and encourage our stakeholders
25 and industry partners to develop cleaner technologies and

1 equipment. We'll hear about some of these programs, the
2 Carl Moyer Program and the FARMER Program in later items
3 on today's agenda.

4 However, even with State incentives and
5 investments, there remains a need for additional
6 resources. Federal funding programs are critical to
7 achieving our air and climate goals. We are currently
8 seeing historic levels of federal support for this work
9 under the Infrastructure and Investment Jobs Act and
10 Inflation Reduction Act, which are providing funding for
11 clean transportation and clean energy projects in
12 California and across the nation.

13 Today, staff will provide us with an update on
14 these federal funding opportunities. Dr. Cliff, would you
15 please introduce this item.

16 EXECUTIVE OFFICER CLIFF: Thank you, Chair
17 Randolph.

18 As we know, funding is an integral part of CARB
19 meeting its zero-emission mandates. CARB utilizes a broad
20 portfolio of incentives that complement our planning and
21 regulatory programs to reduce emissions and increase
22 access to clean transportation. Keep in mind that the
23 State has made substantial financial investments over the
24 years to support widescale deployment of zero-emission
25 equipment and vehicles. Therefore, financial incentives

1 are a key part of California's efforts to ensure cleaner
2 cars, trucks, and equipment are operating in the state,
3 especially in our low-income communities that are burdened
4 by the cumulative impacts of vehicle pollution.

5 In addition, air districts have used and applied
6 for federal funding programs to fund projects that
7 directly impact their communities. California has been a
8 significant benefactor of these federal funds aimed at
9 transforming our transportation system into a substantial
10 zero-emission network.

11 Today, staff will highlight some federal funding
12 programs that complement our State funds. I will now ask
13 Dmitri Smith of the Toxics and Transportation Division to
14 begin the staff presentation.

15 Dmitri

16 (Slide presentation).

17 TTD AIR POLLUTION SPECIALIST SMITH: Thank you,
18 Dr. Cliff. Good morning, Chair Randolph and members of
19 the Board. This presentation will focus on the
20 Infrastructure Investment and Jobs Act, also known as
21 IIJA, or the Bipartisan Infrastructure Law, and the
22 Inflation Reduction Act, also known as IRA. For the
23 remainder of this presentation, I will refer to these acts
24 by their acronyms of IIJA and IRA. Then I will briefly
25 discuss programs outside of IIJA and IRA consisting of the

1 Transportation Infrastructure Finance and Innovation Act,
2 and the Railroad Rehabilitation and Improvement Financing
3 Program.

4 [SLIDE CHANGE]

5 TTD AIR POLLUTION SPECIALIST SMITH: IIJA was
6 signed into law in 2021. The law authorizes 1.2 trillion
7 dollars for transportation and infrastructure spending
8 nationwide with \$550 billion of that figure going toward
9 new investments and programs throughout the country. Over
10 30 billion has been announced by the federal government
11 for transportation related projects in California. At
12 least \$6.72 billion has been invested in California
13 transportation projects and approximately 87,000 jobs have
14 been created.

15 [SLIDE CHANGE]

16 TTD AIR POLLUTION SPECIALIST SMITH: IRA was
17 signed into law a year later in 2022. IRA is broken into
18 three components, two of which of are relevant. There are
19 the Clean Air Act IRA incentives, which address criteria
20 pollutants and toxics and climate pollution reduction IRA
21 incentives, which address global warming and greenhouse
22 gases.

23 IRA provides billions of dollars in tax
24 incentives, grants, loans, to support new infrastructure
25 investments in the areas of clean energy, transportation,

1 and the environment. IRA introduced and expanded tax
2 credits for clean energy technologies. New tax mechanisms
3 now allow tax-exempt entities, such as the State and local
4 governments to apply for IRA tax credits. The Act
5 contains approximately \$500 billion in new spending and
6 tax credits with \$370 billion specifically set aside for
7 clean energy and climate action.

8 Both IIJA and IRA are subject to the Justice 40
9 Initiative, which commits to providing 40 percent of
10 climate, clean energy, other investments to go to
11 disadvantaged communities.

12 [SLIDE CHANGE]

13 TTD AIR POLLUTION SPECIALIST SMITH: IRA will
14 greatly benefit California by providing over \$500 million
15 to reinforce California's fight against the climate
16 crisis, up to \$450 million for the state's green banks to
17 deliver accessible financing to clean energy projects,
18 mobilize private capital, and deploy key climate solutions
19 in low-income and disadvantaged communities. Over \$168
20 million to add 2,600 electric vehicle charging stations in
21 rural and disadvantaged areas across the state and over
22 \$63 million to upgrade existing electric vehicle charging
23 infrastructure. And approximately \$24,000 for
24 Californian's to purchase a zero-emission vehicle in
25 combination with State investments.

1 [SLIDE CHANGE]

2 TTD AIR POLLUTION SPECIALIST SMITH: Acquiring
3 federal funding is a statewide effort with interagency
4 coordination. The State, as a whole, is working
5 collectively to access funding from the IIJA and IRA as
6 well as to encourage businesses to take advantage of their
7 tax incentives. CARB is involved in several ways, either
8 as direct applicants, supporting applications lead by
9 other State agencies, providing letters to support
10 applications from other applicants, and helping to spread
11 the word to local stakeholders about federal funding.

12 CARB has aligned the incentive program to
13 leverage State funds with federal funds. The Clean Truck
14 and Bus Voucher Program makes it easier for public transit
15 agencies to stack with Federal incentives. Additionally,
16 trucking fleets can take advantage of federal tax credits
17 for zero-emission trucks.

18 [SLIDE CHANGE]

19 TTD AIR POLLUTION SPECIALIST SMITH: Now, I will
20 transition to identifying the federal funding programs
21 that I would like to highlight, starting with
22 infrastructure-related programs.

23 [SLIDE CHANGE]

24 TTD AIR POLLUTION SPECIALIST SMITH: The Regional
25 Clean Hydrogen Hub Program seeks to establish networks for

1 hydrogen production and consumption. California's program
2 is led by the Alliance for Renewable Clean Hydrogen Energy
3 Systems, known as ARCHES, which was awarded up to \$1.2
4 billion in July of 2024. ARCHES is a public-private
5 partnership with matching funds totaling \$11.4 billion.

6 This hydrogen hub will support California's job
7 market by creating approximately 220,000 jobs. This
8 program supports the State's efforts to achieve a carbon
9 neutral economy by 2045, aligns with the State's progress
10 towards meeting our ambitious federal air quality and
11 climate mandates. Eligible applicants include industry,
12 universities, national laboratories, State and local
13 governments, tribes, and community based organizations.

14 [SLIDE CHANGE]

15 TTD AIR POLLUTION SPECIALIST SMITH: The National
16 Electric Vehicle Infrastructure Program is a \$5 billion
17 initiative aimed at creating a coast-to-coast network of
18 electric vehicle chargers along major highways.
19 California's efforts is led by a partnership between the
20 California Department of Transportation and the California
21 Energy Commission. California received \$384 million to
22 develop a charging infrastructure network. The agency has
23 developed a deployment plan outlining the State strategy
24 to install high-powered DC fast chargers along designated
25 corridors. The plan was approved in 2022 and requires

1 annual updates of -- for the next five years.

2 The California Energy Commission completed the
3 first round of funding by awarding approximately \$37
4 million to support the development of the charging
5 infrastructure in selected California corridors. Eligible
6 applicants include businesses, individuals, nonprofits,
7 public agencies, tribes, but excludes investor-owned
8 facilities -- utilities, excuse me. The California Energy
9 Commission anticipates releasing the second round of
10 solicitations by the end of the year.

11 [SLIDE CHANGE]

12 TTD AIR POLLUTION SPECIALIST SMITH: The Charging
13 and Fueling Infrastructure Program provides funding to
14 enhance the national charging and alternative fueling
15 network, with the focus on bridging gaps in both urban and
16 rural areas, especially in underserved communities. Over
17 the next five years, \$2.5 billion is allocated for this
18 initiative. At least 50 percent will go to designated --
19 will be designated to a community grant that prioritizes
20 access to electric vehicle charging and alternative
21 fueling infrastructure for rural, low-, and
22 moderate-income neighborhoods.

23 Fifteen projects have been awarded to grants in
24 California. California, Oregon, and Washington
25 collaborated to establish the West Coast Truck Charging

1 and Fueling Corridor Project. This initiative received
2 \$102 million to establish charging in hydrogen fueling
3 stations. Additionally, the Expanding Electrification for
4 All in San Joaquin County Project was awarded \$56 million
5 dollars to construct two charging stations along the I-5
6 corridor.

7 Finally, the City of Blythe received \$19 million
8 for developing truck charging terminals along the I-10
9 corridor. Eligible applicants include State and local
10 governments, tribes, and transportation providers and
11 operators.

12 [SLIDE CHANGE]

13 TTD AIR POLLUTION SPECIALIST SMITH: The Clean
14 School Bus Program provides \$5 billion for over five
15 years, and this is for fiscal years of 2022 to 2026 to
16 replace existing school buses with zero-emission and clean
17 buses. While the program requires -- requirements
18 prohibit any single state from receiving more than 10
19 percent of total funds, California holds the highest
20 number of awards.

21 Since July of 2024, EPA has awarded \$1.78 billion
22 for the program. Roughly nine percent, or \$159 million,
23 was awarded -- has been awarded to California to support
24 replacement of over 560 zero-emission school buses.
25 Additionally, 300 school buses remain on the waiting list,

1 showcase -- showcasing California's high demand.

2 The Los Angeles Unified School District was
3 awarded approximately \$20 million to replace 50 school
4 buses. Meanwhile, the Porterville Unified School District
5 was awarded approximately \$14 million to replace 35 diesel
6 school buses with zero-emission buses. On September 26th,
7 the U.S. EPA opened a solicitation for \$965 million in
8 funding for the Clean School Bus Program for school
9 districts. The application due date is January 9th of
10 2025. Eligible applicants include local or State
11 government, eligible contractor, nonprofit school
12 transportation association, and tribes.

13 [SLIDE CHANGE]

14 TTD AIR POLLUTION SPECIALIST SMITH: Over the
15 past three years, CARB has played a pivotal role in
16 assisting transit agencies in securing federal funding
17 through programs such as the Low and No, and the Bus and
18 Bus Facilities grants, which allow recipients to replace,
19 rehabilitate, and purchase buses and related equipment,
20 and to -- and to construct bus related facilities. During
21 this period, CARB supports -- support has led to
22 successful awards of 46 projects totaling 464 -- \$640
23 million.

24 In 2024, 10 of the 15 of the California projects
25 are for zero-emission buses. Four of the projects include

1 workforce development components, two of the projects
2 relate to hydrogen buses and infrastructure.

3 CARB has been instrumental in providing support
4 letters to bolster these funding applications. Over the
5 last three years, CARB issued a total of 31 support
6 letters. Furthermore, CARB has enabled transit agencies
7 to use the Clean Truck and Bus Voucher Program as local
8 matching funds for federal bus program grants.

9 Eligible applicants include states, counties,
10 cities, townships, special districts, and tribes.

11 [SLIDE CHANGE]

12 TTD AIR POLLUTION SPECIALIST SMITH: The Electric
13 or Low Emitting Ferry Pilot Program offers approximately
14 \$300 million between three different options. The low- or
15 zero-emitting option funds the purchase of electric or
16 low-emitting ferries and electrification reduction of
17 emissions from existing ferries. The rural ferry -- the
18 rural ferry option funds capital, operating, and planning
19 expenses for ferry service to rural areas. And the
20 passenger ferry option funds improving the condition and
21 quality of existing passenger ferry services supports new
22 passenger ferry services and the repair and modernization
23 of ferry boats, terminals, and related facilities, and
24 equipment.

25 The San Francisco Bay Area Water Emergency

1 Transportation Agency received \$11.5 million to build new
2 electric ferry vessels while the Golden Gate Highway and
3 Transportation District received \$4.9 million to buy a new
4 low-emission ferry that will reduce emissions.

5 Eligible applicants include any public entity
6 responsible for operating ferry services.

7 [SLIDE CHANGE]

8 TTD AIR POLLUTION SPECIALIST SMITH: The Active
9 Transportation Infrastructure Investment Program was
10 created to provide safe and connected active
11 transportation facilities and networks within and between
12 communities. Up to approximately \$44.6 million were
13 available for the most recent annual funding amounts with
14 awards ranging from \$100,000 to \$15 million.

15 Eligible applicants include local governments,
16 Metropolitan Planning Organizations, multi-county special
17 districts, states, multi-state group of governments, and
18 tribes.

19 [SLIDE CHANGE]

20 TTD AIR POLLUTION SPECIALIST SMITH: The Climate
21 Pollution Reduction Grant provides nearly \$5 billion to
22 develop and implement plans for reducing greenhouse gas
23 emissions and other harmful air pollution. The program
24 provides \$250 million for climate action planning and
25 approximately \$4.6 billion for implementation grants.

1 Planning grants will be available until September of 2031,
2 while implementation grants funds will be available until
3 September of 2026.

4 One of the largest recipients of this grant is
5 the South Coast Air Quality Management District, which
6 received approximately \$500 million. Their project will
7 decarbonize the transportation and goods movement sectors
8 in Southern California by installing over 1,000 electric
9 chargers, deploying 800 electric vehicles, and
10 electrifying 18 loc -- electrifying 18 locomotives.

11 The cumulative greenhouse gas emission reductions
12 for 2025 to 2050 will be equivalent to 12 million metric
13 tons of CO2, while the project reduces 1,600 tons of
14 nitrogen oxides per year and 30 tons of diesel particulate
15 matter per year. The project anticipates creating a
16 significant number of jobs within the State and
17 nationally, including 470 in California, 4,700 across the
18 nation, and increasing up to 44,000 as the infrastructure
19 becomes fully utilized.

20 This project complements CARB's funding plan for
21 clean transportation incentives efforts to reduce
22 emissions in port areas, where we have approved \$80
23 million in grants to replace diesel drayage port trucks
24 with electric vehicle fleets in fiscal year 2023-24.

25 Eligible applicants include State agencies,

1 municipalities, tribes, tribal consortiums, and tribes are
2 also eligible for of separate pool of funding
3 implementation grants.

4 [SLIDE CHANGE]

5 TTD AIR POLLUTION SPECIALIST SMITH: The Clean
6 Ports Program offers \$3 billion to fund zero-emission port
7 equipment and infrastructure. It will fund climate and
8 air quality planning activities at ports to reduce
9 pollution and transition to zero-emission operations over
10 time.

11 The California ports of San Diego, San Francisco,
12 Los Angeles, Long Beach, Oakland, Richmond and Hueneme
13 apply for approximately \$1.4 billion in funding with the
14 annual -- with the estimated matching total of
15 approximately \$770 million. The proposed technologies
16 include infrastructure upgrades, CARB compliant
17 ocean-going vessel emission capture systems, zero-emission
18 harbor craft, zero-emission cargo handling equipment, and
19 zero-emission trucks.

20 The applications also propose workforce
21 development and community engagement elements. Selectees
22 will be notified by October 2024 and grantee -- and grants
23 will be awarded in December of 2024.

24 Eligible applicants include a port authority,
25 State, regional and local entities, or a tribe that has

1 jurisdiction over a port authority or a port, and private
2 parties.

3 [SLIDE CHANGE]

4 TTD AIR POLLUTION SPECIALIST SMITH: The
5 Low-Carbon Transportation Materials Program incentivizes
6 the use of construction materials and products that have
7 substantially lower levels of greenhouse gas emissions.
8 This program has \$1.2 billion available to State
9 transportation departments. It's anticipated that at
10 least \$22 million will be made available to each State
11 transportation department that addresses the application
12 requirements. Eight hundred million dollars will be
13 available for non-State applicants, including Metropolitan
14 Planning Organizations, local governments or agencies,
15 tribes, federal lands management agencies, other agencies,
16 and non-State applicants are also encouraged to partner
17 with State applicants. Awards must be contracted by
18 September of 2026 and funds must be expended by September
19 of 2031.

20 [SLIDE CHANGE]

21 TTD AIR POLLUTION SPECIALIST SMITH: In this
22 slide and the next slide, I have listed some additional
23 opportunities that are of interest or support CARB
24 programs. The Clean Heavy-Duty Vehicles Program provides
25 grant and rebates for zero-emission vehicle replacements,

1 fueling and charging infrastructure, and workforce
2 development. The Fueling Aviation's Sustainable
3 Transition through Sustainable Aviation Fuels Program
4 offers approximately \$250 billion for the production,
5 transportation, blending, or storage of sustainable
6 aviation fuel with the goal of acceleration the production
7 and use of sustainable aviation fuel and reducing
8 greenhouse gas emissions.

9 The Diesel Emission Reduction Act is an existing
10 program that received an IRA appropriation of \$60 million
11 to identify and reduce diesel emissions resulting from
12 goods movement facilities and vehicles servicing goods
13 movement facilities in low-income and disadvantaged
14 communities.

15 And the Environmental and Climate Justice Block
16 Grants: the Environmental Justice Government-to-Government
17 Program offers funding to support and/or create model
18 government activities that lead to measurable
19 environmental or public health results in communities
20 burdened by environmental harm and risk. With the
21 exception of the Fueling Aviation Program, which allows
22 states, local governments, and air carriers, universities,
23 colleges and research institutions to apply, applicants
24 generally include states, local governments, nonprofits,
25 and tribes.

[SLIDE CHANGE]

TTD AIR POLLUTION SPECIALIST SMITH: This slide shows the IIJA program's of interest. The Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation Program funds are used to ensure surface transportation resilience to natural hazards, including climate change, sea level rise, flooding, and extreme weather events. Eligible applicants include states, Metropolitan Planning Organizations, local governments, special purpose districts, or public authorities with a transportation function, and tribes.

The Carbon Reduction Program offers grants to states to reduce transportation emissions or to develop carbon reduction strategies.

The Federal-State Partnership for Intercity Passenger Rail Grants funds capital projects that improves performance or expands or establishes new intercity passenger rail service. Eligible applicants include a group of states, a public agency, or charter authority established by one or more states, Amtrak acting on its own behalf or under a cooperative agreement with other states and tribes.

And the Pilot Program for Transient -- Transit-Oriented Development offers funds to local communities to integrate land use and transportation

1 planning with a new fixed guideway or core capacity
2 transit capital investment. Eligible applicants include
3 state or local governments.

4 [SLIDE CHANGE]

5 TTD AIR POLLUTION SPECIALIST SMITH: The
6 Transportation Infrastructure Finance and Innovation Act
7 offers a credit assistance -- offers credit assistance for
8 regional and national transportation projects. Funds are
9 appropriated annually and the program uses federal
10 resources to stimulate capital market and investment
11 through direct loans, loan guarantees, and credit, rather
12 than grants.

13 Pending applications for fiscal year 2024
14 includes \$236 million for the San Francisco Bay Area Rapid
15 Transit District for railcar replacement. Eligible
16 applicants include State and local governments, transit
17 agencies, railroad companies, special authorities, and
18 private entities.

19 [SLIDE CHANGE]

20 TTD AIR POLLUTION SPECIALIST SMITH: The railroad
21 Rehabilitation and Improvement and Financing Program
22 provides direct loans and loan guarantees up to 300 -- up
23 to \$35 billion to finance the development of railroad
24 infrastructure with \$7 billion set aside to support small
25 railroads.

1 In January of 2024, the U.S. Department of
2 Transportation provided a \$31.4 million loan to the Sierra
3 Northern Railway and Mendocino Railway to expand and
4 update rail infrastructure. Eligible applicants include
5 railroads, State and local governments, limited freight --
6 and limited freight shippers.

7 [SLIDE CHANGE]

8 TTD AIR POLLUTION SPECIALIST SMITH: This
9 concludes my presentation. This slide identifies
10 resources for additional information. Thank you for your
11 valuable time during this presentation.

12 CHAIR RANDOLPH: Thank you very much, Dmitri.
13 That was a very comprehensive presentation. There's --
14 there are many programs out there that are funded and are
15 available for applications. And so those of you involved
16 in local governments, or businesses, or NGOs that might be
17 eligible for this funding in different programs, we really
18 encourage you to take advantage of the links that Dmitri
19 put in the presentation, so that we can make sure that
20 there are plenty of applicants and plenty of these funds
21 flow to California. So I really appreciate it.

22 Clerks, do we have any members of the public who
23 have signed up to speak on this item.

24 BOARD CLERK MOORE: No, there are no commenters.

25 CHAIR RANDOLPH: All right. Thank you.

1 Any questions or comments from the Board?

2 Board Member Rechtschaffen.

3 BOARD MEMBER RECHTSCHAFFEN: Dmitri I have a
4 quick question about the NEVI Program, which I know we
5 don't actually implement. We do it in partnership with
6 other State agencies. But there's been a lot of criticism
7 about how slow that program has been to roll out. I know
8 the CEC -- you mentioned the CEC just approved the first
9 set of projects for funding. Do we have any sense of when
10 stations will actually be built in California with NEVI
11 funding?

12 TTD AIR POLLUTION SPECIALIST SMITH: No, I don't
13 have the -- any information as far as a related status on
14 that, but that is something that I can follow up on.

15 BOARD MEMBER RECHTSCHAFFEN: Thank you.

16 CHAIR RANDOLPH: Dr. Shaheen.

17 BOARD MEMBER SHAHEEN: Thanks so much, Chair, and
18 thanks, Dmitri, for the amazing presentation. I just want
19 to take a moment, as the automotive member of this Board,
20 to just say what a historic moment this is, right, to have
21 this level of investment and transportation, \$1.2 trillion
22 for transportation infrastructure. So, wow, right, I just
23 have to say that. I see Steve Cliff smiling. It's big.

24 And I am so grateful for all of the tracking
25 you're doing. The -- these grants are coming out

1 constantly. So it's very challenging to know what the
2 level of investment is, but really proud to see like 30
3 billion in California transportation-related projects,
4 87,000 California jobs. So my quick question for you, and
5 I think you may not know the answer to it, but would love
6 to see California getting more money for active
7 transportation infrastructure and investment.

8 On that particular item, I don't think you had
9 any data in terms of number of applicants or the status of
10 that, is that correct?

11 TTD AIR POLLUTION SPECIALIST SMITH: Yes. That's
12 correct.

13 BOARD MEMBER SHAHEEN: Okay. I hope we can get
14 some of those too.

15 Thank you.

16 CHAIR RANDOLPH: Okay. Great. Thank you very
17 much. And -- yeah, and we can have staff follow up on
18 those two additional pieces of information.

19 All right. Thank you very much. I appreciate
20 the presentation.

21 TTD AIR POLLUTION SPECIALIST SMITH: Thank you.

22 CHAIR RANDOLPH: Okay. The next item on the
23 agenda is item number 24-5-3, 2024 Funding Agricultural
24 Replacement Measures for Emissions Reductions, known as
25 FARMER, Program guidelines. If you are here with us in

1 the room and wish to comment on this item, please fill out
2 a request-to-speak card as soon as possible and submit it
3 to a Board assistant. If you are joining us remotely and
4 wish to comment on this item, please click the raise-hand
5 button or dial star nine now. We will first call on
6 in-person commenters followed by any remote commenters
7 when we get to the public comment portion of this item.

8 Agricultural equipment is a source of air
9 pollution and reducing these emissions is necessary to
10 meet federal ozone and particulate matter air quality
11 standards. Additionally, the agricultural sector is often
12 one of the first to experience the impacts of climate
13 change and it has a critical role to play in addressing
14 greenhouse gas emissions and their climate impacts.

15 The FARMER Program is a vital component of CARB's
16 incentive portfolio and focuses investments on projects
17 that support the agricultural sector's transition to the
18 cleanest available engines, vehicles, and equipment.
19 Projects funded through the FARMER Program provide
20 accelerated emissions reductions and supplement the
21 benefits achieved by regulations that apply to the
22 agricultural sector, such as the Truck and Bus, Advanced
23 Clean Fleets, and Zero-Emission Forklift regulations. In
24 addition, investments from the FARMER Program also achieve
25 significant reductions in greenhouse gas emissions, while

1 supporting deployment of zero-emission equipment and the
2 cleanest available combustion technologies.

3 Since the Program's inception in 2018, \$515
4 million in State funds have been invested, which was
5 matched with \$521 million in private investments to fund
6 over 10,000 agricultural equipment replacement projects.
7 These projects are expected to result in reductions of
8 over 28,000 tons of NOx and 1,650 tons of PM2.5 emissions,
9 providing significant air quality benefits to impacted
10 areas, including in disadvantaged and low-income
11 communities. These projects are also expected to reduce
12 388,000 metrics tons of carbon dioxide equivalent
13 emissions, which will help reduce the impacts of climate
14 change.

15 Dr. Cliff, will you please introduce this item?

16 EXECUTIVE OFFICER CLIFF: Thank you, Chair
17 Randolph. As mentioned, the FARMER Program has been and
18 continues to be an important piece of the CARB incentive
19 portfolio. Vehicles and equipment replaced in the Program
20 provide some of the most cost effective emission
21 reductions that CARB has to offer, helping the State meet
22 its clean air mandates and climate change targets. The
23 FARMER Program has invested about 70 percent of the
24 funding to benefit priority populations. In addition to
25 the emission reductions that you noted, since 2022,

1 approximately a third of those projects have been deployed
2 on farms of 100 acres or less.

3 The proposed 2024 FARMER Program guidelines
4 improve on the already successful program by providing
5 additional project flexibility, further encouraging
6 deployment of zero-emission technologies, and streamlining
7 air district implementation of the Program.

8 In developing these updated guidelines, CARB
9 staff met with partnering air districts, agricultural
10 industry stakeholders, equipment dealers and
11 manufacturers, members of the community, and held a
12 handful of public workgroup meetings and workshops
13 throughout the state. Input from this public process has
14 been incorporated into the current proposal being
15 presented today.

16 I will now ask Evan Powers of the Mobile Source
17 Control Division to begin the staff presentation.

18 Evan.

19 (Slide presentation).

20 MSCD AIR POLLUTION SPECIALIST POWERS: Thank you,
21 Chair -- or thank you, Dr. Cliff. Good Morning, Chair
22 Randolph and members of the Board. I'm Evan Powers with
23 the -- staff with the FARMER Program here at CARB.

24 [SLIDE CHANGE]

25 MSCD AIR POLLUTION SPECIALIST POWERS: And I'm

1 honored to be presenting our proposed updates to the
2 FARMER Program guidelines.

3 Before I get into the proposed updates, I'd like
4 to provide some background and general -- and a general
5 program update. The agricultural industry in California
6 is important to the state's economy. And it's comprised
7 of almost 70,000 farms and ranches producing over 400
8 different commodities that are consumed in state and
9 relied upon in much of -- in much of the country and
10 throughout the world. In fact, based on the 2022 crop
11 year, nearly three quarters of the fruits and nuts and
12 over a third of the vegetables consumed in the U.S. are
13 farmed right here in California. These farms not only
14 bring in almost \$60 billion in annual sales, but also
15 directly support over 400,000 jobs, many of which are held
16 by people living in disadvantaged and low-income
17 communities.

18 Further, many additional jobs can be indirectly
19 attributed to the ag industry, including those at ports,
20 distributors, retail stores, and equipment dealers, just
21 to name a few.

22 [SLIDE CHANGE]

23 MSCD AIR POLLUTION SPECIALIST POWERS: These
24 farms, ranches, and other ag operations rely on many types
25 of vehicles and equipment, including tractors, harvesters,

1 utility train vehicles, or UTVs, and other mobile
2 equipment, stationary and portable irrigation pumps, and
3 heavy-duty trucks. Since these ag businesses tend to use
4 many types of specialized equipment that serve specific
5 functions, replacing them can be costly. Additionally,
6 the vehicles and equipment used at agricultural operations
7 are a source of criteria pollutant emissions.

8 [SLIDE CHANGE]

9 MSCD AIR POLLUTION SPECIALIST POWERS: Currently,
10 we know there are about 120,000 pieces of diesel off-road
11 equipment operated at agricultural operations in the
12 state. As shown in the slide, these farm equipment are
13 responsible for about five percent of the NOx from mobile
14 sources statewide, but represent a much higher percentage
15 in regions where agriculture represents a larger
16 proportion of the local economy, such as in the San
17 Joaquin Valley.

18 Additionally, some of these regions with
19 prominent ag industries also experience poor air quality
20 and are in non-attainment with federal ambient air quality
21 standards.

22 In these areas of the state, accelerated ag
23 equipment turnover projects can help districts meet State
24 Implementation Plan, or SIP, commitments, and achieve
25 attainment with federal standards.

1 [SLIDE CHANGE]

2 MSCD AIR POLLUTION SPECIALIST POWERS: Statewide
3 emission reductions are and will continue to be achieved
4 through various regulations that impact the ag industry,
5 such as the Truck and Bus Regulation, and the recently
6 passed Advanced Clean Fleets and Zero-Emission Forklift
7 Regulations, in addition to rules impacting irrigation
8 pump engines.

9 Whereas, voluntary incentives have proven to be a
10 successful way to accelerate the natural turnover of
11 mobile off-road equipment and dry private investment into
12 cleaner technologies. In fact, to better understand the
13 emissions from vehicles and equipment used to support the
14 ag sector, and assess the extent of the accelerated
15 turnover from regulations and federal, State, and local
16 incentive programs, CARB staff are beginning to administer
17 a new data collection survey. This effort will enable
18 CARB staff to update the current emissions inventory and
19 will reflect emission reductions achieved through
20 incentives in the last six years. The surveys themselves
21 should be sent out before the end of the year.

22 [SLIDE CHANGE]

23 MSCD AIR POLLUTION SPECIALIST POWERS: Over the
24 past 25 plus years, the agricultural industry has made
25 great strides in reducing the impact of emissions from

1 diesel off-road equipment, in part by providing
2 significant private investments to match and even exceed
3 public incentive funding in turning over the legacy diesel
4 fleet.

5 Through State programs, such as the Carl Moyer
6 and FARMER programs, and the federally administered
7 Environmental Quality Incentives Program, or EQIP, along
8 with private investments, over \$2 billion have been spent
9 replacing old agricultural equipment.

10 While the Carl Moyer and EQIP programs invest a
11 portion of their funds to agricultural equipment
12 replacements, it's important to note that FARMER is the
13 only -- the only State incentive program dedicated to
14 agricultural equipment replacements. With the help of our
15 district -- air district and federal and industry
16 partners, over 22,000 agricultural engines have been
17 replaced with incentives since 1998, resulting in
18 thousands of tons of NOx, ROG, and PM emission reductions.

19 [SLIDE CHANGE]

20 MSCD AIR POLLUTION SPECIALIST POWERS: Next, I'd
21 like to provide some background information on the program
22 we're here to discuss today. Recognizing the success of
23 past incentive projects and the need to further reduce ag
24 sector emissions, the California State Legislature
25 appropriated \$135 million to CARB in fiscal year 17-18 to

1 replace old vehicles and equipment used in ag.

2 Subsequently, CARB staff developed the Funding
3 Agricultural Replacement Measures for Emission Reductions,
4 or FARMER Program, and the guidelines for FARMER were
5 approved in early 2018. To streamline implementation,
6 CARB staff modeled FARMER after the long-standing and very
7 successful Carl Moyer Program, in which funding is
8 distributed to the local air districts for implementation.

9 Staff also followed the Moyer Program's premise
10 of being a scrap and replace program, meaning each project
11 generally results in one or more old engines being
12 destroyed. This is a key component of these projects
13 being SIP creditable.

14 Finally, to receive funding, the vehicle or
15 equipment replaced must serve an agricultural operation,
16 and since some of these vehicles and equipment types are
17 subject to regulation, we require that any baseline
18 vehicle or equipment be in compliance with any rule or
19 regulation to be eligible for funding.

20 [SLIDE CHANGE]

21 MSCD AIR POLLUTION SPECIALIST POWERS: Over the
22 last seven years, the FARMER Program has received
23 continued support from the Legislature. As such, about
24 \$760 million have -- has been appropriated to the Program
25 statewide. Although, it is important to note that FARMER

1 funding is annually appropriated and in any given year
2 there is no guarantee for funding.

3 To date, the FARMER Program has funded over
4 10,000 projects providing significant air quality and
5 climate change benefits. Further, about 70 percent of the
6 implemented FARMER projects have benefited AB 1550
7 priority populations. And roughly one-third of the
8 projects have been at farms 100 acres or less.

9 [SLIDE CHANGE]

10 MSCD AIR POLLUTION SPECIALIST POWERS: Though
11 significant FARMER Program funds have been invested in
12 zero-emission UTVs, trucks, and irrigation pump engines.
13 The majority of the funding has been used to replace old
14 tractors, harvesters, and other off-road equipment. And
15 on average, grant recipients have matched funding provided
16 through FARMER at about a 50 percent cost share. Of the
17 6,200 off-road equipment replacement projects, about
18 5,000, or 77 percent, have resulted in destroying a Tier 0
19 or Tier 1 diesel engine.

20 And keep in mind, since FARMER is primarily a
21 scrap and replace program, all of these old engines and
22 equipment are ultimately crushed and will no longer
23 operate. Though, we've systematically been replacing the
24 dirtiest engines at a great pace, most districts are still
25 oversubscribed, and we welcome any additional funding to

1 the Program. For example, the San Joaquin Valley Air
2 Pollution Control District's queue of eligible projects is
3 typically around \$300 million long.

4 [SLIDE CHANGE]

5 MSCD AIR POLLUTION SPECIALIST POWERS: Now, I'd
6 like to discuss some of the Program updates we're
7 proposing today. Through implementation of the Program,
8 CARB staff have made various modifications and revisions
9 to project categories to address issues and accommodate
10 various needs through subsequent memos.

11 There are also various new administrative and
12 project modifications that have been requested, both by
13 implementing air districts as well as industry -- ag
14 industry stakeholders.

15 With that, we are proposing updates to the FARMER
16 Program guidelines to develop a single comprehensive
17 document that accounts for necessary administrative and
18 project category changes to the current guidelines. As
19 I'll describe in a bit, the proposed guidelines will also
20 provide additional support to small farms, encourage
21 deployment of zero-emission technologies, provide
22 additional flexibility, and otherwise aid in air district
23 implementation of the Program.

24 [SLIDE CHANGE]

25 MSCD AIR POLLUTION SPECIALIST POWERS: Throughout

1 this update process, we've conducted numerous public
2 meetings to gather feedback and have consulted with
3 partnering air districts, met with ag industry and
4 community groups, as well as members of the public. We've
5 also coordinated very closely with the CARB Carl Moyer
6 Program team to ensure consistency between the programs.

7 These public meetings were held across the state
8 and remotely with Spanish translation to allow for input
9 from folks in all areas of the state. Attendees in these
10 meetings included air district staff, farmers,
11 consultants, and equipment dealers. Through this robust
12 public process, we're confident that our proposed changes
13 encompass the entirety of the necessary revisions in a
14 reasonable, logical, and meaningful way, and also
15 highlights the partnership our team has built with
16 district staff and various stakeholder groups.

17 I'll now discuss our proposed changes beginning
18 with some general Program changes.

19 [SLIDE CHANGE]

20 MSCD AIR POLLUTION SPECIALIST POWERS: First,
21 we're proposing to update the definition of ag op --
22 agricultural operations that we currently use to be
23 consistent with definitions for vary -- for various
24 agricultural vehicles and equipment, from applicable CARB
25 regulations. We're proposing to expand our used equipment

1 category for small producers to all areas of the state.
2 This has proven to be a very successful pilot in the San
3 Joaquin Valley. And we see this as an opportunity to
4 provide additional support to small producers statewide.

5 We've also included a provision to allow CARB's
6 Executive Officer to approve future updates to the
7 guidelines as needed. Any updates approved under this
8 provision would require staff to hold a public meeting and
9 consider public input.

10 [SLIDE CHANGE]

11 MSCD AIR POLLUTION SPECIALIST POWERS: Consistent
12 with Health and Safety Code, we are proposing to require
13 districts to evaluate all off-road projects using a
14 10-year project life. This would help small operations
15 that don't accrue as many hours of operations on their
16 equipment qualify for a more meaningful incentive amount.
17 We would also allow for projects to be funded up to any
18 applicable compliance date, again consistent with Health
19 and Safety Code.

20 [SLIDE CHANGE]

21 MSCD AIR POLLUTION SPECIALIST POWERS: We're
22 proposing to make some updates to project timelines. To
23 avoid lengthy project delays, we're proposing to require
24 that a purchase order be made by an applicant within one
25 year of contract execution, while allowing districts to

1 grant extensions as needed. This would help streamline
2 project implementation while ensuring funding liquidation
3 deadlines are met.

4 We're also proposing to extend the deadline for
5 Destruction or salvage of the old vehicle or equipment up
6 to 90 days for combustion equipment projects and up to six
7 months for zero-emission equipment projects at the
8 district's discretion.

9 [SLIDE CHANGE]

10 MSCD AIR POLLUTION SPECIALIST POWERS: Next, I'd
11 like to focus on proposed changes for the off-road project
12 category specifically. For off-road projects, we're
13 proposing to allow for a 25 horsepower increase, or a 35
14 percent increase in horsepower, whichever is greater. In
15 the current guidelines, we generally limit the horsepower
16 of the replacement equipment to a 25 percent increase.
17 We've heard from districts that this can be somewhat
18 limiting for applicants, since newer equipment does tend
19 to be larger in terms of horsepower.

20 Similarly, for two-for-one or more-for-one
21 projects where there are two or more old equipment that
22 are scrapped, we're proposing to base the horsepower cap
23 on the largest piece of baseline equipment.

24 [SLIDE CHANGE]

25 MSCD AIR POLLUTION SPECIALIST POWERS: Next,

1 we're proposing to incorporate provisions to allow for
2 efficiency gains associated with replacement specialty
3 equipment. This will not only help us claim additional
4 emission reductions that we feel are not -- are not
5 currently being accounted for, but it will also ensure
6 applicants wishing to purchase specialty equipment qualify
7 for an appropriate incentive amount.

8 We're also proposing to allow additional
9 flexibility for projects where the baseline and
10 replacement equipment are different, provided the
11 replacement equipment serves the same function and
12 performs the same work equivalent as the baseline. For
13 zero-emission equipment, we're proposing to allow tractors
14 20 horsepower or greater to be allowed as the baseline.
15 Currently, the minimum is 25 horsepower.

16 Our reasoning for this is that these smaller
17 tractors lend themselves well to being replaced with some
18 of the electric options currently on the market. We're
19 also proposing to increase the maximum incentive cap for
20 zero-emission projects to 85 percent. We see this again
21 as an opportunity to help growers overcome the higher
22 costs generally associated with the zero-emission
23 equipment.

24 [SLIDE CHANGE]

25 MSCD AIR POLLUTION SPECIALIST POWERS: Next, I'd

1 like to transition into some proposed quantification and
2 cost effectiveness updates, but first I'd like to remind
3 folks that most of the projects funded in FARMER are
4 subject to a cost-effectiveness cap.

5 Along with including updated diesel emission
6 factors from CARB's off-road emission factor databases,
7 we'll also be -- we're also proposing to update diesel
8 load factors to match what's currently being used by
9 CARB's ag and forestry inventories. As a reminder, load
10 factor refers to the average proportion of available
11 horsepower used by a given equipment type to accomplish a
12 task and directly correlates with the emissions --
13 directly correlates to the emissions produced by a piece
14 of equipment.

15 Some of these load factor changes will
16 significantly decrease the emission reductions we're
17 achieving from the projects. We're -- so we're proposing
18 an increase in the cost effectiveness thresholds to
19 continue to provide a meaningful incentive amount. Our
20 proposed cost effectiveness limit for combustion
21 replacements is \$60,000 per weighted ton. Currently, it's
22 34,000. Likewise, for zero-emission replacements, our
23 proposed cost effectiveness limited is \$120,000 per
24 weighted ton, and currently it's at 66,000.

25 Based on our analysis, these cost-effectiveness

1 limits will offset the updated load factors while
2 accounting for increasing equipment costs, and ultimately
3 provide similar incentive amounts to projects funded under
4 the current guidelines.

5 [SLIDE CHANGE]

6 MSCD AIR POLLUTION SPECIALIST POWERS: As I've
7 described, agricultural incentive projects have proven to
8 be a cost-effective way to achieve emission reductions
9 from vehicles and equipment used in California's
10 agricultural industry. The proposed 2024 FARMER Program
11 guidelines will continue to build on past success and
12 highlights the strong partnerships we've built with air
13 districts and industry stakeholders.

14 Since these proposed changes fall outside of CARB
15 Executive Officer's authority to approve changes to the
16 project categories, we would like to recommend that the
17 Board approve the proposed guidelines as is. Upon
18 approval, implementing air districts may then begin
19 utilizing the updated guidelines.

20 Thank you for your attention and consideration.
21 While that concludes my presentation, we do have a few air
22 district staff who would like to provide some additional
23 remarks. The first one will be Mr. Michael McKay with the
24 Santa Barbara Air -- Santa Barbara County Air Pollution
25 Control District. He'll be followed by Lauren Moore with

1 the Place County Air Pollution Control District. And
2 finally, we'll have Aaron Tarango with the San Joaquin
3 Valley Air Pollution Control District.

4 With that, I'd like to pass the mic off to Mr.
5 Mike McKay.

6 MIKE MCKAY: Thanks, Evan. Good afternoon, Chair
7 Randolph and members of the Board. As Evan said, my name
8 is Mike McKay. I'm with the Santa Barbara County Air
9 Pollution Control District.

10 I've managed our incentive programs since the
11 inception of FARMER in 2017. I'm here to offer our
12 support for the FARMER Program, their proposed guideline
13 update -- (Clears throat). Excuse me -- and their
14 continued partnership with districts to help improve local
15 agricultural communities.

16 While these proposed guidelines were being
17 developed, FARMER staff maintained an open line of
18 communication, which was critical for questions and
19 suggestions from District staff. With 35 air districts in
20 California and unique situations for each, we don't take
21 lightly CARB's ability to create and maintain a
22 collaborative process throughout that time.

23 So as Evan's presentation showed, there are many
24 positive updates to the proposed guidelines, like
25 increasing allowable horsepower from 125 percent to 135

1 percent, standardizing zero-emission projects types, and
2 the updated cost effectiveness limits. So these are just
3 a few that to come mind that we're all part of the
4 collaborative process working with the districts.

5 In 2023, the value of agricultural production in
6 Santa Barbara County was more than \$1.7 billion. So this
7 industry is a vital part of our local economy. And the
8 FARMER Program has been instrumental in assisting with the
9 implementation of clean technology, particularly in low
10 income and disadvantaged communities where farming plays a
11 big role. Since 2018, 70 percent of all funded projects
12 in our grant program were in the agricultural industry,
13 totaling more than \$12 million. Four million of that came
14 from the FARMER Program.

15 While our district currently receives 12 and a
16 half percent administrative funds to implement our grant
17 program each year, we do subsidize our clean air grant
18 program with additional local revenue sources. This is
19 due to higher administrative costs, growing interest from
20 industry, and an increase in zero-emission technology
21 projects, which are becoming more complex and frequent.
22 We appreciate CARB's efforts to increase administration
23 fees for our grant program, which will help lessen that
24 fiscal burden.

25 We continually work hard on building

1 relationships with our local agricultural communities.
2 And like most districts, with that relationship building,
3 creates an oversubscription for our grant program. All of
4 this requires us to be creative when reviewing
5 applications to assure that the best projects are funded.

6 We appreciate FARMER staff being diligent and
7 helpful through this guideline development process. It's
8 improved our ability to manage our program effectively and
9 efficiency. And we appreciate the collaborative efforts
10 and we do feel that our concerns were heard and our
11 questions were answered throughout this process.

12 So I thank you for the opportunity to speak today
13 in support of the FARMER Program, their proposed
14 guidelines, and we hope more FARMER funds become available
15 in the future, because this program is an asset to the
16 success of our local grant program.

17 Thank you.

18 MSCD AIR POLLUTION SPECIALIST POWERS: Next, I
19 guess, we can turn it over to Ms. Lauren Moore.

20 LAUREN MOORE: Good morning. My name is Lauren
21 Moore and I am the Air Pollution Control Specialist
22 managing the FARMER Program at the Placer County Air
23 Pollution Control District.

24 Placer County APCD is unique, in that we
25 administer the FARMER Program for the shared allocation

1 pool on behalf of CARB. The shared allocation pool is
2 specifically designated for the California air districts
3 with less than one percent of the statewide agricultural
4 equipment emissions inventory. This is to ensure farmers
5 in those districts have the opportunity to access FARMER
6 funding and to streamline the implementation of the FARMER
7 Program. The shared pool currently consists of 15 air
8 districts located across the state.

9 The program has seen incredible interest and has
10 been oversubscribed every year we've had an allocation.
11 In our most recent solicitation for applications this
12 August, the shared pool received over 135 applications for
13 review, which, if funded, at their maximum eligible award
14 amount, would total roughly 13.5 million dollars in
15 funding.

16 In contrast, the CARB fiscal year 23-24 project
17 fund allocation for the FARMER shared pool was about 2.5
18 million, just about 20 percent of the pool's total
19 requests for this year. As of March 2024, the shared pool
20 has implemented over 200 agricultural equipment
21 replacement projects, ranging the gamut of eligible FARMER
22 projects from on-road agricultural trucks to irrigation
23 pumps, to tractors, to logging equipment. These projects
24 are projected to reduce over 7,300 metric tons of CO2
25 equivalent, 112,000 pounds of fine particulate matter, and

1 over two million pounds of nitrogen oxides over their
2 project lives.

3 The updated FARMER guidelines will open the door
4 to more -- even more incredibly cost-effective equipment
5 replacement projects that were not previously eligible.
6 Specifically, the opportunity for farmers to replace their
7 current equipment with something more well-suited or
8 efficient for their operation, provided the function
9 remains the same, will be a great benefit for smaller
10 farms.

11 About one-fifth of all applications the shared
12 pool receives for request -- are requests for projects,
13 which are not traditionally like for like. However, in
14 many instances, the applicant would prefer smaller more
15 efficient equipment that emits even fewer emissions and
16 also saves the Applicant on fuel costs. We are incredibly
17 appreciative of the CARB FARMER's team's efforts to
18 collaborate with local air districts and use the feedback
19 of our ag operators in these guideline updates. The new
20 guidelines will provide more opportunities for our ag
21 communities, especially those with smaller operations, and
22 in lower income communities, and will streamline the
23 administration process, so we can deliver funds to those
24 who need it faster and more efficiency.

25 On behalf of the shared allocation pool air

1 districts and the ag operators we represent, thank you for
2 your consideration of these FARMER guideline updates.

3 MSCD AIR POLLUTION SPECIALIST POWERS: Next, I
4 think we can finish with Aaron Tarango with the San
5 Joaquin Valley Air Pollution Control District.

6 AARON TARANGO: Is it on?

7 Great. Chair Randolph, members of the Board, my
8 name is Aaron Tarango. I'm the Grant Program Manager of
9 the San Joaquin Valley Air Pollution Control District.
10 I've had privilege of working closely with the CARB FARMER
11 Program team since the inception of the FARMER Program in
12 2017. I would like to take a moment to express our full
13 support of the guideline changes.

14 At this time, I also want to recognize the
15 outstanding CARB FARMER team, Lucina Negrete, Peter
16 Christensen, Michelle Buffington, Erin Uchida, Evan
17 Powers, Jason Crow, and Nathan Dean. Each of them has
18 played a critical role where -- and a vital role in the
19 success of the Program.

20 Over the years, they've been consistently
21 responsive to any questions, feedback, or concerns raised
22 by the District and our valley stakeholders. Their
23 commitment to open communication and collaboration has
24 been instrumental in the Program's continued growth and
25 effectiveness.

1 One of the central aspects of any grant program,
2 particularly one like FARMER, is the ability to adapt to
3 new technology and practices. Agriculture is an ever
4 evolving field and farmers are continuously adopting more
5 efficient, sustainable methods and equipment. The FARMER
6 Program has not only acknowledged this, but embraced it.

7 The team's efforts to ensure the Program remains
8 current with advancements in FARMER technology and
9 practices has been crucial in keeping it relevant and
10 beneficial for the farmer community.

11 Furthermore, the FARMER Program has played a
12 critical role in supporting these advancements in order to
13 improve air quality and -- air quality and air rate's
14 impact to buy agricultural-related emissions. In the San
15 Joaquin Valley alone, the FARMER Program has facilitated
16 the replacement of over 4,900 older polluting ag tractors
17 with new Tier 4 final tractors, more than 3,600 UTVs with
18 the new electric UTVs, over 214 agricultural trucks and 45
19 ag pumps.

20 These upgrades have resulted in substantial
21 emission reductions, including more than 23,000 tons of
22 NOx, 1,300 tons of PM2.5, and 351,000 metric tons of GHGs.
23 The introductions have not enhanced air quality across the
24 valley, but have also positively impacted health to valley
25 residents. It would not have been possible without the

1 FARMER Program.

2 To conclude, I want to thank the FARMER team for
3 their commitment to the Program's evolution. Their
4 dedication to staying up to date with the needs of farmers
5 and the technology ensures that the Program continues to
6 support the agricultural community, while still achieving
7 the goal of attaining your civic and air quality
8 improvements.

9 Their flexibility and forward-thinking approach
10 have truly made the difference in the Program. Thank you
11 for your time today. Very much appreciate it.

12 CHAIR RANDOLPH: All right. Thank you very much.

13 We will now hear from the public who signed up to
14 speak on this item, either by submitting a request to
15 speak or by raising their hand in Zoom. I will ask the
16 Board clerks to call the public commenters.

17 BOARD CLERK MOORE: Thank you, Chair Randolph.
18 As you mentioned earlier, I will call in-person commenters
19 first and then we will hear from those who have raised
20 their hand in Zoom. We currently have seven commenters
21 who have turned in a request-to-speak card in person, and
22 two who have raise their hand in Zoom. I apologize if I
23 mispronounce your name.

24 Our first commenter is Melissa Koshlaychuk.

25 MELISSA KOSHLAYCHUK: Check. Check.

1 I'm looking for that two-minute timer.

2 Well, thank you so much. Well, good afternoon,
3 Chair Randolph and members of the Board, and thank you for
4 this opportunity to provide comment on the FARMER Program.
5 My name is Melissa Koshlaychuk and I'm here today with
6 Western Growers. We are an agricultural trade association
7 that represents farmers and shippers in California,
8 Arizona, New Mexico, and Colorado.

9 I just want to start out by first saying that
10 this FARMER Program is critical for the California
11 agriculture industry, which definitely reflects and
12 mirrors what was mentioned earlier by Chair Randolph and
13 others and pointing out that California farmers face
14 unique regulations that are not seen anywhere else in the
15 U.S.

16 And so programs like this are heavily relied on
17 and critical for the success of our agricultural
18 businesses. There are a lot of call-outs for the metrics
19 that essentially quantify the success of the Program, with
20 respect to the total tons of nitric oxide that have been
21 removed as well as particulate matter and carbon dioxide.
22 But the one that I'd like to call special attention to has
23 to do with the funding.

24 So the FARMER Program, having distributed over
25 \$515 million since 2018 is impressive. And what's also

1 equally impressive is the dollar-for-dollar match from the
2 agricultural industry at just slightly over 521 million.
3 And when we think about where that money comes from, I
4 think we don't have to look much further than the UC Davis
5 cost studies that look at the operational costs for our
6 California agricultural businesses. And just in 2024
7 alone, a fair amount of them are operating in the negative
8 when we look at profit margins. And so that money is a
9 lot. And I think that that speaks volumes about the
10 co-commitment of the agricultural industry to match CARB's
11 commitment to reducing emission reductions.

12 And I think just overall noting that -- how well
13 this initiative -- this incentive program is functioning,
14 and that programs like this -- we need to continue with
15 this. Thank you for your time.

16 BOARD CLERK MOORE: Thank you.

17 Our next commenter is Ken Mak.

18 KEN MAK: All right. Checking.

19 All right good morning, Chair Randolph and Board
20 members. So I'm Ken Mak. I'm one of the supervisors with
21 the Bay Area Air Quality Management District's Grant
22 Division. And I'm here today to express our support for
23 the proposed updates to the Program guidelines.

24 As you've heard, since the inception of this
25 program, it has been instrumental in cleaning up older,

1 highly polluting equipment that significantly contributes
2 to ozone formation and -- for air quality. The projects
3 funded by this Program are among the most cost effective,
4 delivering substantial environmental benefits at a
5 relatively low cost. The guideline updates that you heard
6 today are designed to streamline the project
7 administrative requirements and make it easier for
8 applicants to participate in the program and to comply
9 with these requirements. The updates will also play a
10 critical role in supporting the adoption of zero
11 zero-emission equipment, which is essential for reducing
12 criteria pollutants and our carbon footprint.

13 In addition to what you heard today, we also hope
14 that CARB will consider extending liquidation deadlines
15 and increasing the allowable administrative cost recovery
16 for air districts. These changes will be necessary to
17 help the districts prioritize funding for zero-emission
18 equipment that take longer to implement and also to
19 perform the due diligence that's required by these
20 guidelines.

21 I do want to take a moment to thank CARB staff
22 for their diligent work in developing these updates, their
23 willingness to incorporate feedback from the various
24 agencies over the past years have been invaluable and
25 demonstrates a collaborative spirit that is vital for this

1 Program's success.

2 We firmly believe that these updates will enhance
3 the Program's effectiveness and ensure its continued
4 success in helping communities achieve their clean air
5 goals. We look forward to your approval of the updates
6 and to continuing our partnership with the Air
7 District's -- Resources Board. And we hope to continue to
8 collaborate to pursue California's critical air quality
9 and climate change goals.

10 Thank you.

11 BOARD CLERK MOORE: Thank you.

12 Next commenter is Steven Fenaroli.

13 STEVEN FENAROLI: Hello, Chair and members. My
14 name is Steven Fenaroli with the California Farm Bureau.
15 We represent over 26,000 farming and ranching families
16 across the state.

17 I just want to start by saying thanks to the CARB
18 staff specifically on the FARMER Program. They took a
19 tour across the state and held workshops and public
20 meetings. And that's credibly helpful for our members to
21 be able to hear directly from staff. So I just can't
22 overstate our appreciation for that.

23 Something that I think we heard from some of the
24 guest speakers from the different air pollution districts
25 was around the oversubscription of the Program. And I

1 think we would just echo the popularity of it. The data
2 is there to support its success. And we just look forward
3 to continued partnership with CARB in asking the
4 legislature to continually appropriate money to fund the
5 Program.

6 So thank you.

7 BOARD CLERK MOORE: Thank you.

8 Our next commenter is Taylor Roschen.

9 TAYLOR ROSCHEN: Good afternoon, Madam Chair and
10 members Taylor Roschen with Kahn, Soares, and Conway on
11 behalf of a variety of agricultural associations.

12 I also would like to express appreciation for
13 CARB staff and the FARMER team and the presentation today.
14 We support the guideline updates. Since 2017, FARMER has
15 been an incredibly successful program. And one of the
16 most successful and cost effective solutions to help the
17 ag sector transition to the cleanest available technology.

18 I think what it's proven is that incentives in
19 the ag sector work and we move faster and further
20 together. The staff report also highlights an important
21 piece that I'd like to highlight. Because ag equipment is
22 operated intermittently, it's highly customized for
23 California's commodities, and it's incredibly expensive to
24 replace. Farmers have a very difficult time taking the
25 financial risk to scrap this type of equipment that works

1 currently to replace them for cleaner ones.

2 With most commodity prices being at an all-time
3 low right now and the average family farm being overly
4 extended in loans, margins have become even tighter, so
5 the FARMER Program provides an important pathway forward,
6 including for our smallest farms in California. But more
7 importantly, FARMER results in immediate air quality
8 benefits for Californians. The ag community has worked
9 incredibly hard every year, including this year to provide
10 funding for the FARMER Program in the Legislature.
11 Obviously, we would like to see more zeros on the end of
12 this year's appropriation.

13 We are working hard with the CARB staff and CEC
14 staff to update the ag invent -- emissions inventory as
15 well. And we heard the Board's call to action at the last
16 meeting to work harder to accelerate our options --
17 actions. So you have our commitment to work hard in 2025
18 to secure additional funding for this critical program.

19 Thank you.

20 BOARD CLERK MOORE: Erin Norwood.

21 ERIN NORWOOD: Good morning. Thank you for the
22 opportunity to provide comments. I'm testifying on behalf
23 of the Almond Alliance. We represent over 7,600 growers
24 and more than a hundred processors of almonds in the state
25 producing nearly a hundred percent of the U.S. almonds and

1 over 80 percent of the global supply. Excuse me. Notably
2 70 percent of our growers operate on a hundred acres or
3 less and nearly 90 percent are still family owned.

4 The Almond Alliance is very appreciative and
5 supportive of the changes to the FARMER Program
6 guidelines. This program has been instrumental in helping
7 our members replace old high-emission equipment with
8 cleaner more efficient alternatives, leading to
9 significant reductions in the NOx and PM emissions as
10 reported earlier today, especially in the Central Valley
11 where many of our farmers live and work.

12 The utilization of the private funds in the
13 Program makes equipment turnover feasible for many of our
14 small farmers and family farmers who wouldn't otherwise
15 afford those costs. By covering part of the expenses, the
16 Program accelerates the adoption of the new technology and
17 delivers immediate environmental benefits, as has been
18 stated previously.

19 And as indicated in the report today, you know,
20 we are very pleased that over a third of the FARMER-funded
21 projects are benefiting small farms with less than a
22 hundred acres. And that makes that program even more
23 critical for our membership. So we would like to again
24 express our gratitude for the work that you've done on the
25 Program and the updates, and do echo the calls for

1 additional funding for this moving forward. And we'll
2 work with the rest of the industry to try and get that
3 funded with the Legislature next year.

4 Thank you.

5 BOARD CLERK MOORE: Thank you.

6 Jacob DeFant.

7 JACOB DeFANT: You're killing it with the names
8 today.

9 Thank you, Chair Randolph and the rest of the
10 Board. I am speaking on behalf of Agricultural Council of
11 California. We represent 15,000 growers throughout the
12 state of California here to speak in support of the
13 guideline updates and generally the FARMER Program.

14 The FARMER Program directly contributes to
15 California's air quality improvement initiatives and is
16 one of the most successful programs in replacing old
17 equipment on farms, resulting in a reduction of over
18 28,000 tons of NOx emissions and 16,000 tons of
19 particulate matter.

20 It's also one of the best programs in some of
21 these at-risk air quality districts at improving public
22 health. Areas, such as the San Joaquin Valley, which
23 struggle with some of the worst air quality in the state
24 and the country are major beneficiaries of the FARMER
25 Program, which significantly reduces exposure to some of

1 those toxic air pollutants for vulnerable populations.
2 Nearly, 70 percent of the funding benefits priority
3 populations and results in immediate air quality benefits.

4 The FARMER Program has distributed over \$515
5 million in funding to date, which is matched dollar for
6 dollar by farmers, making it one of the most cost
7 effective programs in reducing air pollution and improving
8 air quality as well. The Program has also resulted in a
9 replacement of over 10,000 pieces of equipment, including
10 tractors -- not just tractors, but also irrigation pumps
11 and other sources of emissions, and is adapting to new
12 technologies becoming commercially available, including
13 through electrification.

14 Our farmers are using programs not just to
15 transition from some of these tractors, but to other
16 zero-emission equipment like yard goats, irrigation pumps,
17 and UTVs. The FARMER Program has garnered strong support
18 from ag groups, air quality districts, environmental
19 organizations, such that we've heard today through the
20 public comments, and partnerships with these -- well,
21 thank you very much.

22 BOARD CLERK MOORE: Thank you.

23 Our last commenter in person is Jason Mandly.

24 JASON MANDLY: Good morning, Chair Randolph,
25 members of the Board and staff. We just want to reiterate

1 all the comments that you've already heard from our other
2 air district colleagues throughout California supporting
3 the FARMER Program. The Butte County Air Quality
4 Management District supports the proposed guidelines and
5 the proposed updates to those guidelines. And we just
6 want to reiterate the level of service from the FARMER
7 staff, from the beginning, not just with this process, but
8 from the beginning of this Program, has been exceptional
9 and has really helped the success of the FARMER Program in
10 Butte County.

11 Thanks.

12 BOARD CLERK MOORE: Thank you.

13 BOARD CLERK MOORE: We have to in Zoom.

14 The first commenter is Jorge Camacho. I have
15 activated your mic. Please unmute and you may begin.

16 JORGE CAMACHO: Hello. Can you hear me?

17 BOARD CLERK MOORE: Yes.

18 TODD CAMPBELL: Oh, perfect.

19 JORGE CAMACHO: Great. As you mentioned, my name
20 is Jorge Camacho and I am the grant supervisor for the
21 Mojave Desert Air Quality Management District. Chair
22 Randolph and members of the CARB Board, thank you for the
23 opportunity to provide comment on the agenda items
24 concerning the proposed updates to the FARMER Program
25 guidelines, and also the agenda item to consider revisions

1 to the Carl Moyer air quality standards attainment program
2 guidelines.

3 The Mojave Desert Air Quality Management District
4 is one of the state's 35 who are responsible for regional
5 air quality planning, monitoring, and stationary source
6 permitting. In addition, we also administer air quality
7 improvement grant programs, such as the FARMER and Carl
8 Moyer programs.

9 I am happy to say that our District has been
10 successfully implementing these programs since their
11 inception. These programs have cost effectively reduced
12 emissions within communities and improved air quality one
13 project at a time. However, despite our best proven
14 practices, current guidelines are not equipped to adapt to
15 the new changing landscape of zero emission and cleaner
16 engine technology. In addition, new mobile source
17 regulations, such as the Advanced Clean Fleet Rule and the
18 Zero-Emission Forklift rules have increased the
19 administrative burden for District staff.

20 As such, these regulatory changes affect
21 necessary resources to properly and fully conduct the
22 required project evaluation that includes emissions,
23 implementation, and reporting requirements throughout the
24 duration of the grant awards. The proposed changes to
25 both skylines are needed to alleviate these issues.

1 On behalf of our Executive Director, Brad
2 Poiriez, I am here to offer our District's support for the
3 proposed changes to the guidelines. And I would also like
4 to thank and acknowledge CARB staff's work on the changes
5 and their willingness to work with the districts to
6 continue the success -- the successful administration of
7 these programs.

8 Thank you.

9 BOARD CLERK MOORE: Thank you.

10 Our last commenter for this item is Christian
11 Bisher. I have activated your microphone. Please unmute
12 and you may begin.

13 CHRISTIAN BISHER: Hi. Good morning. My name is
14 Christian Bisher with the Central California Environmental
15 Justice Network. And while I -- while these incentive
16 measures do remove emissions, I would just like to remind
17 the Board and CARB staff that, especially in the San
18 Joaquin Valley, what we really need is ag equipment
19 regulation that will get the very worst equipment out of
20 service. But I had a -- really basically a comment -- a
21 question more than a comment, but regarding Mr. Cliff's
22 opening remarks on the cost effectiveness of the FARMER
23 Program being some of the best.

24 When I look at the San Joaquin Valley's 2023
25 Annual Demonstration Report, the NOx cost effectiveness is

1 just over \$61 million per ton, per day, and for PM2.5 it's
2 just over \$995 million per ton, per day. And so maybe
3 off-line someone from CARB could get in touch with me and
4 help me understand why those numbers that seem really,
5 really high to me, especially when you take the emission
6 reductions that those achieved and compare them to what
7 the emission inventory is for farm equipment. It's going
8 to be a lot of money to get those done. So I'd just
9 appreciate it if someone from CARB could contact me to
10 discuss.

11 Thank you.

12 BOARD CLERK MOORE: Thank you. That concludes
13 our comments on this item.

14 CHAIR RANDOLPH: Okay. Thank you. Staff, are
15 there any issues you want to address before I close the
16 record on this item?

17 EXECUTIVE OFFICER CLIFF: (Shakes head).

18 CHAIR RANDOLPH: Okay. Any questions or comments
19 from the Board members? We will start with Board Member
20 Guerra.

21 BOARD MEMBER GUERRA: Thank you very much, Chair.
22 I appreciate this and wanted to thank staff and all of the
23 partners involved in the extensive outreach on this
24 program. It's clearly, you know, one of the most popular
25 programs that I've heard when I've been meeting with our

1 air districts.

2 A couple, you know, thank yous to recognize.

3 One, the recognition for the challenges that some of the
4 small farms face, particularly in the, you know,

5 Sacramento, Northern California valley areas. I

6 appreciate the streamlining efforts and the farmer shared
7 pool as well on that and giving the air districts some

8 discretion on the regulation here, particularly on -- you
9 know, on the procurement side on the contract execution.

10 I know sometimes -- you know, we didn't want this money to
11 sit, but sometimes it takes a while for the -- just the
12 procurement process to go through. So I wanted to thank
13 on that.

14 The only, I guess, you know, concern that I had
15 and -- well, there's the concern that I always hear on
16 FARMER is that there's not enough money. So that's
17 probably the biggest complaint I get on FARMER when I'm --
18 when I've been out in the -- in the -- in the districts.

19 But the resolution gives the Executive Officer
20 the ability to change the guidelines in the future. And
21 that's the purview of the Board. And I appreciate, in the
22 spirit of streamlining, okay, how do we move this faster,
23 so that we can actually effectuate this -- the support for
24 the farmers. So I'm willing to support this motion also,
25 not only the guidelines, and the changes, and the ability

1 for the Executive Officer to move forward, but I would
2 like, Chair, if in the -- in the resolution, at least to
3 add a section on the updated portion of it that gives the
4 Executive Officer the authority a requirement that it --
5 that he or she report back -- that the Executive Officer
6 report back to the Board, you know, promptly or whenever
7 appropriate.

8 I understand that part of the reason for this is
9 that it can take time to get on the calendar on the agenda
10 for this Board. And we wouldn't want a benefit of
11 changing in the guidelines to affect that farmers. But
12 again, the purview of guideline changes is the Board, so I
13 want to make sure that there is a little bit of an
14 engagement from this body with future Executive Officers
15 that may change the guidelines. So those are my comments.

16 CHAIR RANDOLPH: Thank you. I think that's a
17 great suggestion and I have some ideas. So I will --

18 BOARD MEMBER GUERRA: Yeah. And again --

19 CHAIR RANDOLPH: I actually made some notes --

20 BOARD MEMBER GUERRA: Oh, good.

21 CHAIR RANDOLPH: So I will -- I'll suggest some
22 language.

23 BOARD MEMBER GUERRA: And I just wanted again,
24 just great work on the outreach and how far they went.
25 I -- you know, it's a big state and there's a lot --

1 there's a lot of roads out there, so I appreciate the fact
2 that staff and all the community members were part of
3 that.

4 CHAIR RANDOLPH: Great. Okay.

5 Board Member Hurt.

6 BOARD MEMBER HURT: Thank you, Chair.

7 So many thanks to staff and all those who
8 contributed to the workshops on this -- on this matter and
9 obviously modernization of the guidelines is really
10 important. And I want to thank Ken Mak from traveling
11 from my home area of the Bay Area and giving your
12 comments. And I agree flexibility and extending time
13 requirements is important.

14 I have two questions in two areas. Specifically,
15 I appreciate used equipment, especially for smaller farms,
16 producers, and associations. And in cases where there's a
17 Tier 3 or 2, or let's say a cleaner replacement instead of
18 scrapping, is there an opportunity for those to be sold to
19 maybe small farmers that have a Tier 0 or Tier 1 project
20 that's not financially able to convert to zero emission at
21 this time?

22 MSCD VEHICLE PROGRAM SPECIALIST BUFFINGTON:

23 Thank you for the question. Michelle Buffington
24 with the FARMER team. We do have a trade-up -- not a
25 trade-up -- a used tractor category that we were piloting

1 in San Joaquin Valley that we are now allowing for all of
2 the districts implement. So there -- that is one
3 mechanism in which a small farmer who does not
4 necessarily -- can have access to a new piece of equipment
5 would be able to get a used piece of equipment through the
6 Program.

7 BOARD MEMBER HURT: Thank you. I just want to
8 emphasize that, because as much as we talk about zero
9 emission, we also need to emphasize that there are used
10 and cleaner options. And they're not always super costly
11 and there are ways that we can help others around us get
12 to cleaner tools and equipment.

13 My second question is around dealers-only
14 conversation. And I understand the choices made just to
15 prevent fraud and quality assurance. Are there -- I'm
16 wondering if there are at least restrictive ways to do
17 this without a dealer at all times. We do it with
18 light-duty cars. We have lemon laws. And certainly,
19 there are third-party models. And again, I'm thinking of
20 smaller farmers, cooperatives, you know, online market
21 places with limited choices and there are fewer options
22 for equipment. And I'm just wondering if we evaluated
23 that and what that would mean, as it relates to
24 accessibility issues. Maybe I can talk more, if you need
25 to think.

1 MSCD VEHICLE PROGRAM SPECIALIST BUFFINGTON: Oh,
2 no. Thank you --

3 BOARD MEMBER HURT: Yeah.

4 MSCD VEHICLE PROGRAM SPECIALIST BUFFINGTON:

5 -- again for the comment. And we appreciated you
6 bringing it up during your briefing. We understand --
7 like you had mentioned all the reasons why we used
8 dealerships. I think that we have the opportunity to
9 continue to explore that opportunity of other methods. We
10 would obviously want to be working closely with our ag
11 stakeholders and the air districts to make sure that we
12 aren't opening the Program in ways that can cause harm to
13 the participants of the Program. So we appreciate that --
14 your thoughts on that and we would be happy to continue
15 those conversations moving forward.

16 BOARD MEMBER HURT: Thanks. And I guess maybe
17 another question, since I'm a little newer to this area,
18 are dealers able to add markup costs on those prices for
19 those small farmers on the equipment?

20 MSCD VEHICLE PROGRAM SPECIALIST BUFFINGTON: I
21 think we'll have to get back to you on that particular.

22 BOARD MEMBER HURT: Okay. All right. Well, I
23 look forward to working with you all. I am going to
24 support this, because it is an important modernization,
25 but I do want to uplift small farmers and the need for

1 used equipment, and equipment that is accessible and
2 affordable. And I know it's a difficult area for that to
3 happen. But any way we can create policy that supports
4 them, I think is important for the state of California.

5 MSCD AIR POLLUTION SPECIALIST POWERS: Can I just
6 add? I'm sorry. Evan Powers. I will add that the
7 majority of the districts do have great working
8 relationships with the dealers in their districts, and we
9 felt that it was important to leverage those relationships
10 and utilizing those relationships in these programs -- or
11 in this Program in that project category.

12 BOARD MEMBER HURT: Yeah. And I don't want the
13 dealers to get me wrong, I think they're a very important
14 part of this landscape, and they should continue to be so,
15 but just as we, I think, when we think of our light-duty
16 vehicles, we have expanded beyond dealers just being
17 sellers, and so what does that look like for agriculture
18 and for more affordable options and equipment. So I look
19 forward to talking more about that.

20 CHAIR RANDOLPH: All right. Dr. Pacheco-Werner.

21 BOARD MEMBER PACHECO-WERNER: Thank you so much.
22 You know, echoing Board Member Guerra and Board Member
23 Hurt's comments on all fronts, really supportive. And
24 just want to -- I know Board Member Guerra mentioned it
25 and some of our commenters mentioned the funding for years

1 to come, that this has been an incredibly successful
2 program and don't want to take it for granted in terms of
3 the amount that the funding has decreased. And so I
4 commend staff with continuing to make the best of what we
5 do have, and hope for better years to come on this. So
6 thank you.

7 CHAIR RANDOLPH: Any other comments or questions?

8 Dr. Shaheen.

9 BOARD MEMBER SHAHEEN: Thank you so much, Chair
10 and I really appreciate the discussion. Appreciate all
11 the stakeholders who came here to give your remarks, as
12 well as people online. And I also really want to
13 appreciate the staff very much. I really enjoyed our
14 briefing.

15 I'm going to follow up a little bit on Board
16 Member Hurt's comments regarding the used market, because
17 my sense is that that's an opportunity for us to spread
18 the benefits to smaller farms, but also take advantage of
19 the capital. And I know the cost effectiveness analysis
20 is based on a 10-year useful life. As I recall, you
21 expressed that that was notably higher? Was it 20 years
22 typically useful life of a vehicle?

23 MSCD AIR POLLUTION SPECIALIST POWERS: Yeah. So
24 our inventory shows that the equipment typically operates
25 in the field longer than 10 years, so we thought that was

1 a conservative approach to evaluate.

2 BOARD MEMBER SHAHEEN: It makes perfect sense.
3 So Evan and Michelle - and I know Michelle, you did a lot
4 of the number crunching - I'm very curious as we -- you're
5 like whoa. Okay. Sorry.

6 (Laughter).

7 BOARD MEMBER SHAHEEN: I get a little geeky
8 sometimes. Okay. So, with the used market, so with these
9 new guidelines that you're implementing -- so I paid close
10 attention to the new cost effectiveness limits for the new
11 vehicles, but how does this apply to the used vehicles in
12 this market? Is there a limit or how will this be
13 operationalized for the used market?

14 MSCD AIR POLLUTION SPECIALIST POWERS: Yeah, I
15 can -- I think it would help if I provided some background
16 on how that used equipment category actually works. So we
17 require -- for that particular project category, we
18 require that the baseline unit be a Tier 0 or a Tier 1.
19 The replacement must be a Tier 3 or cleaner.

20 We also require now that the equipment purchase
21 be done through -- the transaction be done through a
22 dealership. We also have a really extensive dealer
23 evaluation form, which may answer part of Ms. Hurt's
24 question, that is part of the process. And this not only
25 ensures that the equipment is fully operational, but also

1 ensures that the emission control systems are fully
2 functional and can meet the duration or can be operated at
3 the duration of the project life.

4 The projects, as you mentioned, Dr. Shaheen, are
5 still subject to the same cost effectiveness thresholds as
6 a traditional scrap and replace new equipment purchase.
7 So maybe that sheds some light on it.

8 CHAIR RANDOLPH: All right. All right. Thank
9 you.

10 Board Member Eisenhut.

11 BOARD MEMBER EISENHUT: Thank you, Chair. I
12 rarely do this, but I -- my comments are a virtual
13 duplication of comments offered by Board Member Eric, so
14 I'm not going to repeat them. He read my notes. And
15 given the -- given the timing of my perfectly timed being
16 the last, I'm looking for a nod from you that it's time to
17 offer a motion and I would like to do so.

18 CHAIR RANDOLPH: Board Member De La Torre wanted
19 to say a few words.

20 Go for it. Sorry. They told me you wanted to
21 say something.

22 So Board Member Eisenhut, before you make a
23 motion, I just kind of wanted to circle back on the
24 comment Board Member Guerra made about the guidelines
25 delegation. And so -- and I had a couple concerns. One

1 was, as you noted, you know, guidelines updates are the
2 purview of the Board, but it also -- I do want to make
3 sure that there is an opportunity for the Board to be able
4 to kind of discuss this Program and hear about some of
5 these issues that we were just talking about.

6 At the same time, I also recognize that sometimes
7 these little tweaks can get bogged down. So my suggestion
8 is to amend the third from the bottom paragraph and
9 provide that in that -- in the delegation that we add that
10 any changes would be reported to the Board in written
11 memos at the time the changes in the -- to the guidelines
12 are made, and that the staff update the Board at least
13 annually on the FARMER Program. And then that gives them
14 the opportunity to share again what the changes were and
15 talk about the Program. And we can leave it to staff to
16 decide do they want to do that kind of -- this same time
17 of the year when we talk about the funding plan or other
18 times of the year where it might make sense to provide
19 that update. Does that sound like a good option?

20 Okay.

21 Board Member Guerra.

22 BOARD MEMBER GUERRA: No. That's helpful. And
23 that actually -- and what gives me ease also, with that
24 notification, is that at least as staff has presented the
25 authority to the Executive Officer is that there's still a

1 public workshop -- public review process and hearing
2 process. So I think I would probably have much more
3 hesitation if there was no public hearing process by the
4 Executive Officer and their team.

5 So with that, I'm glad to support that --
6 whatever motion is made in that manner.

7 CHAIR RANDOLPH: Okay. So I can add where it
8 says, "up to date," at the last part of the paragraph,
9 "Ensure a public process for any updates, report those
10 actions -- report those changes in written memos to the
11 Board at the time the changes are made, and provide
12 updates about the Program at a Board meeting at least
13 annually."

14 Board Member Eisenhower.

15 BOARD MEMBER EISENHUT: So we're back. I move
16 adoption of the 24-5-3 as amended.

17 BOARD MEMBER BALMES: Second.

18 CHAIR RANDOLPH: All right. Clerk, will you
19 please call the roll.

20 BOARD CLERK MOORE: Dr. Balmes?

21 BOARD MEMBER BALMES: Yes.

22 BOARD CLERK MOORE: Mr. De La Torre?

23 BOARD MEMBER DE LA TORRE: Yes.

24 BOARD CLERK MOORE: Mr. Eisenhower?

25 BOARD MEMBER EISENHUT: Yes.

1 BOARD CLERK MOORE: Senator Florez?

2 BOARD MEMBER FLOREZ: Florez, aye.

3 BOARD CLERK MOORE: Mr. Guerra?

4 BOARD MEMBER GUERRA: Guerra, aye.

5 BOARD CLERK MOORE: Ms. Hurt?

6 BOARD MEMBER HURT: Aye.

7 BOARD CLERK MOORE: Mr. Kracov?

8 BOARD MEMBER KRACOV: Yes.

9 BOARD CLERK MOORE: Dr. Pacheco-Werner?

10 BOARD MEMBER PACHECO-WERNER: Yes.

11 BOARD CLERK MOORE: Mr. Rechtschaffen?

12 BOARD MEMBER RECHTSCHAFFEN: Yes.

13 BOARD CLERK MOORE: Dr. Shaheen?

14 BOARD MEMBER SHAHEEN: Aye.

15 BOARD CLERK MOORE: Ms. Takvorian?

16 BOARD MEMBER TAKVORIAN: Yes.

17 BOARD CLERK MOORE: Chair Randolph?

18 CHAIR RANDOLPH: Yes.

19 BOARD CLERK MOORE: Madam Chair, the motion

20 passes.

21 CHAIR RANDOLPH: All right. Thank you.

22 The next item on the agenda is Item number

23 24-5-4, proposed revisions to the Carl Moyer Memorial Air
24 Quality Standards Attainment Program guidelines.

25 If you are here with in the room and wish to

1 comment on this item, please fill out a request to speak
2 card as soon as possible and submit it to a Board
3 assistant. If you are joining us remotely and wish to
4 comment on this item, please click the raise-hand button
5 or dial star nine now. We will first call on in-person
6 commenters followed by any remote commenters when we get
7 to the public comment portion of this item.

8 The Carl Moyer Program is named after Dr. Carl
9 Moyer and was CARB's first incentive program dating back
10 to 1998. The Carl Moyer Program paved the way for our
11 current broad portfolio of incentive programs. Dr. Moyer
12 had a vision to achieve permanent emissions reductions
13 from mobile sources before regulatory deadlines. He led
14 the effort to develop an incentive program that brought
15 together a diverse group of businesses and government to
16 support meeting the National Ambient Air Quality
17 Standards. His passion for the environment and his vision
18 to unite business and government to improve California's
19 air quality is reflected in the Carl Moyer Program
20 Foundation and the proposed updates before the Board
21 today.

22 CARB administers the Carl Moyer Program in
23 partnership with California's 35 air districts. The State
24 develops guidelines that the air districts implement based
25 on their regional emissions reductions needs. The Carl

1 Moyer Program complements our regulatory programs by
2 providing those financial incentives for vehicles and
3 equipment owners to voluntarily purchase engines and
4 technologies that are cleaner than required by applicable
5 regulations.

6 Over the course of 25 years, the Carl Moyer
7 Program has been highly successful in providing
8 cost-effective emissions reductions from multiple source
9 categories. To date, the Carl Moyer Program has provided
10 more than \$1.5 billion in funding to replace over 69,000
11 engines, which has reduced ozone precursor emissions by
12 about 202,000 tons and particulate matter emissions by
13 about 7,400 tons. These emissions reductions have played
14 an important role in advancing California's work to clean
15 the air and protect public health.

16 Dr. Cliff, would you please introduce the item.

17 EXECUTIVE OFFICER CLIFF: Thank you, Chair
18 Randolph. As you stated, the Carl Moyer Program has been
19 very successful in delivering cost-effective emission
20 reductions by providing financial assistance to replace,
21 repower, and retrofit highly polluting engines. It is the
22 longest running incentive program at CARB. And the Carl
23 Moyer Program framework has served as the foundation for
24 many, if not all, the incentive programs here at the
25 agency.

1 While regulations continue to be the primary
2 means for reducing air pollution in California, incentives
3 play a role in accelerating technology development and
4 deployment, supporting fleet turnover beyond what is
5 required by regulation. CARB has a portfolio of
6 incentives each guided by their own statutory requirements
7 that work together to support California's multiple public
8 health, air quality, climate change, and equity goals.

9 Incentives will continue to play a role in
10 meeting California's strategic air quality objectives,
11 particularly for the State Implementation Plan and the
12 deployment of zero-emission technologies. Incentives also
13 continue to play an increasingly important role in
14 supporting small businesses and addressing environmental
15 injustices in minority and low-income communities, and
16 areas disproportionately impacted by air pollution.

17 The Carl Moyer Program is complementary to other
18 CARB incentive programs. It supports cost-effective
19 incentives for commercially available technologies. The
20 Program requires scrap and replacement of higher polluting
21 technology and funds up to the incremental cost of
22 commercially available cleaner-than-required technologies.

23 The proposal before you today retains the
24 framework that Dr. Moyer inspired 25 years ago. The
25 changes proposed today are intended to meet the needs of

1 the evolving regulatory landscape, encompass commercially
2 available zero-emission technologies, and to further
3 assist California's small businesses.

4 In developing these updated guidelines, CARB
5 staff worked collaboratively with our air district
6 partners, met with stakeholders, community members, and
7 held three public workshops throughout the state. Input
8 from this public process has been incorporated into the
9 proposal being presented today.

10 I will now ask Ms. Deborah Paselk from the Mobile
11 Source Control Division to begin the staff presentation.

12 Debbie.

13 (Slide presentation).

14 MSCD STAFF AIR POLLUTION SPECIALIST PASELK:

15 Thank you, Dr. Cliff. And good morning, Chair
16 Randolph and members of the Board. Today, I'm presenting
17 an overview of the Carl Moyer Memorial Air Quality
18 Standards Attainment Program, or more commonly referred to
19 as the Moyer Program and staff's proposed revisions to the
20 Program guidelines. These enhancements aim to modernize
21 the Moyer Program and create guidelines that improve
22 California's air quality and alignment with CARB's mission
23 to protect public health and our communities.

24 Now, I'll walk you through the outline of our
25 presentation.

1 [SLIDE CHANGE]

2 MSCD STAFF AIR POLLUTION SPECIALIST PASELK:

3 Today, we'll go over the Program's background,
4 including an overview and the Moyer Program outcomes to
5 date. I will then highlight staff's proposed updates for
6 the guidelines and we will close the presentation with
7 staff recommendations and untimed testimony from a few
8 guest speakers.

9 [SLIDE CHANGE]

10 MSCD STAFF AIR POLLUTION SPECIALIST PASELK: Over
11 the last 25 years, the Moyer Program has been a model for
12 many other successful incentive programs at the local,
13 State, and federal levels. At its core, the Moyer Program
14 achieves cost-effective emission reductions and provides
15 SIP creditable emission reductions by adhering to our four
16 core elements.

17 Surplus. We require reductions to be early
18 and/or in excess of regulations.

19 Quantifiable. We provide e mission
20 quantification methodologies publicly to clearly determine
21 the reductions.

22 Permanent. We ensure reductions are permanent by
23 requiring Scrappage of the old vehicle or equipment.

24 And finally, enforceable. The Board-approved
25 Moyer guidelines are legally enforceable.

1 Additionally, in 2001, the environmental justice
2 requirements were added, requiring 50 percent of our top
3 five air districts' funding be allotted to projects
4 achieving emission reductions in disadvantaged and
5 low-income communities.

6 So, what are the Moyer Program guidelines?

7 [SLIDE CHANGE]

8 MSCD STAFF AIR POLLUTION SPECIALIST PASELK:

9 Well, the Moyer Program guidelines provide a
10 framework to aid the air districts' investments providing
11 the how-to guide on funding a variety of source
12 categories. The guidelines identify roles and
13 responsibilities, outline administrative and
14 implementation requirements, and procedures. And now I
15 would like to talk how the Program implemented locally
16 through our air district partnerships.

17 [SLIDE CHANGE]

18 MSCD STAFF AIR POLLUTION SPECIALIST PASELK:

19 Collaboration is paramount to the Moyer Program's
20 ongoing success, including the Moyer 2024 guideline update
21 driven by changes in technologies, regulations, and a need
22 to streamline.

23 Moyer Program staff developed and revised
24 guidelines as needed in partnership with the air districts
25 and the public. They assist air district in the nexus

1 between Moyer and the regulations. Moyer staff support
2 air districts in making case-by-case determinations when
3 air district projects do not fit neatly within the
4 guidelines framework. They manage and distribute program
5 funds to the air districts and provide district oversight.

6 On the air district side, the air districts
7 implement the Program to fit their regional and community
8 needs. They also select projects, contract with
9 applicants, conduct project inspections, enforce when
10 projects are not performing, monitor projects over the
11 lifetime, and report outcomes to CARB.

12 Let's now talk about the Moyer Program successes.

13 [SLIDE CHANGE]

14 MSCD STAFF AIR POLLUTION SPECIALIST PASELK: Over
15 \$1.5 billion have been invested in technologies that
16 provide criteria and toxic emission reductions through the
17 Moyer Program. Currently, the perpetually funded Moyer
18 Program is allocated \$130 million annually with
19 approximately two-thirds of that allocation coming from
20 the smog abatement fee and the remainder from the tire
21 replacement fee, which was recently extended through
22 January 1st of 2034.

23 In addition, air districts that take more than
24 the minimum allocation must provide a 15 percent match.
25 The five air districts subject to the environmental

1 justice community investment requirements have
2 collectively exceeded the target of the investment and
3 spent over half a billion dollars on these environmental
4 communities.

5 The Moyer Program funds a broad variety of
6 project types, which meet the diversity needs of our
7 districts' local priorities, demographics, and geography.
8 As of 2021, the Moyer Program has cleaned up over 69,000
9 engines and reduced ozone precursors by over 200,000 tons,
10 and particulates of over 7,400 tons.

11 To provide some perspective on the types of
12 investments made through the Moyer Program, we want to now
13 show them at the project source category level.

14 [SLIDE CHANGE]

15 MSCD STAFF AIR POLLUTION SPECIALIST PASELK:

16 Let's take a look at how many dollars have been
17 spent on various source category projects, since the
18 program's inception in 1998 through 2021. As you see, a
19 majority of the Moyer funds go towards off-road projects
20 and on-road heavy-duty projects, because these projects
21 are highly cost effective, in high demand, and are also
22 driven by regulatory deadline requirements.

23 [SLIDE CHANGE]

24 MSCD STAFF AIR POLLUTION SPECIALIST PASELK: Now,
25 let's look at this chart that depicts the number of Moyer

1 source category projects. A few things to highlight here.

2 We are seeing and continue to see a rise in
3 marine and locomotive projects due to recent regulations
4 and increases in availability of zero-emission
5 technologies. The same can be said with the rise in
6 on-road heavy-duty projects, in part because of the
7 Incentive Program Advisory Group, also referred to as
8 IPAG, which was a process that took place with Board
9 Members Burg, Kracov and Hurt. IPAG works to further
10 accelerate zero-emission vehicles and create equity in
11 on-road and infrastructure investments. And lastly, we
12 are expecting increases in infrastructure investments and
13 the deployment of zero-emission vehicles and equipment.

14 Now, I would like to highlight the collaboration
15 that went into building these proposed changes.

16 [SLIDE CHANGE]

17 MSCD STAFF AIR POLLUTION SPECIALIST PASELK: For
18 the last year and a half, we have held regular working
19 group meetings with the local air districts to review the
20 guidelines in a collective effort to update them.
21 Additionally, the Moyer Program team held three hybrid
22 public meetings, a community meeting, and numerous
23 one-on-one meetings with interested stakeholders to
24 discuss the proposed changes.

25 Now, let's move on to those major proposed

1 changes, which are reflective of those workgroup meetings
2 and the feedback that we received from stakeholders and
3 communities.

4 [SLIDE CHANGE]

5 MSCD STAFF AIR POLLUTION SPECIALIST PASELK:

6 Since the last comprehensive guideline update in
7 2017, many of on-road and off-road regulations have
8 passed, impacting Program guidelines.

9 One way of many ways we are proposing to
10 alleviate these impacts is a one-year minimum project
11 life. For reference, in the 2017 guidelines, this was set
12 at three years. A one-year minimum project life
13 flexibility will allow applicants to receive funding
14 before their compliance deadlines. We're also proposing
15 additions to the guidelines that streamline processes and
16 add flexibility to project categories. This includes our
17 proposal to simplify off-road agricultural projects by
18 allowing projects to follow Funding Agricultural
19 Replacement Measures for Emission Reduction Program, also
20 know as the FARMER Program.

21 Another example is reducing the case-by-case
22 determinations by providing more project types in each of
23 those categories. Also, we're expanding opportunities to
24 support the modernization of the Program by expanding
25 zero-emission opportunities in marine and locomotive

1 projects.

2 [SLIDE CHANGE]

3 MSCD STAFF AIR POLLUTION SPECIALIST PASELK: With
4 on-the-ground implementation experience, air districts
5 provided us with vital information to widen zero-emission
6 technology opportunities including: delaying scrappage
7 for new technology adopters to allow them to fully
8 integrate new technology before scrapping their current
9 technology; broadening the eligible costs that the Program
10 can cover for zero-emission technologies, including taxes,
11 warranties, and insurance. Additionally, allowing for
12 lease-to-own to provide more options for fleets; and on
13 the infrastructure project side, plus-up options that will
14 open to the public or generate electricity via wind or
15 solar.

16 [SLIDE CHANGE]

17 MSCD STAFF AIR POLLUTION SPECIALIST PASELK:
18 Program Administration has changed since the last
19 comprehensive update, including expanded air district
20 responsibilities and the increases in cost of living. In
21 recognition of this, we are proposing to increase the
22 total administration fund allocation for air districts
23 from 6.25 percent for populations over one million to 12.5
24 percent, and from 12.5 percent for populations less than a
25 million to 15 percent.

1 Also, other programs that follow the Moyer
2 administrative procedures, like the FARMER Program and CAP
3 incentive, are aligning or are in discussions to align
4 with these changes respectively.

5 [SLIDE CHANGE]

6 MSCD STAFF AIR POLLUTION SPECIALIST PASELK:

7 Lastly, we're updating emission calculations,
8 load factors, and grant amounts to align with updated
9 inventories, inflation, and the current market conditions.
10 And we are also simplifying the calculation methodology
11 approach for all project types making it easier and faster
12 to determine the cost effectiveness of various projects.

13 Our updated cost-effective limits are shown in
14 the table here on the screen. And now, I will go over
15 some of the additional proposed changes based on feedback
16 from the 45-day comment period.

17 [SLIDE CHANGE]

18 MSCD STAFF AIR POLLUTION SPECIALIST PASELK:

19 Based on the feedback that we receive during the
20 45-day comment period, we are proposing to following
21 additional changes:

22 Incorporating Archuleta's bill SB 1158, which was
23 recently signed by the Governor, and that extends the air
24 district's liquidation deadline to six years following
25 disbursement; allowing additional district discretion on

1 when post-inspection of on-road trucks occur during
2 delivery of new trucks; aligning FARMER and off-road Moyer
3 zero-emission warranty requirements and forestry load
4 factors; increasing marine zero-emission cost
5 effectiveness limit to \$522,000, which aligns with the
6 zero emission for on-road trucks; and providing minor
7 updates to the chapters.

8 [SLIDE CHANGE]

9 MSCD STAFF AIR POLLUTION SPECIALIST PASELK:

10 Staff recommends the Board approve the proposed
11 Moyer Program 2024 guidelines. The proposed changes in
12 the guidelines will continue to support CARB's work with
13 air districts and implementing the Moyer Program while
14 setting the stage for advanced technology projects that
15 further help California meets its clean air objectives and
16 strategic plan goals.

17 Before we begin with the testimony, I would like
18 to take a moment to recognize the Moyer family who joined
19 us today to honor Dr. Moyer's contribution and legacy to
20 protect the public health. And they're sitting right
21 behind me.

22 (Applause).

23 MSCD STAFF AIR POLLUTION SPECIALIST PASELK: I
24 would also like to recognize and thank all of the local
25 air districts who spent the last year and a half engaging

1 with CARB staff on this process.

2 Now, we would like to invite a few individuals
3 who worked alongside Dr. Moyer during the Program
4 development. Tom Swenson and Kevin Shanahan and also the
5 -- and air districts who implement the Program. And for
6 them, we have Mike Neuenburg from Sacramento -- Sac
7 Metropolitan AQMD, Mei Wang from South Coast AQMD, Jason
8 Mandly from Butte County AQMD, and Todd DeYoung from San
9 Joaquin Valley APCD to provide testimony. Thank you.

10 TOM SWENSON: Appreciate that. Good morning. My
11 name is Tom Swenson and I worked for the Sacramento Air
12 District from 1993 to 2003 doing mobile source related
13 work.

14 It's pretty humbling to think about what we've
15 just heard this morning and that initial work. So the
16 initial work was done by Dr. Moyer, of course, Carl,
17 Charlotte Pera, remember Sharla, Tim Taylor, and myself.
18 And it's really 30 years old. We started the work in
19 1994. And we were -- we were trying to think about, you
20 know, how do we do things to get the emission reductions
21 done like right now. And, you know, Carl used to say,
22 "It's all about the trucks, stupid."

23 (Laughter).

24 TOM SWENSON: He did, because that's who was
25 use -- that's who uses the fuel, right, who's using the

1 fuel, who's burning the fuel? So we made a decision to
2 basically go emission shopping. We call it an incentive,
3 but it's really -- we went -- we were out buying emission
4 reductions. That's what we did. And we made a conscious
5 decision not to fund technology advancements. We wanted
6 to go specifically after commercially available stuff.

7 And as I was preparing for these remarks, I
8 happened to be driving through Elk Grove earlier this
9 week, and the very first participant -- this was before it
10 went statewide, but the very first participant was a
11 trucker in Elk Grove. And I had the opportunity to
12 actually -- the only reason I know where he lives is
13 because I went there personally to tell them this wasn't a
14 scam --

15 (Laughter).

16 TOM SWENSON: -- because it was like, wait a
17 minute, you're going to give me a brand new engine. I'm
18 not so sure about this. So it all started from that first
19 repower. And we sort of -- you know, one of the things
20 that Carl encouraged Tim and I to do was get out of the
21 office, and talk to industry, and create partnerships.
22 You're going to hear from Kevin Shanahan next. And he's
23 one of those key partners that we developed a relationship
24 with to develop the foundation of the programs that you
25 know are here today.

1 It's just -- it is so humbling to think about
2 what that initial work has become. It -- I mean, I've
3 been doing this now for darn near 30 years. And I watched
4 this happening, but I -- it didn't really become real
5 until today. And the friendships and the partnerships are
6 really special. So Carl was also a mentor to me, because
7 I was in my mid-20s. I know a lot more hair and less
8 gray.

9 (Laughter).

10 TOM SWENSON: He gave me a lot of advice, much of
11 which I probably, because I was in my mid-20s, didn't
12 cap -- fully capture. But there's two things that I still
13 carry with me today. The first is to be humble. He used
14 to say give away the credit and take the blame. And that
15 was Carl. And then the other thing, and I'm pretty sure
16 he was telling me to shut up more and listen, but he said,
17 you aren't learning anything, if you're talking.

18 And so those two things I carry with me all the
19 time. Really appreciate the opportunity to share my
20 thoughts today. And I'm just amazed at the people and the
21 benefits to the community that these programs have
22 developed into. So thank you.

23 KEVIN SHANAHAN: Good morning. Good morning. My
24 name is Kevin Shanahan and I'm so honored to be here to
25 provide testimony today. And I, too, am just blown away

1 by what I heard today, the amount of money of course, but
2 the -- it's getting used in such an effective way, but the
3 tons of PM and NOx.

4 I leaned over to Tom during this, and I said he's
5 got to be running around up there just so thrilled with
6 what's he done. Tom said, no, no, he's too humble, which
7 is true.

8 (Laughter).

9 KEVIN SHANAHAN: I want to put this in a little
10 bit of context. I was fortunate to be the owner of
11 Cummins West from 1986 until selling the business in 20 --
12 late 2013. Cummins West is one of the largest Cummins
13 distributors in North America. We -- our territory is
14 California, Nevada, and Hawaii. We sold and serviced
15 diesel-fueled engines in all mobile source applications,
16 heavy-, medium-, and light-duty trucks and buses, and
17 additionally stationary power generation applications and
18 a wide range of marine mining and construction equipment
19 applications.

20 I share these facts with you, because it brings
21 to mind that the regulatory focus in the early nineties
22 was increasingly on reducing the emissions from these
23 mobile sources, the emissions they produced. At that
24 time, my competitors and I, as well as the users of these
25 mobile sources, were viewed as the enemy, and -- by

1 regulators and the environmental community. And
2 unfortunately or sadly, the feeling was mutual.

3 (Laughter).

4 KEVIN SHANAHAN: And at that time, all anyone of
5 us had to do was look at the state's terrible air quality
6 and know toxic emissions from these sources was a very
7 serious problem and getting worse each year.

8 Not only was the air quality in the State
9 terrible, but the relationship between the regulators, the
10 environmentalists, and the producers and users of these
11 mobile source -- sources was even worse than the air
12 quality, if you -- if that could even be possible. Tom
13 and I have -- just briefly saying, it's -- we hated each
14 other. It was just terrible.

15 So, enter Carl Moyer. As I remember, as Tom
16 alluded to, Carl is consulting with Tim Taylor and Tom at
17 the Sacramento AQMD on how to reduce emissions from on-
18 and off-road mobile sources. I was intrigued by what they
19 were doing and how Carl was suggesting they go about it.

20 Fundamentally, the root of Carl's approach was
21 collaboration. First, Carl showed us how to
22 collaboratively identify the stakeholders of -- for a
23 given problem. Carl then showed us how to elaborate
24 together and solve problems by sharing each other's --
25 each stakeholder's unique -- own unique perspectives,

1 knowledge, and experience with that given problem
2 peacefully.

3 Carl's approach was knew to us and the progress
4 was very encouraging. To our surprise, we all got along
5 really well and realized today, we might be able to
6 develop some real measurable mobile source emission
7 reductions. Carl showed us that together we could move
8 from conflict to convergence, and come together to reduce
9 toxic diesel emissions. We gained immense respect for
10 each other.

11 God, I'm shaking. This is incredible.

12 We gained immense respect for each other, built
13 trust in each other, and came up with some of the most
14 creative solutions on how to fund these -- those solutions
15 collaboratively, and we couldn't find any money, but I
16 guess door to door, like Tom said.

17 So by following Carl's lead and letting him guide
18 us, we started reducing diesel NOx and PM emissions to
19 clean up California's air. Carl had the vision to see how
20 building a firm base of collaboration, built on trust and
21 respect could resolve big air quality challenges. But
22 after hearing what I heard today, I had no idea how big,
23 but he did. Carl's ideas and approach took what we
24 learned at the Sacramento AQMD and spread his formula for
25 success to the Bay Area AQMD and the other district. And

1 it wasn't long before CARB embraced what was happening,
2 and collaboration reached a whole new level with what was
3 to become the incredibly successful statewide Carl Moyer
4 Emission Reduction Program.

5 Collaboratively, recognizing the huge amount
6 of -- at that time we, collaboratively figured out -- we
7 recognized a huge amount of federal highway funding that
8 was at stake if we didn't hit these targets. So once we
9 kind of got our heads together, it was like, well, that's
10 a -- incentivizing some of these things is a drop in the
11 bucket compared to what we have at stake, and that's when
12 it started to get rolling.

13 Carl was a mentor to all of us, bringing out the
14 full potential of each of us in our individual role as a
15 stakeholder in reducing toxic diesel emissions. Carl's
16 dedication and commitment to getting us to all work
17 together produced friendships with people. I continue to
18 admire and respect, and honestly I really miss Carl. I
19 mean -- I'm sure you do, too, obviously, but -- but, I
20 mean, getting this collaboration to work, I mean, Jerry
21 Brown, John Burton. I remember John White got me in to
22 see Burton and I went to pitch him on something we were
23 trying to do and Burton "F" this and "F" that with me.
24 And he said I don't know what the hell you're talking
25 about.

1 (Laughter).

2 KEVIN SHANAHAN: Go down the hall to hall to Kip
3 Lipper in what -- if he agrees with it, I'll go along with
4 it.

5 (Laughter).

6 KEVIN SHANAHAN: And I mean, Burton and I use to
7 have -- I got to know him. We'd have breakfast at least
8 twice a month down at the Fairmont in the -- I mean, we
9 became friends, but also so many others, Jared Huffman,
10 Russ Long, Mike Kenny, and Tom Cackette, and Jack
11 Kitowski, and of course, John White and Patty Monahan,
12 with the Union of Concerned Scientists at that time. And
13 I think she's with the -- she's a big shot over at the
14 Energy Commission now. That was a compliment. But also
15 Ellen Garvey, Jack Broadbent, Bob Sawyer, and, of course,
16 Alan Lloyd.

17 Carl Moyer was and continues to be a huge
18 influence on my life in my business, in my personal life,
19 collaboration, working together, shutting up -- shut up
20 and listen, Kevin. And it's just -- these fundamentals
21 have stayed with me ever since I met him.

22 Working with Carl and working collaboratively
23 with CARB, the various air districts, environmental groups
24 and industry is the most treasured memory of my business
25 career.

1 Thanks for having me and thanks for listening.

2 (Applause).

3 MSCD STAFF AIR POLLUTION SPECIALIST PASELK: And
4 the next person we'll have speak is Mike Neuenburg from
5 Sac Metropolitan AQMD.

6 MIKE NEUENBURG: Let's see, I just want to say
7 good morning to the Board -- to Chair Randolph and the
8 Board and to Dr. Moyer's family as well.

9 My name is Mike Neuenburg. I'm Program
10 Supervisor of Incentives at the Sacramento Air District,
11 where I've worked for the last 23 years. And it's
12 actually an honor to be here today and speak on behalf of
13 the Moyer Program. I am going to just deviate for a quick
14 said and off the notes and just say thank you to both Tom
15 and Kevin for your personal thoughts and sharing about Dr.
16 Moyer.

17 Tom and Tim Taylor were actually the ones who
18 hired me on at the Air District back in 2001. And so I
19 heard some stories about Dr. Moyer at the time when I was
20 there for a couple of years working him and Tim, but it
21 was really good to hear what you guys had to share about
22 him as well and the influence he had. And, of course, my
23 notes will kind of cover that a little bit. But I just
24 want to say a special thank you to that.

25 I actually came from the chemical manufacturing

1 environment for about 10 years before I came to the Air
2 District. And Tom actually recognized the connection
3 between that regulatory side where I was working as an
4 environmental compliance manager. And, of course, yes,
5 Kevin is absolutely right, when you're working in the
6 chemical industry and you've got folks coming in to
7 inspect your facilities, nobody is happy about regulators
8 coming in.

9 And so that was the nexus when I was hired on was
10 I saw the beauty of this Program and the benefits of
11 government and business working together. And I think
12 those notes will cover it from here going forward, but
13 that was -- that was the personal connection I had and
14 that's why I'm still here 23 years later is because we're
15 still working with business with all the different groups,
16 ag and construction, and all the other folks that you
17 worked with from there. And, of course, we're working
18 with community groups and helping out our public here as
19 well.

20 So with that, I do want to share what I want to
21 call a positive thinking story, similar to the story of
22 *The Little Engine That Could*, "I think I can, I think I
23 can, I think I can." And after what I just heard here, I
24 think I'm actually going to be in line here.

25 Okay. While I didn't know Dr. Moyer personally,

1 I can share about how his life impacted our agency. Back
2 in the 1990s, as you heard, the Sacramento federal
3 non-attainment area was designated with a severe status in
4 ozone, and 70 percent of that pollution was coming from
5 transportation and off-road mobile equipment.

6 After careful evaluation of the combustion
7 technologies contributing to ozone, Dr. Moyer and the Sac
8 Metro team determined that replacing diesel engines with
9 cleaner technology was one of the best options. However,
10 there were no regulations in play to force people to
11 change into cleaner technology, and diesel engines can
12 last for decades.

13 So the big question became how do you get owners
14 to change their engines or equipment? Nobody is just
15 going to do it out of the goodness of their heart. After
16 all, they have a business to run. Hence, the idea of
17 providing incentives for equipment replacement was born.

18 While the thought of providing money would seem
19 simple, there are challenges as you've obviously heard in
20 front of Dr. Moyer and the Sac Metro team. For example,
21 what is the right amount of money to get owners to make
22 the switch? How do you get owners to trust government?
23 What's the catch? How do you quantify the emission
24 reductions are real and meet EPA requirements? And most
25 importantly, where does the money come from?

1 Well, the Sac Metro team did identify some local
2 funds that could be used towards this concept and they
3 would work with Dr. Moyer to set up the heavy-duty vehicle
4 incentive program. After the questions were addressed,
5 the pilot project was born in 1996 in our local air
6 district. Working the local dealers to identify potential
7 participants, the local program was a huge success and a
8 couple years later, 25 million was authorized to the
9 beginning of the Carl Moyer statewide incentive program in
10 honor of the life-long work that Dr. Moyer had done.

11 The funding was distributed to ARB and the local
12 air districts, and now 25 years later, as you've heard,
13 over one billion has been allocated to the Moyer Program.

14 Additionally, this Program spurred on numerous
15 other incentive programs now totaling billions annually
16 across the globe, and at the federal, State, and local
17 levels. California air districts have collaborated with
18 ARB, local dealerships, and the community on these
19 incentive programs to share ideas and learn from each
20 other to improve these programs. *The Little Engine That*
21 *Could*, "I think I can," came through.

22 Today, Sac Metro Air District, along with others,
23 is using Moyer and other funds aimed at replacing diesel
24 equipment with zero-emission technologies. From EV big
25 rigs to numerous EV delivery trucks, zero-emission

1 hydrogen locomotives, EV ag tractors, and perhaps most
2 importantly, EV school buses who are carrying our future
3 generation of transportation users and exposing them to
4 the benefits of zero-emission technology. These programs
5 are providing valuable benefits to our underserved
6 communities, clearly improving air quality, while
7 providing health benefits to all.

8 In closing, I would like to say thanks to Chair
9 Randolph and the Board, Dr. Moyer's family, and to the
10 people in this room and on the webcast for listening to
11 our story. And let's change the positive story of *The*
12 *Little Engine That Could*, from, "I think I can, I think I
13 can, I think I can," to, "We know we can, we know we can,
14 we know we can."

15 (Applause).

16 MSCD STAFF AIR POLLUTION SPECIALIST PASELK: Now,
17 I would like to have Mei Wang from South Coast AQMD.

18 MEI WANG: Thank you. Good afternoon, Chair
19 Randolph and the member of the Board.

20 Thank you for the opportunity to speak today on
21 the Carl Moyer Programs. My name is Mei Wang, Assistant
22 Deputy Executive Officer at the South Coast Air Quality
23 Management District, Technology Advancement Office.

24 I'm here to represent the South Coast AQMD
25 support on this item. The South Coast AQMD has

1 implemented the Carl Moyer Program since its inception in
2 1998. During the past 25 years, the Carl Moyer Program
3 funds have resulted in the replacement of nearly 9,000
4 engines and about 10,000 tons per year of NOx and 300 tons
5 per year of PM emission reductions.

6 The Program has provided over \$600 million in
7 incentive fundings and leverage over a billion dollar of
8 private investments. The Moyer Program has helped OEM and
9 other manufacturer push to get their clean technology
10 commercialized, so they can be part of Moyer Program.

11 We appreciate the countless hour CARB staff spent
12 working with us and other air district to obtain input
13 parameters, address needed changes in the Carl Moyer
14 Program guidelines, and continually refine the highly
15 successful programs when it is needed. Over the years,
16 the Carl Moyer Program has transformed from funding only
17 the clean diesel equipment to alternative fuel and is now
18 heavily focused on the zero-emission technology in several
19 sector. It is really an exciting time for the Moyer
20 Program.

21 The update to the Moyer Program will provide air
22 district and -- with the guidelines and resources needed
23 to continue to implement and track usage of equipment
24 funded under the Moyer Program. The Moyer update, such as
25 simplifying cost effectiveness calculation, allowed delay

1 scrapping when going to zero-emission technology, and
2 allowing lease-to-own options will help implement
3 zero-emissions equipments. Additional changes to the
4 infrastructure guidelines are extremely beneficial to
5 support implementation of the zero-emission equipment.

6 In general, the update and the revision to the
7 guidelines will encourage innovation, develop resilience,
8 and provide flexibility to support the transition to
9 zero-emission technology. This is especially true within
10 our overburdened communities, with -- which is a priority
11 of the Moyer Program.

12 The increase in administrative fee will continue
13 to support the Program implementation, particularly with
14 funding more complex zero-emission projects, improve
15 operational efficiency, and maximize Program emission
16 reduction benefit by continuing to secure the technical,
17 legal, and financial expertise to take -- it takes to
18 implement and oversee the Moyer Program.

19 We appreciate the CARB Board and staff in
20 supporting the Moyer Program and value the collaborative
21 approach CARB have taken in getting this amendment before
22 you today. As always, we're looking forward to continue
23 working together on this critical program.

24 Thank you.

25 (Applause).

1 MSCD STAFF AIR POLLUTION SPECIALIST PASELK: And
2 now, we'll have Jason Mandly from Butte County AQMD.

3 JASON MANDLY: Good afternoon, Chair Randolph and
4 members of the Board and staff. My name is Jason Mandly
5 and I have the pleasure of implementing the Carl Moyer
6 Program in Butte County, California. So Butte County AQMD
7 started Implementing the Program in the year 2000. I
8 think we needed a couple years to make sure it wasn't a
9 scam.

10 (Laughter).

11 JASON MANDLY: But, you know, Larry Odle, Jim
12 Wagoner, Gail Williams were some of the staff that were on
13 Board that got it started locally. And then Aleah Ing and
14 Armen Kamian added on to our local program. And then I
15 took it over in the year 2015. And would it -- wouldn't
16 you know that was the year that we finally attained the
17 2008, 8-hour our ozone standard right when I started.

18 Of course, ozone is a regional pollutant and the
19 sources of emissions and the strategy is to reduce those
20 emissions are diverse. But with over -- with hundreds of
21 tons of voluntary NOx emission reductions over the years,
22 just in our small and rural air district, not to mention
23 the efforts of other districts throughout the Sacramento
24 Valley Air -- Sacramento Valley Air Basin, I have to point
25 to the Carl Moyer Program as being part of that puzzle.

1 And one of the reasons why Butte County reached
2 attainment, not just with 2008 federal ozone standard, but
3 also the 2015, and soon the State standard. The majority
4 of Carl Moyer Program funds in Butte County, they tend to
5 support agricultural projects, since those tend to achieve
6 the most surplus emission reductions for our communities.
7 However, we do infrastructure projects as well, as well as
8 school bus projects, reducing kids exposure to diesel
9 particulate matter.

10 And just this past year, we've been putting the
11 Carl Moyer Program into the hands of hundreds of Butte
12 County residents with the expanded zero-emission lawn and
13 garden equipment program, reducing folks exposure to
14 pollutants resulting from the combustion and just the
15 handling of gasoline.

16 When working with CARB staff to update the Carl
17 Moyer Program guidelines, it was encouraging to see CARB
18 reaching out to small and rural air districts for feedback
19 on how to make the Program more successful no matter what
20 corner of the state you're in.

21 Our Air District has 11 staff total. Some have
22 five, other air districts operate with just one person and
23 air quality being maybe just one of the many hats that
24 they have to wear as part of their responsibilities.

25 These proposed updates to the guidelines expands

1 the menu of possible projects and it streams line --
2 streamlines many processes, which will make it easier for
3 smaller districts like ours to have success stories
4 through the Carl Moyer Program. Butte County Air Quality
5 Management District is supportive of the proposed
6 guideline updates. We support continued collaboration
7 between CARB and CAPCOA, and especially with the Carl
8 Moyer Rural Assistance Program, and give thanks to the
9 CARB staff that have been helping us throughout the years
10 to implement the Program, particularly our liaisons, past
11 and present, such as Dinh Quach, Debbie Paselk, Kreston
12 Tom.

13 Thank you.

14 (Applause).

15 MSCD STAFF AIR POLLUTION SPECIALIST PASELK: And
16 next, we have Todd DeYoung from San Joaquin Valley APCD.

17 TODD DeYOUNG: Good afternoon Madam Chair,
18 members of the Board. Todd DeYoung, the Director of
19 Grants and Incentives for the San Joaquin Valley Air
20 Pollution Control District. It's a pleasure to be here
21 this afternoon. This time was originally made available
22 to Tung Le, the Executive Director for CAPCOA.
23 Unfortunately, he had an emergency to attend to, so he
24 won't be able to make it. I was provided with his
25 comments, so I'll read those into the record.

1 But while I'm up here, I wanted to provide my own
2 support from the San Joaquin Valley Air Pollution Control
3 District's perspective, and then recognize Dr. Moyer's
4 family. I've been involved in the Program since 1999. I
5 never had the pleasure to meet Dr. Moyer, but his impact
6 is obviously profound, as you've heard this morning. So
7 really appreciate you all being here and it's a pleasure
8 to be here with you today.

9 So I am here to speak on behalf of the San
10 Joaquin Valley Air Pollution Control District and provide
11 our support for the Carl Moyer Program amendments before
12 you this afternoon. I've personally been working with
13 CARB on this Program for the past 25 years. And through
14 this time, I've seen this Program continue to evolve and
15 continue to remain relevant and responsive to the needs,
16 and the residents, and businesses of the San Joaquin
17 Valley and all of California. We really appreciate the
18 collaboration with staff through this process. And these
19 amendments really reflect a great partnership between the
20 air districts and CARB staff.

21 While sometimes we have different perspectives,
22 these guidelines represent that collaborative spirit and
23 compromise that address the unique challenges that we
24 face, as we work towards the transition to cleaner
25 technology throughout California. I'd like to recognize

1 the entire staff that worked on these guidelines
2 amendments including, but certainly not limited to, Lucina
3 Negrete, Michelle Buffington, Tess Sicat, Derek Winters,
4 Debbie Paselk, Neva Lowery and all of the others that were
5 involved, really have done a bang up job throughout this
6 entire process in keeping the air districts informed.
7 It's been -- it's been a true pleasure.

8 So with that, I will read Tung Le's comments.

9 So I would like to begin by recognize the
10 collaborative efforts of CARB, Air District staff, and
11 CAPCOA in working together to address key updates to the
12 Moyer Program. This partnership has allowed air districts
13 across the state to share their concerns, ideas, and
14 invaluable experiences, ensuring that local perspectives
15 are heard and reflected in the proposed changes. The
16 updates we're discussing today stem from the frustrations
17 of air districts who are on the front lines of addressing
18 air quality challenges. Their input has been critical in
19 shaping a more effective and responsive program.

20 The Moyer Program has a profound and positive
21 impact on the lives of residents throughout the State. By
22 enabling the transition to cleaner technologies, it not
23 only supports our goals of cleaner air, but it also helps
24 those in need of funding to make that transition possible.

25 We also want to acknowledge the ongoing

1 commitment from CARB staff in listening to our concerns
2 and the suggestions of air districts. This open line of
3 communication has allowed for a more robust Program
4 responsive to local needs. The collaboration between
5 local air districts and State agencies has been
6 instrumental in the development of these updated
7 guidelines, which we believe will further improve the Carl
8 Moyer Program and its ability to support cleaner air
9 across California.

10 Thank you.

11 (Applause).

12 CHAIR RANDOLPH: All right. Thank you much very
13 much. We will now hear from the public who signed up to
14 speak on this item, either by submitting a request to
15 speak card or by raising their hand in Zoom.

16 Board clerk, you please call the commenters.

17 BOARD CLERK LEVRINI: Okay. We have one
18 in-person commenter, and six commenters on Zoom.

19 Ken Mak, please.

20 KEN MAK: All right. Good afternoon, Chair
21 Randolph and Board members. So again, I'm Ken Mak. I'm
22 from the Bay Area Air Quality Management District. And
23 like my colleagues from the other air districts here, I'm
24 here to support the proposed revisions to the Carl Moyer
25 Program.

1 As you heard from the testimony today, Moyer has
2 become the gold standard in air quality grant programs and
3 has been instrumental in cleaning up older, highly
4 polluting equipment. The proposed updates that you've
5 heard today are extensive, they're necessary, and they're
6 designed to streamline both the project and administrative
7 requirements, making it again easier for Applicants to
8 participate and comply with the requirements.

9 We also greatly support and appreciate staff's
10 recommendation for extending the liquidation deadline, and
11 also increasing the allowable administrative cost recovery
12 for air districts. Again, these changes are essential to
13 enabling zero-emission projects that take long to
14 implement and to be successful in supporting -- in
15 supporting air districts in performing the due diligence
16 for this Program.

17 And on that note, we also appreciate staff's
18 recommending also considering making these same changes to
19 the other State incentive programs, such as the Community
20 Air Protection Incentives Program. Again, the changes are
21 critical, given the additional time necessary for complex
22 projects that improve community health and also to cover
23 the additional costs associated with administering these
24 projects.

25 Again, I want to thank CARB staff for their

1 diligent work in developing these updates. They really
2 embody the collaborative spirit of this Program and
3 they're willingness to incorporate feedback from the air
4 districts. In closing, we firmly believe that these
5 proposed updates will enhance the Program's effectiveness
6 and ensure the continued success of the Program, and we
7 look forward to your approval of these proposed updates,
8 and to continuing our collaboration with CARB staff to
9 implement this Program.

10 Thank you.

11 BOARD CLERK LEVRINI: Thank you.

12 All right, we're going to transition to Zoom. We
13 have six commenters.

14 Alex Spataru, Charles Costanzo, Ken Franke, Lisa
15 McGhee, Mark Stone, and Christian Bisher.

16 Alex, I have activated your microphone. Please
17 unmute.

18 ALEX SPATARU: Hi. Thank you all. Appreciate
19 the opportunity to speak on a great -- I've been a great
20 admirer of the Carl Moyer Program. But there's a glitch
21 in this one. And when it comes to the zero to the
22 equivalency of 30 percent to 100 percent maritime
23 applications.

24 I run an environmental technology firm and I
25 teach at UCLA in the School of Engineering. And I teach

1 graduate courses in the hydrogen ecosystem and when it
2 comes to microgrids. The current 30 percent
3 zero-emissions capable guideline is really off track. It
4 incentivizes innovation and it discourages harbor craft
5 operators who have built or who are building a hundred
6 percent zero-emission vessels. It disincentivizes harbor
7 craft operators who are planning to build the hundred
8 percent zero-emission vessels.

9 It gives a wrong signal to investors to
10 port-related zero-emission technologies like green
11 hydrogen batteries. And as far as a California hydrogen
12 hub, it goes a hundred percent against it. Okay. It
13 undermines it literally.

14 Now, further, the path put forward by CARB to
15 qualify for zero-emissions status, looks like it's an open
16 invitation for gaming. And the rule enforcement path
17 proposed is wide open to gaming as well.

18 As written, it is impossible to monitor and
19 control unless the CARB Enforcement Division staff is
20 seriously augmented. It is well known throughout the
21 industry that CARB lacks enforcement ability and that
22 noncompliant vessels operate with impunity throughout the
23 states. Otherwise, put the 30 percent zero CARB carrot
24 even though it's a poison carrot is way to tempting and
25 the CARB stick is way too short.

1 Thank you for considering these objections to the
2 30 percent zero-emission equivalency clause.

3 Appreciate it.

4 BOARD CLERK LEVRINI: Thank you.

5 Charles Costanzo, I have unmuted -- I've given
6 you permission to talk, please unmute you mic.

7 CHARLES COSTANZO: Thank you. Charles Costanzo
8 on behalf of Curtin Maritime. I'd like to thank the staff
9 for their work on these revisions.

10 Curtin Maritime has concerns regarding the ZEAT
11 terminology and definitions in chapter seven of the
12 proposed rules regarding marine vessels. The definition
13 before the Board, zero-emission capable hybrid vessel
14 means a commercial harbor craft utilizing a hybrid power
15 system with two or more onboard power sources, one or more
16 of which is approved to be capable of providing a minimum
17 of 30 percent vessel power with zero tailpipe emissions
18 when averaged over a calendar year.

19 This definition and characterization of a
20 zero-emission capable hybrid vessel creates a false
21 equivalency between an actual ZE vessel and a vessel that
22 is not. When California's goal is to reduce emissions to
23 zero, it seems retrograde to write rules that declare an
24 emitting vessel to be zero emission. Zero-emission
25 technology exists for workboats now, and the definition

1 appears to be a hedge against the development of actual
2 zero-emission technology. The definition allows non-ZE
3 vessels to be treated like ZE vessels and disincentivizes
4 operators developing zero-emission technology by branding
5 equivalent benefits to operators of non-ZE vessels. The
6 definition undermines the rule and seeks only to delay a
7 total commitment to decarbonization

8 All that is likely to capital intensive and
9 technology challenge -- technologically challenging to
10 achieve this goal, these objectives should not lead to the
11 adoption of half measures that delay the implementation of
12 real existing solutions, failing to set California on a
13 proper course.

14 Additionally, we believe that the new draft
15 rules, through the inclusion of zero-emission capable
16 hybrid vessel definition established this exception that
17 undermines the rule, tilts the playing field against
18 innovation, and frustrates the development of operation --
19 and operation of legitimately zero-emission harbor craft.

20 We urge you to remove the definition and resolve
21 that zero emission means exactly that. Alternatively, you
22 should direct staff to establish rules that elevate
23 funding levels to prioritize actual zero-emission
24 equipment. This will spur the --

25 BOARD CLERK LEVRINI: All right. Ken Franke, I

1 have activated your microphone. Please begin.

2 KEN FRANKE: Ladies and gentlemen of the CARB
3 Board, my name is Ken Franke and I'm President of the
4 Sportfishing Association of California. Our membership
5 includes the commercial passenger fishing vessels
6 throughout the state. Let me preface my comments and
7 thank this Board and CARB staff for working with our small
8 boat owners to comply with the rule, Ms. Soriano, Ms.
9 Sicat, Ms. Sandoval and others within the CARB staff have
10 been a good resource to communicate with on ideas to bring
11 the fleet into compliance.

12 With regard to this agenda item, we do recommend
13 a policy clarification on consideration on the following
14 question, I hear it often, if a vessel owner is seeking an
15 extension to replace machinery, can the end date of the
16 extension be used for the purposes of obtaining Carl Moyer
17 funding? Our shared goal is to get older machinery
18 removed from service. If grant money can be applied
19 through such a policy interpretation, it may open the door
20 to many more vessels being repowered now instead of
21 repowered later or removed from service.

22 Talking with staff aspects of this may, in fact,
23 be in place, but clarity needs to be provided on the
24 process, so the districts recognize the path to compliance
25 and can share that with the boat owners.

1 Thank you.

2 BOARD CLERK LEVRINI: Thank you.

3 Next commenter, Mark Stone.

4 MARK STONE: Thank you for this opportunity
5 today. Right now today, I'm a New York dealer. We are a
6 Volvo, Isuzu, Hino, Workforce dealer in the State of New
7 York. We have sold one of the 34 class BEVs in New York
8 State and one of the first northeast dealers of BEV
9 certified. We will hundred support -- we 100 percent
10 support that goal, but not to the extent of loss of jobs,
11 businesses in New York State.

12 Here, Burr Truck, we're the only public charging
13 station in the State of New York with 125 kilowatt DC
14 Level 3 fast charger that allows trailer parking for two
15 trucks. We are asking for a two-year pause in the State
16 of New York, because the State has no investment -- has
17 done -- made no investments to support the trucking for
18 BEVs. That being said, how can what's good for California
19 be good in New York today knowing these facts?

20 Can New York get a two-year policy, approved by
21 California, start at ratios for 2025 and 2027, as opposed
22 to the 2027 ratios, meaning seven percent in 2027 versus
23 15 percent, as mentioned in the chart that I applied in my
24 questions?

25 The OEMs place dealers under allotments, because

1 they never have or never will have enough ZEV credits to
2 ever catch up. All those -- although this rule is based
3 upon OEMs, not dealers, the OEMs have no choice but to
4 place dealers in the state under allotments to get enough
5 credits. This will make dealers go out of business,
6 because dealers don't -- because OEMS don't sell trucks,
7 dealers do. For example, we had 200 trucks sold in 2025
8 and only getting 13 trucks now. We know that wasn't the
9 intent of CARB and makes dealers go out of business.

10 Since there are significant infrastructure
11 deficits in the ACT that New York, should there not be
12 bilateral support given to meet these goals? This would
13 be a more common sense approach to support growth -- job
14 growth in the State and clean the air for more ZEVs by
15 working together united for a greener and more sustainable
16 approach.

17 The State of New York needs to be -- build out
18 infrastructure first in order to meet these ACT rules.

19 Thank you.

20 BOARD CLERK LEVRINI: Thank you.

21 Christian Bisher.

22 CHRISTIAN BISHER: Good afternoon. My name is
23 Christian with the Central California Environmental
24 Justice Network. And I didn't mention it last time, but
25 my comments are informed by the continued ambient air

1 quality failures and extension requests.

2 But with my understanding of the Program, there
3 does not seem to be a reason to reduce the required life
4 of the project down to one year. At that point, the
5 equipment is only one year away from being replaced or
6 required being replaced. Leaving the required life at
7 three years, forces owners to replace the equipment
8 sooner, if they want to take advantage of the incentive
9 funding, which would provide more emissions reductions.

10 Otherwise, they -- yeah, they can get wait until
11 the regulation requires that they just need to pay for it
12 on their own. Also, if there is always a line of people
13 and businesses waiting to use the Carl Moyer funding,
14 there does not seem to be a use reason to reduce the
15 required project life, meaning there's not going to be
16 money that goes unspent, if the project life is not
17 reduced to one year.

18 I asked a question at the public workshop, but I
19 was happy to hear an example of why you should reduce the
20 required life limit from three years down to one to take
21 advantage of the funding that would otherwise not be used
22 for three years of project life. So in my head, if it's
23 reduced, for every project that is awarded with only one
24 year project life, we're going to be given away two years
25 of emission reductions.

1 Thank you.

2 BOARD CLERK LEVRINI: Thank you. That concludes
3 our commenters on Zoom.

4 CHAIR RANDOLPH: All right. Thank you very much.

5 Staff, are there any comments you would like to
6 address before we close the record?

7 EXECUTIVE OFFICER CLIFF: (Shakes head).

8 CHAIR RANDOLPH: Okay. I will now close the
9 record on this item.

10 Board members, question, discussion.

11 Board Member Kracov.

12 BOARD MEMBER KRACOV: Just really quickly. My
13 friend down there in the South Coast that's very active on
14 the Port issues, Alex Spataru, had this question about the
15 30 percent with the harbor craft. My understanding is
16 that this does relate to the Harbor Craft Regulation,
17 but -- and I know you're speaking with Alex and continuing
18 to do so. But just for the record, could you explain your
19 perspective on the questions that he asked?

20 EXECUTIVE OFFICER CLIFF: Yeah. I think the
21 definitions do relate to the Harbor Craft Rule and we'll
22 need to follow up on more of the specifics and happy to do
23 so. I did talk to my colleagues here just to make sure
24 that we're following it, but to change those definitions
25 would mean changing requirements in the regulation itself.

1 BOARD MEMBER KRACOV: Thank you. I appreciate
2 any follow-up you can do with him.

3 CHAIR RANDOLPH: Okay. Any other questions or
4 comments?

5 Board Member Takvorian.

6 BOARD MEMBER TAKVORIAN: Thank you, Chair. Thank
7 you, all, for being here and for this great presentation.
8 Congratulations on the anniversary. It's exciting. I
9 just wanted to say that I really appreciated the early
10 inventors or collaborators, as you call them. And I just
11 wanted to say that I think that in the way that you said
12 that Dr. Moyer said it was all about trucks, I think
13 that's what communities were saying. And the Moyer
14 Program gave a lot of credibility to environmental justice
15 communities that were struggling with the pollution that
16 was coming from adjacent ports and industrial facilities.
17 And so that probably was not a collaboration that most of
18 us -- I was on that side and we weren't all great at
19 collaborating, but this really brought us together, I
20 think, in a way that then set the framework for Prop 1B
21 and for all of the incentives that we are talking about at
22 every one of these meetings.

23 So just huge appreciation for the work that you
24 all did and for your families' member who really changed
25 California in many ways in some of the most impacted

1 communities. So I just wanted to express that. And I
2 also want to say I really appreciate, as a non-air
3 district person, the increases for the air districts to
4 implement these programs, because I know that it's a lot
5 of work, and that it's -- and that we're still struggling
6 with having small businesses who will take advantage of
7 the program. We have great numbers. Lots of people want
8 to participate, but it's still really hard for some of the
9 smaller businesses that are often owned by the residents
10 of the communities that are very impacted. And I know
11 that that's your priority, so I appreciate the changes
12 that are being made to make that easier for them.

13 So thank you.

14 CHAIR RANDOLPH: Board Member De La Torre.

15 BOARD MEMBER DE LA TORRE: Thank you. It's not
16 about the action we're taking today, but about the Program
17 itself, because it's been around for so long and everyone
18 was telling -- talking about the beginnings and the
19 accomplishments over time. But back around 1998 when this
20 was happening, I was a young city council member in my
21 hometown of South Gate and I was on a regional joint
22 powers authority called the Gateway Cities Council of
23 Governments. We got the first incentives dollars from
24 litigation by NRDC, Gail Feuer, she got a settlement with
25 all of the grocery store warehouses in Southern

1 California - kind of a predecessor to the Indirect Source
2 Rule - and got this substantial amount of money.

3 And I still don't know why, but somehow she
4 picked the Gateway Cities Council of Governments, because
5 we have one of the ports. We've got a hell of a lot of
6 warehouses in that area. We have the 710 freeway, the
7 diesel death corridor as it's called. And so we got these
8 millions of dollars to do a truck buy back program, the
9 first at the time.

10 And this is just amazing to me, because I think
11 about where we are today. We were buying trucks back that
12 were 19 -- this is late 1990s, that were 1970 or older,
13 that were still on the road, right around 2000. So it's
14 just amazing the progress we've made from that time, where
15 we were Picking off 1970s trucks or 1960s trucks to today,
16 where the trucks are 2010 or newer. That's the time frame
17 in which all of this has happened. And now I run the
18 Gateway Cities Council of Governments. That's my day job.
19 But I'm really proud of that legacy and I'm really proud
20 of how the Moyer Program has accelerated that time frame
21 that we do not have those supper old trucks on the road,
22 because of subsequent iterations of this concept.

23 And so it's an amazing, amazing thing that we
24 should always recognize and pat ourselves on the back for,
25 because, I mean, that is an -- in 24 years, we've made

1 that kind of progress. It's really amazing. So anyway, I
2 just wanted to throw that in there, because obviously it's
3 touched me personally, but when I connected with Moyer, it
4 wouldn't have happened otherwise.

5 So thank you.

6 CHAIR RANDOLPH: Thank you.

7 Board Member Guerra.

8 BOARD MEMBER GUERRA: Thank you, Chair. I wanted
9 to say save this comment for this round that I was going
10 to make earlier when the FARMER Program came up and that's
11 also that, you know, for the family, you know, the
12 complaint that we hear about the Moyer Program is that we
13 want more money, because it's so successful. And that
14 program and the work that Dr. Moyer did has led to many
15 other programs, like the FARMER Program. So the legacy
16 continues to move on.

17 And I have the humble pleasure of sitting as the
18 Sacramento Air Basin representative. And for me, it feels
19 such -- not so much pride, but joy to not only have served
20 as Chair of the Air District, and knowing the legacy that
21 Dr. Moyer did, because it was in the Sacramento Metro Air
22 District here in 1996 that -- where this movement started.

23 And I just want the family to know that that
24 approach that Dr. Moyer has left continues to live on, the
25 spirit of collaboration and working with our sources, and

1 working with the community, and working with the
2 regulators and the elected officials all to try to find a
3 solution. Thank you, Mike, for being here today and
4 all -- and all of the staff out there at the Air District.
5 And the spirit of getting out of the office still holds
6 true. And I just wanted to read a couple comments that I
7 heard that, you know, that the staff they still have had
8 many fun encounters in the field inspecting farm equipment
9 in the mud and in the rain, and actually talking to the
10 farmers, and seeing them at where they're at.

11 And also, something that, you know, for many of
12 us that grew up riding the diesel buses and smelling that
13 diesel bus with no AC, and sometimes the windows that only
14 cracked down for like five, you know, inches, and you're
15 trying to get a little breath, the fact that we moved from
16 those diesels to electric buses, now the staff not only
17 are having the conversation about the clean air, but the
18 funny encounters about, well, now that these electric
19 buses are also now cleaner, but also quieter, we have to
20 install some, you know, warning sounds. And so discussing
21 with the kids and the staff about what kind of music to
22 play, whether it's, "Wheels on the Bus go Round and
23 Round," versus ACDC, you know --

24 (Laughter).

25 BOARD MEMBER GUERRA: -- and so, you know, just

1 to warn people. But I just wanted the family to know that
2 what a legacy that is for a Sacramentan, for our region,
3 for a place that has had very poor air, and the reason
4 we've met and continue to see increases in our air quality
5 and the health benefits, the long-standing health
6 benefits. Those kids that are growing up here are going
7 to have better chances at stronger lungs because of Dr.
8 Moyer. So I wanted to thank you for sharing, you know,
9 Dr. Moyer with us.

10 And with that, Madam Chair, I wanted to wait till
11 the end and would be glad to make a motion if that's the
12 last comments as well.

13 CHAIR RANDOLPH: Board Member Hurt had some
14 comments.

15 BOARD MEMBER HURT: Well, I guess it's a battle
16 of making the motions, because I was going to move
17 Resolution 24-13's revision of Carl Moyer Memorial Air
18 Quality Standards Attainment Program guidelines, and thank
19 the family once again for joining us.

20 Thank you very much.

21 BOARD MEMBER GUERRA: I'll second.

22 CHAIR RANDOLPH: Perfect. Before member Hurt
23 moves, Board Member Guerra seconds.

24 Clerk, will you please call the roll.

25 BOARD CLERK MOORE: Yes.

1 Dr. Balmes?

2 BOARD MEMBER BALMES: Yes.

3 BOARD CLERK MOORE: Mr. De La Torre?

4 BOARD MEMBER DE LA TORRE: Aye.

5 BOARD CLERK MOORE: Mr. Eisenhut?

6 BOARD MEMBER EISENHUT: Yes.

7 BOARD CLERK MOORE: Senator Florez?

8 Mr. Guerra?

9 BOARD MEMBER GUERRA: Guerra, aye.

10 BOARD CLERK MOORE: Ms. Hurt?

11 BOARD MEMBER HURT: Aye.

12 BOARD CLERK MOORE: Mr. Kracov?

13 BOARD MEMBER KRACOV: Yes.

14 BOARD CLERK MOORE: Dr. Pacheco-Werner?

15 BOARD MEMBER PACHECO-WERNER: Yes.

16 BOARD CLERK MOORE: Mr. Rechtschaffen?

17 BOARD MEMBER RECHTSCHAFFEN: Yes.

18 BOARD CLERK MOORE: Dr. Shaheen?

19 BOARD MEMBER SHAHEEN: Aye.

20 BOARD CLERK MOORE: Ms. Takvorian?

21 BOARD MEMBER TAKVORIAN: Yes.

22 BOARD CLERK MOORE: Chair Randolph?

23 CHAIR RANDOLPH: Yes.

24 BOARD CLERK MOORE: Madam Chair, the motion

25 passes.

1 CHAIR RANDOLPH: All right. Thank you very much.
2 And we will adjourn for a lunch break. We will be back at
3 about 1:30, so a 45-minute lunch break.

4 (Off record: 12:47 p.m.)

5 (Thereupon a lunch break was taken.)
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1 AFTERNOON SESSION

2 (On record: 1:37 p.m.)

3 CHAIR RANDOLPH: Okay. Good afternoon. We are
4 back from our lunch break.

5 The last item on the agenda is item number
6 24-5-5, proposed amendments to the Advanced Clean Trucks
7 Regulation and the Zero-Emission Powertrain Certification
8 Test Procedure.

9 If you are here with us in the room and wish to
10 comment on this item, please fill out a request-to-speak
11 card as soon as possible and submit it to a Board
12 assistant. If you are joining us remotely and wish to
13 comment on this item, please click the raise hand button
14 or dial star nine now. We will first call on in-person
15 commenters followed by any remote commenters, when we get
16 to the public comment portion of this item

17 The Advanced Clean Trucks Regulation was adopted
18 by the board in January 2021 and approved by the Office of
19 Administrative Law on March 15th, 2021. The Advanced
20 Clean Trucks Regulation is a central component of the
21 Board strategy to reduce harmful criteria pollutant and
22 greenhouse gas emissions from medium- and heavy-duty
23 vehicles to the greatest degree possible.

24 The regulation is expected to increase the supply
25 of zero-emission vehicles into applications that are

1 well-suited for their use. We are already seeing growth
2 in the medium- and heavy-duty zero-emission market. Truck
3 manufacturers are two years ahead of schedule in meeting
4 their zero-emission sales requirements, and we expect to
5 see a continued growth in sales.

6 The zero-emission powertrain test procedure was
7 adopted by CARB in 2019, and establishes alternative
8 certification procedures for heavy-duty battery electric
9 and fuel cell vehicles, and the zero-emission powertrains
10 those vehicles will use.

11 Today, the Board will hear proposed amendments to
12 the Advanced Clean Trucks Regulation and the Zero-Emission
13 Powertrain Certification Test Procedure. This is the
14 second hearing on this item, following the hearing we held
15 on this item in May. At that hearing, numerous upfitters
16 and dealers spoke about their inability in California to
17 receive combustion products from manufacturers for the
18 2024 model year and attributed this issue to a number of
19 factors including the ACT Regulation.

20 In response to these comments, the Board deferred
21 its vote on the proposed ACT amendments to a future
22 hearing and directed staff to work with industry to assess
23 the situation further. Since the May hearing, staff has
24 determined that the supply issue for the 2024 model year
25 is not attributable to the Advanced Clean Trucks

1 Regulation, but rather to a number of other complex
2 contributing factors, and that the amendments that staff
3 are proposing today continue to be appropriate.

4 Dr. Cliff, would you please introduce the item.

5 EXECUTIVE OFFICER CLIFF: Thank you, Chair
6 Randolph. As you know, the Advanced Clean Trucks
7 Regulation established requirements for manufacturers to
8 sell increasing numbers of zero-emission medium- and
9 heavy-duty vehicles starting with the 2024 model year.
10 Recent statewide sales reported to CARB for the 2023 model
11 year shows even before the start of the regulation, ZEVs
12 are already making up one in six medium- and heavy-duty
13 vehicle sales.

14 At the last hearing on this topic, as you noted,
15 we heard concerns regarding a significant shortage of
16 diesel heavy-duty vehicles, including tow trucks. Staff
17 have held multiple meetings with representatives from all
18 major engine and truck manufacturers, as well as numerous
19 dealers, upfitters, and fleet representatives. On
20 September 25th, 2024, I sent you a memo outlining the
21 factors affecting the current vehicle shortage situation.

22 Overall, the product shortage for the 2024 model
23 year affects heavy-duty diesel vehicles, but especially
24 the medium heavy-duty. It is not driven by the Advanced
25 Clean Trucks Regulation, and is, in fact, mostly driven by

1 a limited supply of compliant heavy-duty omnibus diesel
2 engines.

3 Last year, pursuant to Board Resolution 23-15, I
4 approved amendments to the Heavy-Duty Omnibus Regulation
5 to reduce the potential for product shortages to occur,
6 based on the best information available at the time.
7 However, manufacturer sales forecast turned out to be
8 incorrect. This, and other factors, have resulted in
9 heavy-duty engine manufacturers being unable to fulfill
10 current market demand for internal combustion engine
11 vehicles.

12 So to be clear, the amendments to the Advanced
13 Clean Trucks Regulation being discussed today are not
14 contributing to the product shortages of traditional
15 combustion engine-powered vehicles for this year. Staff
16 will continue to closely monitor this situation moving
17 forward.

18 For today, the proposed Advance Clean Truck
19 amendments before you for adoption fulfill key commitments
20 made in the Clean Truck Partnership. The first is to
21 clarify that compliance determination and sales reporting
22 requirements are both defined when vehicles are produced
23 and delivered for sale in California.

24 The second is to extend the number of years a
25 manufacturer has to make up a compliance shortfall. Based

1 on input from stakeholders, staff has proposed additional
2 amendments to streamline implementation and certification
3 procedures. The proposed amendments generally constitute
4 non-substantial administrative changes that are not
5 projected to increase emissions, would decrease
6 manufacturer's compliance costs, would better ensure the
7 interpretation of definitions, and align the requirements
8 with the Board's original intent.

9 Beyond these amendments, staff have continued to
10 engage with stakeholders to address engine availability
11 concerns and have cooperatively developed solutions that
12 will expand availability, while maintaining emissions
13 benefits. This includes negotiating with our Clean Truck
14 Partnership signatories to allow manufacturers to sell the
15 needed medium heavy-duty engines into California,
16 providing important relief to dealers and fleets from the
17 current product shortage issues.

18 I will now ask Kat Talamantez of the Mobile
19 Source Control Division to begin the staff presentation.

20 Kat.

21 (Slide presentation).

22 MSCD AIR POLLUTION SPECIALIST TALAMANTEZ: Thank
23 you, Dr. Cliff. Today, I'll be taking us through the
24 proposed amendments to the Advanced Clean Trucks, or ACT,
25 Regulation, and the Zero-Emission Powertrain Certification

1 Test Procedure. The proposed amendments consist of
2 generally minor administrative changes with minimal cost
3 impact and no significant emissions impact.

4 [SLIDE CHANGE]

5 MSCD AIR POLLUTION SPECIALIST TALAMANTEZ: I'll
6 begin with a review of some background information,
7 followed by a summary of the proposed amendments, and
8 finishing with a brief discussion of the next steps.

9 [SLIDE CHANGE]

10 MSCD AIR POLLUTION SPECIALIST TALAMANTEZ: The
11 ACT Regulation was adopted by the Board in June of 2020 to
12 accelerate commercial deployment of zero-emission
13 vehicles, or ZEVs, and contribute towards meeting the
14 State's air quality and climate mitigation targets. The
15 regulation establishes requirements for medium- and
16 heavy-duty manufacturers to sell an increasing portion of
17 their sales as zero emission starting in the 2024 model
18 year and ramping up through 2035. It provides credit for
19 early sales, flexibility to make up a deficit within one
20 model year, and the ability for manufacturers to bank and
21 trade credits.

22 [SLIDE CHANGE]

23 MSCD AIR POLLUTION SPECIALIST TALAMANTEZ: Now,
24 to provide an update on the ACT Regulation. Based on
25 information reported in 2021 and 2022, manufacturers are

1 currently two years ahead of compliance with the
2 regulation and have already produced enough ZEVs to meet
3 the 2024 and 2025 requirements. The data for the 2023
4 model year shows that ZEVs make up about 16 percent of the
5 total new medium- and heavy-duty vehicle sales in
6 California, which is nearly double from 2022. And lastly,
7 10 other states have adopted ACT so far, cumulatively
8 accounting for about 25 percent of medium- and heavy-duty
9 trucks sales in the U.S.

10 [SLIDE CHANGE]

11 MSCD AIR POLLUTION SPECIALIST TALAMANTEZ: Moving
12 on to another area, staff are proposing to amend the
13 Zero-Emission Powertrain Certification Test Procedure, or
14 ZEP Certification, adopted by the Board in July of 2019.
15 The ACT Regulation requires ZEP Certification starting
16 with the 2024 model year to receive credit and is
17 currently only applicable to heavy-duty and incomplete
18 medium-duty ZEVs. It is an optional certification pathway
19 for heavy-duty and incomplete medium-duty ZEVs that
20 increases consumer protections, establishes new warranty
21 requirements, and accelerates progress towards greater
22 vehicle repairability.

23 [SLIDE CHANGE]

24 MSCD AIR POLLUTION SPECIALIST TALAMANTEZ: In
25 July of 2023, CARB announced a Clean Truck Partnership

1 agreement with the nations leading major truck
2 manufacturers. The agreement advances the development of
3 ZEVs for the trucking industry and provides flexibility
4 for manufacturers to meet emissions requirements while
5 reaching the State's climate and emissions reduction
6 goals. The agreement marks a commitment from the
7 manufacturers to meet California's vehicle standards,
8 including standards that will require manufacturers to
9 only produce and sell ZEVs starting with the 2036 model
10 year. As part of the agreement, CARB agreed to initiate a
11 rulemaking action in 2024 to include specific changes to
12 ACT that are part of these proposed amendments.

13 [SLIDE CHANGE]

14 MSCD AIR POLLUTION SPECIALIST TALAMANTEZ: At the
15 May 2024 hearing, staff presented to the Board the
16 proposed amendments to the ACT Regulation. At the
17 hearing, numerous upfitters and dealers spoke about their
18 current inability to receive combustion products from
19 manufacturers in California and express concern that the
20 ACT Regulation was responsible. In response to these
21 comments, the Board deferred its vote on the proposed
22 amendments to a future hearing and directed staff to work
23 with industry to assess the situation further.

24 Since the hearing, CARB staff has held over 40
25 meetings with stakeholders, including representatives from

1 all major truck and engine manufacturers, fleets, and
2 dealers. Staff's findings were presented to the Board in
3 a memo posted on September 25th, 2024.

4 [SLIDE CHANGE]

5 MSCD AIR POLLUTION SPECIALIST TALAMANTEZ: As
6 outlined in the memo, it appears that all diesel
7 heavy-duty vehicles in Class 4 and above are affected by
8 the shortage with a prevalent impact on Classes 6 and 7.

9 The situation is evidently complicated with
10 several contributing factors. However, all manufacturers
11 have explicitly indicated that the product availability
12 issues for the 2024 model year are not caused by the ACT
13 Regulation. In other words, there are no changes that can
14 be made to ACT that would alleviate or resolve the product
15 availability issues for the 2024 model year.

16 Alternatively, intentional business decisions
17 being made in the medium heavy-duty space to not produce
18 engines compliant with the Heavy-Duty Engine and Vehicle,
19 or Omnibus, Regulation, and instead relying on the legacy
20 provisions provided in the Omnibus Regulation is a primary
21 factor contributing to the issue.

22 Other factors affecting the issue include a
23 nationwide downturn in the market, supply chain issues
24 carrying over from previous years not caused by CARB
25 regulations, and manufacturers not being sufficiently

1 prepared to comply with the Omnibus Regulation.

2 Amendments made to the Omnibus Legacy engine caps
3 in 2023 were implemented to address potential shortages
4 and provide relief given manufacturer plans to not produce
5 Omnibus compliant engines. These cap adjustments provided
6 some relief; however, issues remain. The originally
7 proposed ACT amendments are minor and mainly apply to
8 compliance in the upcoming years, rather than directly
9 contributing to improving the availability issue. But
10 many manufacturers have expressed that the changes will
11 provide them with more flexibility as the market adjusts
12 and will potentially mitigate pressure on truck purchasers
13 in future years.

14 To address the imminent product availability
15 issues, staff have worked extensively with stakeholders to
16 develop solutions the Board or staff could approve.

17 [SLIDE CHANGE]

18 MSCD AIR POLLUTION SPECIALIST TALAMANTEZ: Now,
19 to discuss actions being taken to address the shortage, as
20 we transition to cleaner combustion and zero emission.
21 First, several manufacturers have recently announced the
22 introduction of new Omnibus-compliant engines that can be
23 used in Class 8 vocational trucks and tractors. In
24 addition, there are also several new and improved ZEVs
25 coming to the market from major manufacturers.

1 Manufacturers will also continue to introduce additional
2 Omnibus-compliant engines and ZEVs for various truck
3 configurations in the 2025 and 2026 model years, which is
4 the solution that we all ultimately want. But until then,
5 we are also relying on legacy engines.

6 CARB has also approved Cummins legacy engine
7 mitigation plan for disadvantaged community projects,
8 which will ensure that they can sell the needed engines
9 while maintaining emissions benefits of the Omnibus
10 Regulation.

11 Actions staff are proposing include adjusting the
12 legacy engine caps under the Omnibus Regulation, which
13 will permit manufacturers to sell more medium heavy-duty
14 engines in California during the 2024 through 2025 model
15 year period. All other provisions for legacy engines,
16 including the requirement to offset emissions, would
17 remain in effect. Staff are also extending the Advanced
18 Clean Fleets Omnibus provision enforcement discussion for
19 out-of-state fleets to the 2026 model year.

20 And lastly, there are a number of provisions here
21 today for the Board's consideration.

22 [SLIDE CHANGE]

23 MSCD AIR POLLUTION SPECIALIST TALAMANTEZ: As
24 mentioned previously, the proposed amendments originally
25 presented at the hearing in May would provide additional

1 flexibilities to the manufacturers that would assist them
2 in complying with the requirements. The proposed ACT
3 amendments here today would also permit secondary vehicle
4 manufacturers, or vehicle upfitters, to participate in the
5 ACT ZEV credit banking and trading system, providing them
6 with a greater ability to procure combustion engine
7 vehicles in instances where a manufacturer is restricting
8 sales of these vehicles and is choosing not to purchase
9 ZEV credits.

10 Finally, staff are also planning to post a 15-day
11 change package following the hearing, as part of the
12 proposed ACT amendments to exclude Omnibus-compliant
13 heavy-duty engines from generating deficits under ACT for
14 the 2026 model year. This will increase the number of
15 Omnibus-compliant engines amongst the heavy-duty classes
16 in 2026 without compromising ZEV deployment, given that we
17 have the Advanced Clean Fleets Rule, which requires
18 entities to incorporate ZEVs into their fleets.

19 Overall, the measures being taken by staff are
20 expected to provide important relief to fleets and dealers
21 for the availability issue.

22 [SLIDE CHANGE]

23 MSCD AIR POLLUTION SPECIALIST TALAMANTEZ: In
24 addition to the amendments proposed in May, staff posted a
25 15-day change package on October 7th, 2024, that proposes

1 more amendments to the ACT regulation in response to
2 stakeholder comments received so far and discussions
3 following the May hearing. I will now provide a summary
4 of all of the proposed changes.

5 [SLIDE CHANGE]

6 MSCD AIR POLLUTION SPECIALIST TALAMANTEZ: As
7 part of the Clean Truck Partnership agreement, staff is
8 proposing to remove requirements for manufacturers to
9 track when vehicles reach the ultimate purchaser, meaning
10 they will no longer have to follow and document a
11 vehicle's entire pathway through upfitters and dealerships
12 to actual owner operator. Instead, they will incur
13 credits or deficits when the vehicle is produced and
14 delivered for sale in California, which essentially means
15 delivered to the initial entity like a dealer, an
16 upfitter, or in some cases the ultimate purchaser. This
17 change also harmonizes with a recent amendment made to the
18 Omnibus Regulation.

19 [SLIDE CHANGE]

20 MSCD AIR POLLUTION SPECIALIST TALAMANTEZ: Also,
21 part of the Clean Truck Partnership agreement, staff is
22 proposing to provide additional time to make up any
23 deficits. We've also included some conditions to that
24 time extension and eligibility criteria as well to ensure
25 that manufacturers are making progress each year.

1 [SLIDE CHANGE]

2 MSCD AIR POLLUTION SPECIALIST TALAMANTEZ:

3 Further, as mentioned previously, we are
4 proposing to permit secondary vehicle manufacturers to opt
5 into the credit trading and transfer provision under ACT
6 to provide them with greater ability to procure combustion
7 vehicles in instances where a manufacturer is restricting
8 sales of these vehicles and is choosing not to purchase
9 credits.

10 We are proposing to permit up to 50 percent of
11 the deficits generated in a model year to be made up with
12 NZEV credits, as requested in comments we received.
13 Additionally, we are proposing to provide a labeling
14 option to protect manufacturers against circumstances in
15 which a vehicle is placed in an unintended state.

16 [SLIDE CHANGE]

17 MSCD AIR POLLUTION SPECIALIST TALAMANTEZ: The
18 proposed amendments also encompass minor conforming
19 changes that coincide with the changes that are in the
20 Clean Truck Partnership Agreement, but we've also
21 incorporated other small changes that improve alignment
22 with Advanced Clean Cars and the 100 percent ZEV sales by
23 2036 requirement under Advanced Clean Fleets. The
24 remaining proposed changes update reporting and record
25 keeping requirements and streamline implementation.

1 [SLIDE CHANGE]

2 MSCD AIR POLLUTION SPECIALIST TALAMANTEZ:

3 Lastly, we are proposing to provide additional
4 certification options for manufacturers of complete
5 medium-duty ZEVs to earn ZEV credit under ACT. The
6 existing certification options have been outlined for
7 clarity and we are proposing to expand the ZEP
8 Certification procedures to complete medium-duty ZEVs as
9 currently they are only available for heavy-duty and
10 incomplete medium-duty ZEVs.

11 Additionally, we are proposing to provide the
12 option to certify complete medium-duty ZEVs to the
13 Advanced Clean Cars I certification procedure beyond the
14 2025 model year, as this procedure's requirements
15 currently sunset at the end of the 2025 model year.

16 [SLIDE CHANGE]

17 MSCD AIR POLLUTION SPECIALIST TALAMANTEZ: Moving
18 on to the next steps, staff recommends that the Board
19 approve Resolution 24-5, which includes adopting the
20 proposed amendments and directing the Executive Officer to
21 submit the amendments to the U.S. EPA for inclusion in the
22 California State Implementation Plan.

23 Lastly, as mentioned previously, staff is
24 proposing to release a second 15-day change package to
25 include an additional change to ACT, as part of the

1 efforts to alleviate the current product availability
2 issue, in addition to technical reference, certification,
3 and labeling changes consistent with comments received
4 during the 15-day comment period.

5 Thank you. This concludes staff's presentation.

6 CHAIR RANDOLPH: All right. Thank you very much.

7 We will now hear from the public who signed up to
8 speak on this item, either by requesting -- either by
9 submitting a request to speak card or by raising their
10 hand in Zoom.

11 Board Clerk, will you please call the first set
12 of commenters.

13 BOARD CLERK MOORE: Yes. Our first commenter is
14 Mariela Ruacho. Our second commenter will be James
15 Wheeler followed by Frank Wheeler.

16 MARIELA RUACHO: Hi. Mariela Ruacho with the
17 American Lung Association. Thank you for the opportunity
18 to speak here today. California's Clean Truck rules are
19 critical to improving and protecting our public health.
20 CARB's careful development of the rule, voluntary
21 agreement, and proactively smoothing out potential
22 implementation issues, like those proposed today, are
23 important steps to reducing harm, saving lives, and
24 meeting clean air standards.

25 Currently, truck makers have the flexibility to

1 provide clean trucks that meet standards, avoid delivery
2 shortages, and do not -- and do so in a way that ensure
3 ongoing progress towards cleaner air. We support your
4 efforts to ensure California continues on the pathway to
5 cleaner trucks and zero emission adoption, and especially
6 for the most vulnerable communities in California.

7 These commitments that manufacturers and the
8 agency made are important and to the people of California.
9 And we, the people of California, expect real important
10 health results because of this.

11 The health benefits of California's truck rules
12 range into the tens of billions of dollars, and save
13 thousands of lives. We urge the Board to move forward
14 today and to work closely with your partners in other
15 states to provide factual information on pathways to
16 comply and bring healthier air beyond California.

17 Thank you.

18 BOARD CLERK MOORE: Thank you.

19 Our next commenter is James Wheeler.

20 JAMES WHEELER: Thank you. My name is James
21 Wheeler. I'm here on behalf of my company Municipal
22 Maintenance Equipment and a group of similarly affected
23 dealers. First off, I want to say thank you to, Dr. Cliff
24 and Jack for being open to hearing. We appreciate CARB
25 staff working on these modifications and amendments,

1 especially number seven, which allows the secondary
2 manufacturers to participate in trading ACT credits. We
3 believe that this amendment is in spirit of the Clean
4 Truck Partnership Agreement and can aid vocational
5 customers in securing necessary ICEs.

6 We do remain concerned, however, that OEMs are
7 not obligated to accept credits from secondary
8 manufacturers. And we can request that CARB staff works
9 closely with OEMs to ensure that they act in the spirit of
10 the Clean Truck Partnership Agreement and stop putting
11 politics ahead of public services. Our customers clean
12 sewers, sweep streets, pick up trash. These vehicles are
13 essential.

14 Essential emergency equipment manufacturers and
15 our customers need open access to ICEs and we need your
16 help to stay open to support them.

17 Thank you.

18 BOARD CLERK MOORE: Thank you.

19 Frank Wheeler.

20 FRANK WHEELER: Thank you, Board Chair Randolph
21 and Board of Directors and the staff themselves. We want
22 to also appreciate all the work that staff has done
23 listening to us and listening to the other dealers that
24 are similar to us. We represent vocational vehicles that
25 are generally equipment vehicles that have not a clear

1 pathway to EV configuration, because the bridge and weight
2 laws within California highways.

3 Having said that, this previous last probably
4 year, I have -- we have a team of our -- representatives
5 from California please stand up, guys.

6 They cover the whole state of California for our
7 company. Each and every one of them this last year has
8 had a severe hit in how they support their families
9 because of the restriction of ICEs available for orders
10 that we've had since '21 and, '22, and '23, before the
11 implementation of this.

12 The truck manufacturers are not doing what you
13 wanted them to do. You've done the right thing. We
14 believe in clean air. We all want clean air, but it's
15 very difficult when you don't have an agreement between
16 two, when one doesn't go along with the agreement. Having
17 said that, all we want to do is help you go through this.
18 We support the amendment. It's the right move for the
19 right reasons. We're kind of in that log jam. Vocational
20 essential vehicles didn't get looked at in how the EV
21 transition would occur.

22 So thank you very much for the time.

23 BOARD CLERK MOORE: Thank you.

24 Mark Baatz.

25 MARK BAATZ: Thank you for the time. I was here

1 to speak to you in May and I have to say I appreciate very
2 much that I do believe that we were heard. And to
3 reiterate what was just said, yes, we, as an industry -
4 and I'll go into where we are quickly - are proponents of
5 these positive changes. I'm Mark Baatz. We're tow
6 industries. We've been 40 years in business, 50
7 employees, a thousand or so impacted customers, or
8 subcontractors. We supply essential vehicles to essential
9 services, essentially tow trucks, in particular towing and
10 transport equipment, police agencies, AAA, metro transit
11 authority, freeway service patrol, industry in general.

12 Again, we're very -- we are proponents of the
13 clean air agenda and we are the agents of that change. We
14 are the people that take in the trucks that are -- that
15 are not wanted and switch into the new ones. Our problem
16 is that we do not have an electric unit that works for our
17 particular application and we have a shortage. The
18 current ratios leave us short of the vehicles that we need
19 to keep the market moving and to keep the -- to keep the
20 community and our industry moving.

21 That bridge to the next technology is where we
22 need the help, either in the way of time or exclusions for
23 these -- for what we think are emergency vehicles.
24 Current regulations allow for out-of-state vehicles to
25 come in with 7,500 miles on them, new trucks, that

1 don't -- that -- with -- that hurst California industry,
2 because the trucks can't generate -- they can't start
3 here. And it encourages dirty trucks to come in from out
4 of state. So that seems to be -- I think this was
5 addressed in recent discussion, but that was, of course,
6 one of the concerns.

7 Again, it's that bridge to the next gen, and just
8 when does the Board expect that we will have the trucks
9 that we need, enough volume, to keep these essential
10 services moving. So we ask that you please consider that
11 carve-out or what's necessary to move to the next step.

12 Thank you.

13 BOARD CLERK MOORE: Thank you.

14 Joshua Lovelace.

15 JOSHUA LOVELACE: Thank you very much for taking
16 the time to have us here. I appreciate everything that is
17 done between the last meeting and the meeting to now. I
18 appreciate staff's efforts and the Board's efforts. My
19 name is Joshua Lovelace. I work for Miller Industries.
20 We manufacturer towing and recovery bodies for the United
21 States and worldwide.

22 As it has been brought up recently, the biggest
23 challenge that we have is the chassis that we mount our
24 units to are very specialized and nuanced. There simply
25 does not exist an electric -- or, I'm sorry, a ZEV option

1 currently for us to mount our equipment to go out and keep
2 these highways. We are stewards of the highway. We keep
3 the roads open. We are the sole responsible party for,
4 when have a vehicle that's flipped over on the 5
5 northbound blocking all lanes, tow trucks come out, and
6 pick it up, and haul it away. I'm sure you've been --
7 each one of you has been caught in traffic jam a time or
8 two. It is none to pleasant. And our essential service
9 is to go out and keep highways open, keep commerce moving,
10 and effectively keep pollution down.

11 Again, I highlight the appreciativeness -- our
12 appreciation for the work that CARB has done along with
13 staff. We just need to know what that next step is for us
14 that is highly specialized chassis and a highly
15 specialized industry to keep the roads moving and keep
16 people safe. I appreciate your time.

17 Thank you.

18 BOARD CLERK MOORE: Thank you.

19 Our next commenter is Adam Vee -- VanderBee.

20 ADAM VANDERBEE: Good afternoon, Chair and
21 members of the Board. My name is Adam VanderBee. I'm the
22 Regional Sales Director for Tec Equipment. We're the
23 largest distributor Mack and Volvo commercial trucks on
24 the west coast, with 10 of our locations -- or 10 of our
25 35 locations in California.

1 Like many of our dealer peers, we're deeply
2 concerned with our ability to offer CARB-certified
3 equipment to our customers going forward. Having sold out
4 of our 24 model year legacy-compliant product, we're now
5 restricted to selling ZEVs or the limited amount of ICE
6 product that can be unlocked through the ratios via ACT
7 and Low-NOx Omnibus.

8 The unfortunate reality for us is that neither
9 the demand nor the production of ZEVs is where we thought
10 it would at this time and we remain in the infancy stages
11 of ZEV rollout in the Class 8 industry for roadblocks,
12 such as cost, range, weight, and configurations that
13 continue to stifle adoption. My appeal to the Board,
14 however, is to consider the unintended consequences of
15 foreseeing the premature adoption of ZEVs, in an industry
16 that's not quite ready for them.

17 One of the stated goals of ACT, ACF, and the
18 Low-NOx Omnibus regulations is to improve the air quality
19 in disadvantaged communities, where the concentration of
20 emitting vehicles is disproportionately higher. I would
21 contend, however, that these are the very same communities
22 that will be most adversely and immediately affected by
23 the increased costs in their everyday goods and services,
24 as the trucking companies that deliver these goods will be
25 forced to pass along their incremental costs that are tied

1 to their ZEV adoption.

2 The reality is that, at this point, even with
3 available grants, a Class 8 ZEV is two to three times the
4 cost of its ICE equivalent. And additionally, due to
5 range and payload, limitations, it often takes two to
6 three ZEVs to do the work of a single ICE. So it's
7 unrealistic to think that an extra 500 or 600 thousand
8 dollars per unit can be easily absorbed, if at all. These
9 incremental costs will be passed along directly to the
10 consumer, and unfortunately be the disadvantaged who feel
11 the impacts first.

12 Thank you.

13 BOARD CLERK MOORE: Thank you.

14 Anthony Bento.

15 ANTHONY BENTO: Thank you, Chair Randolph and
16 members of the Board. My name is Anthony Bento. I'm the
17 Chief Legal Officer at the California New Car Dealers
18 Association. We represent truck dealers throughout
19 California.

20 As our written comments indicate, dealers
21 throughout California have seen dramatic declines in
22 available trucks for the current model year. Sales data
23 that we provided to the Board demonstrates that the
24 magnitude of these declines is significant, over 80
25 percent for Class 8 vehicles. And the scale of these

1 declines is unique to California and cannot just be
2 attributed to national or economic factors.

3 If the supply of new trucks does not increase in
4 California, businesses that will -- that rely on these
5 vehicles will be forced with two choices, continue to
6 operate their older pollute -- more polluting vehicles for
7 longer or purchase vehicles from out of state that do not
8 comply with CARB requirements. Both options undermine our
9 state's environmental goals and will harm air quality.

10 While we are pleased and support the
11 modifications to ACT, dealers are concerned that inventory
12 shortages may become even worse in the new year. So far,
13 manufacturers' compliance strategy with respect to ACT and
14 the Omnibus Low-NOx rules has been largely to deny
15 inventory to California dealers and to move that inventory
16 out of state.

17 However, that will -- hopefully that will change
18 following today's meeting as more -- and as more engines
19 become certified. But the stakes are too great to not
20 rigorously track the health of the marketplace. As such,
21 we are asking the Board to direct staff to track new and
22 used truck registrations monthly and report back to the
23 Board on the status of the marketplace in the first
24 quarter of next year. Tracking new vehicles registrations
25 is important to see if CARB efforts are having the

1 intended impact and an increasing supply, and tracking
2 used truck registrations is important to evaluate whether
3 market demands are being satisfied by out-of-state
4 vehicles that are not CARB compliant.

5 Again, thank you. I'm available if the Board has
6 any questions.

7 BOARD CLERK MOORE: Thank you.

8 Brandon Neel.

9 BRANDON NEEL: Good afternoon. Thank you for
10 having us here today in reviewing many of the points that
11 were brought up in the May meeting regarding the ACT and
12 how it's impacting upfitters and smaller things. My
13 concern today to reiterate, while we are seeing some
14 investigation of this, I'm still seeing a lack of any
15 tangible planning that I can make to help address it for
16 my employees, my team, and the people we work with.

17 I can't answer customer questions, because it's
18 all speculative on if we open up this one regulation, we
19 might see an improvement. My concern is if we don't see
20 that improvement, are we now at another six to nine months
21 beyond that before we can then get a reaction, and how do
22 I sustain through that six to nine months, how do my
23 customers sustain through that six to nine months without
24 going outside of California and sourcing their materials,
25 their equipment, and eventually, you know, just bringing

1 in -- excuse me. I lost my train of thought there, but --
2 ultimately, outsourcing everything out of California and
3 diminishing our labor force.

4 Many of the people we employ in this industry are
5 the hands-on type of workers. They aren't the -- they
6 aren't the college educated, looking for, you know, the
7 top dollar. They're good hard-working people looking to
8 make a good honest living. And if we can't plan for that
9 living, I can't guarantee them that they will have it. So
10 thank you.

11 BOARD CLERK MOORE: Thank you.

12 Ashley Porter.

13 ASHLEY PORTER: Good afternoon, Chairman Randolph
14 and members of the Board. My name is Ashley Porter. I'm
15 the Sales Manager for Tec Equipment in Oakland,
16 California. We are the largest distributor of Mack and
17 Volvo commercial vehicles on the west coast, with 10 of
18 our 35 locations in California. We serve all parts of the
19 transportation industry, drayage, regional haul,
20 construction, refuse, and over-the-road. Our customers
21 are the heart of what we do. We have been on their
22 journeys throughout the years watching their businesses
23 grow and thrive.

24 Over the last two years, it has been
25 heart-wrenching to walk them through the ACT regulations,

1 Omnibus regulations, and trying to help them understand
2 what these -- what the impact of these are going to have
3 on their businesses and customers. We have seen some pick
4 up and move their businesses out of California. Others
5 have made the hard decision to pass on the cost to update
6 their fleet to their customers, many of which are in
7 disadvantages -- disadvantaged communities in which you
8 are trying to help.

9 The one that I think hurt California's economy
10 the most are the ones that just decide to close their
11 businesses, because they simply do not have the resources,
12 whether it be financially or emotionally to meet ACT,
13 Omnibus, and ACF regulations.

14 CARB states that your mission is to promote and
15 protect public health, welfare, and ecological resources
16 through effective reduction of air pollutants, while
17 recognizing and consideration -- considering effects of
18 the economy. The impact of these regulations, as it is
19 written today, will impact the California economy
20 negatively for years to come.

21 I appreciate you being willing to make changes
22 and I think it's important for our economy. 2023
23 California job markets showed that the transportation
24 industry had the second largest job loss. They also had
25 the largest growth -- lowest growth in comparison year

1 over year to the other job markets. Thank you for being
2 willing to hear our amendment requests. We ask that CARB
3 delay and implement the changes to the Advanced Clean
4 Trucks to give our customers your -- and your constituents
5 the heart of what we all do, the time to figure out the
6 resources they need to comply. We ask that you delay this
7 and accept the changes that you're making.

8 Thank you.

9 BOARD CLERK MOORE: Thank you.

10 Brandon Wong.

11 BRANDON WONG: Good afternoon, Madam Chair and
12 members of the Board. My name is Brandon Wong and on
13 behalf of CALSTART, a nonprofit organization dedicated to
14 advancing clean transportation solutions.

15 We just want to be here today to reiterate our
16 continued support for the Advanced Clean Trucks
17 Regulation. ACT is a critical policy tool for driving
18 innovation in the trucking sector and positioning
19 California as a leader in zero-emission vehicle
20 technology. By setting clear targets for manufacturers,
21 ACT sends important market signals that encourage
22 innovation, not only OEMs, but also within the broader
23 supply chain to include batter manufacturers, service
24 companies, and infrastructure providers. This growing and
25 innovative clean energy ecosystem is creating new jobs

1 right here in California, fostering competition, and
2 leading to a greater variety of clean truck options with
3 new models that meet the unique needs of our economy's
4 wide and varied industries.

5 We appreciate staff's proposed amendments to
6 streamline implementation and thank the Board for
7 continuing to push the envelope on ZEV development. ACT
8 has helped position California, not just as a national hub
9 for transportation innovation, but as a global leader and
10 the expert of clean energy solutions. CARB's work has
11 shown our work to combat climate change is not just good
12 for the environment, but is also good for our economy.

13 Thank you.

14 BOARD CLERK MOORE: Thank you.

15 Our next commenter is Brian Banks.

16 BRIAN BANKS: Hello. My name is Brian Banks.
17 I'm the owner of Action Towing and Road Service in San
18 Mateo County. We have been family owned and operated
19 since 1984.

20 I'd like to start off by saying I support clean
21 energy. I have two daughters and I want them to live in a
22 world with clean air. That being said, I also feel it is
23 important to protect our employees and their families as
24 well. Our company employs 200 people, many who depend on
25 us and our benefit system to protect themselves and their

1 families. Unfortunately, at this point, there's no
2 application that will work in our industry. I ask the
3 Board to please reconsider the regulations and continue to
4 make amendments to allow us to run our businesses until
5 there is a solution, and continue to let our employees
6 provide for their families, while also keeping our
7 roadways flowing and safe.

8 Thank you for your time.

9 BOARD CLERK MOORE: Thank you.

10 Our next commenter is Timothy Post.

11 I want to remind everyone again for the
12 commenters that we have interpreters, so to please just be
13 aware of your speed of speech.

14 TIMOTHY POST: Hi. My name is Timothy Post. I'm
15 with College Oak Road Solutions. I'm one of the
16 supporters of the clean air, but with the delay of
17 everything that's going on and all the trucks not being
18 built, we're sitting at a standpoint now is that do we
19 keep our employees or do we move on? There needs to be a
20 lot more regulation on how we're going to be doing this
21 and there needs to be a lot more effort to help us
22 basically help you, so we can all be in the same platform
23 and we can make it a cleaner place.

24 If this doesn't get amended, there could be
25 possibly thousands of drivers around that are going to

1 lose their job. There's a good chance that a good 60 of
2 my employees will lose their job. From there, we are kind
3 of the road warriors of the freeways. We take care of all
4 these accidents. We help the members -- the road -- the
5 road public. And with this not being there, there's a
6 good chance that it's going to be -- make the freeways,
7 everything more dangerous.

8 If you could reconsider and amend this for the
9 time being, so we can all work together and come up with a
10 solid plan, where we have a truck that we can use and
11 fulfill the needs that we need to have also, that would be
12 great.

13 Thank you.

14 BOARD CLERK MOORE: JR Cady.

15 JR CADY: Thank you for having me today. My name
16 is JR Cady. I'm with Firstline Environmental. We're one
17 of California's largest emergency service environmental
18 and hazmat response companies.

19 Right now, there are zero ZEV technology
20 solutions for our specialty lines of service. We service
21 industries, both private and public, from agricultural to
22 roadside, to utility. With these demands coming in place,
23 we really think there's going to be an end result to a
24 burden of the public, motoring public, and consumer.

25 I would also last -- also lastly ask you to

1 consider looking into the large thermal event runaways
2 that we've had lately. Our response to these events have
3 increased 300 percent over the last 18 months.

4 Thank you, guys.

5 BOARD CLERK MOORE: Thank you.

6 Nicholas Lenz.

7 NICHOLAS LENZ: Good afternoon. My name is
8 Nicholas Lenz with Civic Center Towing Transport Road
9 Service. Please bear with me, this is my first time
10 publicly speaking.

11 My grandfather founded Civic Center Shell in
12 Richmond, California in 1969. He bought his first tow
13 truck in 1970 when my Dad was only five years old. In the
14 late '90s, my parent grew the business getting into the
15 heavy-duty recovery industry helping the California
16 Highway Patrol clear roadways so people can continue to
17 provide for their families.

18 Three weeks ago, we received a phone call from
19 PG&E asking us to get eight pieces of heavy-duty equipment
20 en route to Georgia within 24 hours. We run a crew of 15
21 operators, none of whom could have afforded a college
22 education. Every one of them volunteered to leave their
23 families in order to help the thousands affected by the
24 hurricanes Helene and Milton. That's what we do. When
25 people need us, we jump.

1 As of now, there's no effective heavy-duty EV tow
2 trucks available. And while I advocate for the cleanest
3 possible air, the cost will soon be far beyond what our
4 small family business can afford. With such a short
5 window, these rules could force us to lay off our
6 hard-working team of 30 people or even go out of business
7 entirely. Our priority is to serve the public when they
8 need us most. But without amendments, we won't be able to
9 continue providing such an essential service. I ask you
10 to consider additional support and flexibility for a small
11 family business like ours.

12 Thank you.

13 BOARD CLERK MOORE: Jed Mandel.

14 JED MANDEL: Good afternoon. I'm Jed Mandel.
15 I'm President of Truck and Engine Manufacturers
16 Association. As you know, in July of 2023, EMA and CARB
17 entered into an agreement, the Clean Truck Partnership,
18 regarding the implementation and alignment of a suite of
19 California and federal medium- and heavy-duty on-highway
20 engine emission regulations.

21 One component of that agreement is CARB's
22 commitment to modify ACT deficit -- the deficit markup
23 period and to clarify that the compliance determination
24 and sales reporting requirements in ACT are both defined
25 when vehicles are produced and delivered for sale in

1 California.

2 Staff's proposal is consistent with our Clean
3 Truck Partnership agreement. We fully support it and we
4 strongly urge the Board to adopt it. The proposed
5 amendments will increase flexibility and remove several
6 impediments to the ability of manufacturers to comply with
7 ACT. The proposed amendments and other modifications,
8 which staff have been working on, and which we support
9 will address some of the concerns raised in the May 2024
10 hearing.

11 While those amendments and modifications will not
12 full ameliorate the potential for limited product
13 availability in California. They definitely will increase
14 product availability.

15 I note that one element of CTP agreement
16 specifically states that the signatories would agree to
17 work together to resolve any issues that may warrant
18 regulatory amendments to either Omnibus or ACT and to
19 actively promote further needed infrastructure
20 developments. We have shown that the heavy-duty industry
21 and CARB staff can and have worked together cooperatively
22 to find solutions to -- as issues arise.

23 We want to thank and acknowledge Jack Kitowski's
24 work, Kim Heroy-Rogalski's work on these amendments. I
25 also want to give a special shout-out to Annette Hebert,

1 who has been instrumental in getting us this far and who
2 we will miss.

3 More work likely will need to be done to assure
4 that -- the ultimate success of ACT and our mutual desire
5 to -- for an adoption of Heavy-duty zero-emission
6 technologies. We look forward to continuing to work with
7 the Board and with the staff.

8 Thank you.

9 BOARD CLERK MOORE: Kirk Blackburn.

10 KIRK BLACKBURN: Good afternoon, Chair Randolph
11 and members. Kirk Blackburn here on behalf of the
12 California Tow Truck Association, which is known
13 nationally as the Emergency Road Service Coalition of
14 America, or ERSCA.

15 CTTA is the largest towing association --
16 nonprofit towing association in the world representing
17 near a thousand emergency roadside responders and towing
18 companies within California and throughout the country.

19 CTTA shares the concerns about the ACT Regulation
20 that were expressed by Miller Industries, which
21 manufacturers much of the towing and recovery equipment
22 used by CTTA's members. As explained, the mandates
23 contained in the ACT Rule will drastically impact the
24 availability of tow trucks -- of all tow trucks for sale
25 in the state.

1 As there are currently no known commercially
2 available ZEV tow trucks for sale capable of performing
3 the work -- the same work done by traditional tow trucks,
4 and no clear indication that any manufacturers have plans
5 to develop any such ZEV tow trucks any time in the near
6 future, the lack of availability of tow trucks creates a
7 dire problem for the towing industry and motoring public
8 that they serve.

9 Without a sufficient number of tow trucks on
10 California's roads, accidents, breakdowns, and impounds
11 will remain uncleared, the number of secondary accidents
12 will increase, and the amount of emissions from idling
13 vehicles will also increase, and lost productivity
14 increased traffic will the state's economy. To avoid this
15 crisis, CTT encourages CARB to provide additional relief
16 for tow and recovery equipment.

17 Thank you for your attention to this critical
18 issue, directly impacting roadside responders and the
19 motoring public that they serve.

20 BOARD CLERK MOORE: Thank you.

21 Chris Shimoda.

22 CHRIS SHIMODA: Good afternoon, Madam Chair and
23 Board members. Chris Shimoda with the California Trucking
24 Association.

25 I first would like to thank staff for their work

1 on this issue, especially Jack Kitowski. I've been
2 interacting with Jack for the past year on this. I know
3 that staff is earnestly trying to fix the issues heard
4 here today. I also want to thank CARB for your September
5 25th memo acknowledging the sales ratios that are
6 occurring as a result of these rules.

7 I'm here today in support of our truck dealer
8 members who are really feeling the brunt of those sales
9 ratios. For the past year, we've received reports of
10 between 60 to 90 percent cuts in normal truck allocations
11 and product lines, which have been outright discontinued
12 from the California market. And so this is not limited to
13 upfitters. It is widespread, as you heard from dealers
14 like Tec Equipment.

15 Concerns about these impacts were highlighted
16 over a year ago in an October 2023 bipartisan letter from
17 the Legislature and have now come to fruition for dealers.
18 From one dealer, "This year we had 2,400 sales, but only
19 800 trucks. Next year, we will have 39." From another
20 dealer, "Last year, the yard was full of hundreds of
21 trucks. Today, the yard is nearly empty." From another,
22 "Our salesmen are realizing trucking might not recover and
23 they will need to find different job opportunities to make
24 ends meet."

25 The ACT and the Omnibus are the first

1 California-only medium and heavy-duty standards in over 30
2 years. So the unintended market impacts, are playing out
3 in real-time, are not something anybody in this room have
4 experienced before.

5 Today's proposal is a step in the right
6 direction. We support it and we're hopeful that it will
7 at least partially mitigate these issues, but join others
8 in urging the Board and staff to closely monitor product
9 availability for the 2025 model year and be open to
10 additional necessary changes. And as always, we look
11 forward to working with your staff to try to monitor those
12 impacts.

13 Thank you.

14 BOARD CLERK MOORE: Thank you.

15 Ryan Kenny.

16 RYAN KENNY: Hi. Good afternoon, Chair Randolph,
17 members of the Board, and staff. My name is Ryan Kenny
18 with Clean Energy, a company that considers ourselves a
19 collaborative partner with our State on emissions and
20 climate goals. We support the package of amendments
21 proposed today to improve engine availability. However,
22 limited infrastructure, vehicle availability, and
23 electrical grid capacity has and will continue to be a
24 significant problem for the goods movement industry,
25 especially in the near term.

1 The market has reacted to adopted regulations.
2 Fleets and truck owners appear likely to keep older, less
3 efficient trucks for longer, and dealers are increasingly
4 struggling with demonstrably lower truck sales.
5 Fortunately, there's a readily available solution now as a
6 constructive amendment. The cleanest combustion engine
7 certified at 50 milligrams should get priority in ACT and
8 Advanced Clean Fleets. We encourage CARB to develop
9 regulatory language that would require that the sale of
10 the cleanest heavy heavy-duty engines be sold without
11 generating deficits under ACT. In addition to the model
12 year 2026, we encourage us to also cover model year 2025
13 products.

14 Also, for ACF, we encourage amendments that would
15 allow fleets flexibility to preferentially operate
16 vehicles equipped with the cleanest engines within their
17 California fleets. The market has made it clear that more
18 flexibility is needed to ensure smooth transition to
19 zero-emission technology. This solution is made easy for
20 CARB, because 50 milligram certified engines are available
21 now and would greatly improve engine availability for 2025
22 and 2026.

23 In looking at other states and their adoption,
24 these constructive amendments would be well received by
25 these other states currently concerned about product

1 availability, cost, and reliability. I conclude by
2 thanking you for considering the allowance of the cleanest
3 combustion engines certified at 50 milligrams, by giving
4 them priority in both ACT and ACF, when a ZEV purchase
5 cannot be made.

6 Thank you.

7 BOARD CLERK MOORE: Thank you.

8 Bill Magavern

9 BILL MAGAVERN: Madam Chair and Board members,
10 Bill Magavern with the Coalition for Clean Air in support
11 of these proposed amendments to the Advanced Clean Trucks
12 Regulation. And to be clear, the amendments themselves
13 will not make the air any cleaner, but I'm hearing a
14 consensus that they will make the rule more workable. And
15 our support is strong for the underlying rule.

16 I was here this morning, and it was moving to
17 hear the Haagen-Smit honoree from Ghana say that he's been
18 accused of taking bread out of people's mouths. And
19 clearly he's up against challenges far tougher than
20 anything that we've ever faced. But I was struck by the
21 parallel, because here in California when there was a
22 proposal to go forward strongly to clean up our air and
23 stabilize our climate, it's branded a job killer, right?
24 And we've seen that time and time again, even though we've
25 been able to go forward with these measures and actually

1 strengthen our economy many times, you know, whether it's
2 clean air rules or AB 32 and our global warming standards.

3 Also, we heard this morning about Carl Moyer and
4 it was inspiring to hear about his work. And it seems
5 that one of the real key insights that he has bequeathed
6 to us is the need to focus on reducing diesel emissions
7 from trucks. And, you know, that was true 25 years ago.
8 It's still true today. And that's why it's so important,
9 particularly in our disadvantaged communities, that we
10 stay the course on Advanced Clean Trucks and Advanced
11 Clean Fleets, Heavy-Duty Omnibus, and the Clean Truck
12 Check.

13 Thank you.

14 BOARD CLERK MOORE: Thank you.

15 As a reminder that all public sign-ups for this
16 item are now closed, both in-person and over Zoom.

17 Mike Tunnell.

18 MIKE TUNNELL: Good afternoon, Chair Randolph and
19 members of the Board. I am Mike Tunnell representing the
20 American Trucking Association. ATA is the largest
21 national trade association representing the trucking
22 industry.

23 ATA fleet members rely on the purchase of new
24 trucks to move our nation's freight. New trucks deliver
25 emission reductions and deploy the newest safety

1 technologies available. Both the Advanced Clean Trucks
2 and Low-NOx Omnibus Regulations are severely limiting the
3 availability of new trucks in California and California
4 opt-in states.

5 As noted in Dr. Cliff's recent memo to the Board,
6 the ACF requirements are being pushed onto the dealerships
7 and fleets. With ZEV, ICE sales ratios ranging from 1 to
8 1 to 10 -- to 1 to 10 or 15. Fleets are experiencing
9 restrictions on the availability of new ICE trucks. And
10 when they are able to purchase them, the trucks come at a
11 significant price premium.

12 We're encouraged that the Board and staff
13 recognize there are problems with both the ACT and Omnibus
14 regulations. However, we are concerned that the proposed
15 amendments will fail to unlock potential new truck sales
16 and product limitations will continue.

17 Currently, ACT compliance is based largely on the
18 sale of EV pickup trucks and SUVs, not the types of
19 vehicles trucking fleets buy or truck dealerships sell.
20 Fleets continue to rely on ICE truck purchases due to the
21 performance and infrastructure limitations associated with
22 ZEVs, as well as the significant price differential.
23 Absent further action, we are concerned that the state's
24 truck dealerships, which service trucking fleets, will
25 face further financial and workforce hardships. The Board

1 needs to take significant action now to avert the
2 submerging truck sales crisis.

3 Thank you.

4 BOARD CLERK MOORE: Next commenter is John
5 Moffatt.

6 JOHN MOFFATT: Good afternoon. John Moffatt on
7 behalf of the California Renewable Transportation
8 Alliance. CRTA represents fleet operators, vehicle engine
9 manufacturers, renewable fuel producers, utilities, and
10 fuel providers. Our member companies are dedicated to
11 providing alternative transportation fuel and technology
12 options to further California's climate change goals and
13 support the broader use of renewable natural gas as a
14 transportation fuel to improve emission reduction
15 outcomes.

16 CRTA strongly urges the Board to adopt staff's
17 proposal to develop regulatory language that would require
18 that the sale of the cleanest heavy-duty engines be sold
19 without generating deficits under the ACT. In addition to
20 model year 2026, we would encourage the Board to extend
21 this proposal to cover -- to cover model year 2025
22 products as well in order to help resolve vehicle
23 availability next year. This proposal will help to reduce
24 product shortages, at least in the near term, while also
25 ensuring great near-term emission reductions and continued

1 ZEV deployment.

2 In addition to that proposal, CRTA recommends
3 that the Board adopt the original March 26th version of
4 the ACT amendments that were presented to the Board at the
5 May 23rd meeting and reject the proposed expansion of the
6 ACT credit market to secondary vehicle manufacturers.

7 Allowing secondary manufacturers to trade credits
8 will increase credit costs and does not solve the core
9 vehicle availability issues. Thank you for your continued
10 attention to this intersecting suite of rules and their
11 impact on the medium- and heavy-duty vehicle marketplace.

12 Thank you.

13 BOARD CLERK MOORE: Thank you.

14 Tom Swenson.

15 TOM SWENSON: Good afternoon. Hello again. My
16 name is Tom Swenson. I'm Director in Global Regulatory
17 Affairs at Cummins. Cummins is committed to partnering
18 with CARB and all stakeholders as we work together to
19 transition towards a zero-emission future. Cummins has
20 CARB certified 50 milligram NOx engines in production with
21 additional platforms planned for 2025, '26 and '27. We
22 offer CARB ZEP Cert battery electric zero-emission
23 powertrains through our Accelera Division. We've been
24 successful in purchasing California ZEV-generated NOx and
25 PM emission credits under the Omnibus Regulation. And we

1 appreciate approval of our legacy engine mitigation plan,
2 which will improve California engine availability.

3 Cummins supports the package of amendments
4 proposed today. The amendments will improve engine
5 availability in 2025 and 2026. However, we believe
6 additional actions will be necessary to help ensure
7 sufficient engine availability. Cummins offers the
8 following recommendations.

9 In today's ACT proposal, expansion of the
10 cleanest engines amendment to all 50-milligram engines for
11 2025, in addition to 2026. Additional action to
12 improve -- or to provide ACF fleets flexibility to
13 preferentially operate vehicles with those cleanest
14 engines within their California fleet. Additional action
15 to extend the Omnibus legacy cap adjustments through 2026,
16 which will help ensure sufficient medium heavy-duty engine
17 availability without increasing emissions, and additional
18 action to allow all manufacturers to CARB certified legacy
19 engines in 2026 for out-of-state sales.

20 Finally, we urge CARB to continue the practice of
21 meeting with engine manufacturers, vehicle OEMs, dealers
22 and fleets to understand the practical implementation
23 issues we're facing.

24 Thank you.

25 BOARD CLERK MOORE: Thank you.

1 Our final in-person commenter is Greg Hurner.

2 GREG HURNER: Thank you.

3 Greg Hurner on behalf of Miller Industries.

4 Number one, thank you, CARB Board, for listening
5 in May and waiting. You not only brought forth all the
6 parties back to the table and got staff engaged to find
7 out kind of what the root of the problems are here.
8 That's why we're back here.

9 Unfortunately, I'll speak to the ACT first. This
10 is kind of complicated, because we've got to speak to the
11 ACT. We've got to speak to the Omnibus. I'll speak to
12 the ACT first. I've discussed with staff there are some
13 issues about whether opening the credit market is going to
14 work or not. We're not even sure Miller Industries
15 qualifies as a secondary manufacturer. An upfitter is not
16 interchangeable with secondary manufacturers, so there are
17 some technical issues. We know in 2024 that -- from staff
18 that there were only two transactions in the credit
19 market. It's a very narrow market. There's not a lot of
20 transparency. You're opening it up to ask people to --
21 that are not necessarily sophisticated in this area to
22 start trading credits.

23 As you also heard, there's no requirement that
24 even if a secondary manufacturer, or if it's extended,
25 upfitter, purchase the credit that the manufacturer would

1 accept that. So then you have somebody who's purchased
2 the credit where they thought they were going to go
3 achieve some type of inventory. Now, they have something
4 that may not have value to them.

5 I'm going to hurry, but we're -- you know, we're
6 still very concerned, because we don't have -- in the
7 Omnibus side, we don't have transparency into how many
8 engines this is going to free up. And without that, we
9 really don't know what the solution is. But we do know,
10 and you've heard, that we don't have time with these small
11 businesses to find out it doesn't work, and then come back
12 with another regulatory proposal.

13 So we're asking, begging that the Board consider
14 some type of flexibility that we don't have to come back
15 to you, as a full Board, to achieve our aims. In the
16 worst case scenario, if we allowed legacy engines with a
17 \$9,000 fee, even if 50,000 were sold, that's \$450 million
18 a year that goes to EJ products.

19 BOARD CLERK LEVRINI: Thank you.

20 GREG HURNER: Our distributors are competing
21 against those out-of-state engines in the way this is set
22 up.

23 BOARD CLERK LEVRINI: All right. Thank you.

24 We currently have 17 commenters with their hands
25 raised in Zoom. Again, I want to apologize in advance if

1 I mispronounce your name. Again, closure was at 2:30 pm.

2 And the first five speakers Joe Snyder, Mark
3 Rosenbaum, Casey Tubman, Guillermo Ortiz, and Tim
4 DeMartini.

5 Joe Snyder, I have activated your mic. You may
6 begin.

7 I'm with Freightliner Custom Chassis. Some of
8 the vehicles we build are electric school buses, electric
9 walk-in vans. We're doing our best to meet the
10 regulations. Currently, we have no electric solution for
11 Class A RVs. And there are no credits -- therefore no
12 credits to build Class A RV chassis with ICE engines.

13 Additionally, there's no infrastructure at
14 camping locations where these future vehicles would be
15 going to. Please consider the following:

16 The current law may incentivize older RVs to be
17 purchased, and thus going backwards on the emissions.
18 ACT, as it sits, will stop nearly all sales of new Class
19 As and Super CRVs. RVs are low mileage, low fuel, and
20 thus low-emission vehicles due to the low usage. Not
21 allowing sales of new RVs doesn't stop consumer demand.
22 Eliminating RVs from ACT will ensure clean diesel engines
23 are operating in California.

24 Keeping ACT as it is will ensure older vehicles
25 are sold in state for future -- are sold in state for the

1 near future. Eliminating RVs from ACT will also allow
2 enforcement officials to focus on larger fuel users.
3 Additionally, CARB could add a limit of in-state miles and
4 generator hours to prevent emissions of these vehicles.

5 I welcome the comments of the Board on this
6 topic. I'm thankful for the clean air programs. I've
7 personally told thousand of people all over the U.S. how
8 clean our air is and that I can see the mountains every
9 day and my kids don't know what a smog day is.

10 Help California RVers go out into our national
11 parks all over the United States with clean diesel RVs,
12 not older polluting RVs. These rules can clean the air
13 and demo jobs at the same time, or we can go out and be
14 clean together.

15 Thank you.

16 BOARD CLERK LEVRINI: Thank you.

17 Margaret -- Mark Rosenbaum, I have activated your
18 mic. You may unmute and begin.

19 Mark Rosenbaum, you may unmute and begin.

20 MARK ROSENBAUM: Oh, there it is. I'm sorry.

21 BOARD CLERK LEVRINI: Okay. Perfect.

22 Good afternoon. My name is Mark Rosenbaum and I
23 am the General Manger of Mike Thompson's RV, family owned
24 and operated with five locations.

25 MTRB has helped the Californians enjoy the RV

1 lifestyle since 1972. We have been notified by our RV
2 manufacturers that several types of motorhomes may not be
3 registered in the state. I'm unaware of any impact study
4 that would show the overall outcome of emissions reduction
5 concerning this action. I understand the need to reduce
6 emissions. I've lived in California my entire life, born
7 and raised, but I don't understand the position concerning
8 RVs, and the reduction of emissions, and how the two go
9 together.

10 I say this and this is -- here is why I say it.
11 The driving time of an RV is very low, where most
12 households own a vehicle, they don't own a motorhome.
13 2017 had high auto sales of over two million sold. That
14 same year motorhomes sold was 6,602. That is less than a
15 half a percent versus what the autos sold. And because
16 motorhomes are driven less, it is like a drop of water in
17 a swimming pool for emissions reductions. Californians do
18 not use their RVs as daily drivers or as second vehicles.

19 However, Californians do use their motorhomes for
20 housing during disasters like wildfires and earthquakes.
21 This is a safe haven for many. First responders were
22 using RVs as alternative housing during the pandemic. In
23 the end, reducing the number of motorhomes registered in
24 this state is not going to change the level of emissions,
25 because they are just not driven enough.

1 This action will not only impact California
2 consumers in a negative way, but it will also impact the
3 RV industry. Due to this impact, we're respectfully
4 urging CARB to exempt motorhomes from ACT regulations and
5 prevent an economic loss for the state of California as
6 well as RV dealers have lost --

7 BOARD CLERK LEVRINI: Casey Tubman.

8 Casey Tubman, I have activated your mic. You may
9 unmute and begin.

10 CASEY TUBMAN: Good afternoon. My name is Casey
11 Tubman and I am the President of Newmar Corporation, a
12 Winnebago Industries Company. With over 5,500 U.S.
13 employees, Winnebago Industries is a leading U.S. RV
14 manufacturer under the Winnebago brand design and Newmar
15 brands. And for over 66 years, we have helped many
16 Californians explore and connect with the great outdoors.

17 I am here today because Newmar has been notified
18 by our chassis suppliers that there will be no chassis
19 available that can be certified for a motorhome to be sold
20 and registered within the state of California beginning in
21 January 2025. We are concerned that the ACT Regulation
22 will have a very real and adverse impact to the 11 billion
23 total annual economic impact the RV industry has in the
24 state. It will be detriment of the -- to the detriment of
25 the California RV consumers, dealers, and related

1 businesses.

2 In some cases, such as RV dealerships, the impact
3 may be catastrophic. This impact will also follow through
4 to other CARB-aligned states. We respectfully ask CARB to
5 exempt motorhomes from the ACT Regulation to prevent the
6 loss of the motorhome industry in the state. Thank you.
7 I appreciate the opportunity to speak today.

8 BOARD CLERK LEVRINI: Thank you.

9 Guillermo Ortiz, I have activated your mic. You
10 may unmute and begin.

11 GUILLERMO ORTIZ. Hello. Can you hear me?

12 BOARD CLERK LEVRINI: Yes, sir.

13 GUILLERMO ORTIZ: Thank you.

14 Thank you, Chair Randolph and esteemed members of
15 the Board for this opportunity to comment today. My name
16 is Guillermo Ortiz and I'm a Senior Clean Vehicles
17 advocate for the Natural Resources Defense Council and
18 based out of Oakland, California.

19 I strongly urge you to adopt the amendments
20 considered today, continue pushing for robust
21 implementation of the ACT Regulation, and reject attempts
22 to undermine or delay California's clean truck standards.
23 ACT showcases California's leadership at its best,
24 protecting public health, addressing climate change, and
25 driving technological innovation.

1 The ACT Rule is a critical step towards securing
2 a zero-emission vehicle future, significantly cutting
3 harmful emissions by requiring an increased percentage of
4 new trucks to be zero emission, delivering cleaner air to
5 the Californians who -- Californians who need it most.
6 Zero-emission truck technologies are here. The ACT Rule
7 ensures that these technologies continue to improve and
8 scale providing manufacturers the flexibility to innovate,
9 while making meaningful progress on emission reductions.

10 ACT is particularly effective in its built-in
11 flexibility. It does not impose a rigid one-size-fits-all
12 approach. Instead, it sets increasing zero-emission
13 vehicle sales targets while allowing manufacturers to
14 focus on the vehicle classes most suitable for
15 electrification, while also allowing for banking and
16 trading credits.

17 I want to point out some misinformation that's
18 been going around, particularly around manufacturers and
19 this product shortage. Manufacturers looking out for
20 profits is one thing, but manipulating their customers and
21 dealers, and spreading misinformation to weaken or
22 outright dismantle clean truck standards is another.

23 They're effectively creating a crisis where none
24 exists, undercutting progress that's essential to
25 protecting public health and addressing the climate

1 crisis. If they continue down this path, it will result
2 in unnecessary pollution, delayed progress, failure to
3 meet the climate commitments they've made, and even loss
4 of life within front-line communities. The tools are in
5 place for them succeed.

6 Thank you.

7 BOARD CLERK LEVRINI: Thank you.

8 Tim DeMartini, I have activated your mic. You
9 may unmute and begin.

10 TIM DeMARTINI: Good afternoon, Board. Thank you
11 for hearing us all. I'm Tim DeMartini, the owner of
12 DeMartini RV sales, Grass Valley, California. It's a
13 family-owned business. We've been selling motorhomes in
14 California for over 40 years, and currently, we're the
15 highest volume dealer of Class A diesel motorhomes in
16 California. Last year we sold \$75 million in sales, and
17 at least about two-thirds of them were here to California
18 residents.

19 Now, if I listen to Casey Tubman who just talked
20 from the Winnebago, we're their number three dealer in
21 California. So if you just Listen to him the comments
22 before last, he says we're going to get zero motorhomes
23 for 2025. So, it's going to severely impact our business
24 and the ability of the retiring people of California to
25 even be buy one. For example, our business relies on new

1 luxury motorhomes, which the Newmar Corporation supplies
2 us for mostly.

3 The -- like -- for an example, last year, we
4 sold -- last year, 34 new diesel Dutch Star motorhomes,
5 which is the number one of California and the number one
6 of nation in diesel pushers, and about 30 of them we sold.
7 So people will not be able to obtain one. And then this
8 CARB thing here, it just -- we just need to get an
9 exemption for us to keep in business is going to be a
10 terrible thing. I have a customer right now that wanted
11 to buy -- he lost his wife, wants to buy a new diesel
12 motorhome and can't get the chassis right now, just lost
13 his wife last month, \$500,000 motorhome.

14 Thank you.

15 BOARD CLERK LEVRINI: Thank you.

16 The next five commenters, I have Omar Camacho,
17 Trevor Gasper, Michael Ochs, Lee Howard, and Tom Van
18 Heeke.

19 Omar Camacho, I have activated your microphone.
20 You may unmute and begin.

21 OMAR CAMACHO: Thank you. Good evening. My name
22 is Omar Camacho. I'm the owner of Titan Tow here in
23 Downey, California.

24 Board, I'm asking that you take great
25 consideration as to we've already taken almost a \$2

1 million hit due to previous regulation changes to now
2 being hit once again with now ZEVs. We're asking that we
3 are give an exemption to this ruling as the electric
4 technology is just not there to sustain our workload,
5 especially when we are trying to keep roadways open for
6 cleanup all the way from towing vehicles off to the
7 freeway -- or off the free way.

8 ZEV heavy-duty truck and medium-duty trucks are
9 just not capable of handling our strain and we -- that we
10 place on these trucks. Having an 80,000 pound truck ready
11 to roll over on a bridge will be a huge catastrophe. We
12 cannot free spool the wreckage as it will destroy our
13 bridge when we're landing and the bridge will not sustain
14 the weight -- will not sustain the weight nor the room for
15 additional recovery trucks.

16 Also, the impact of these batteries when the
17 catch on first, having to dump thousand and thousands of
18 gallons of water, then create a havoc to our environment,
19 and closures of roadways for hours. Clearly, a ZEV will
20 not be able to handle such recoveries. We're not against
21 clean air and we are just asking for the technology to
22 further develop, so that we can make a transition and we
23 have some time to financially recover after many small
24 businesses took extremely hard hits with previous
25 regulation changes.

1 Please think this thoroughly as your decision
2 will have many financial impacts on small businesses here
3 in California. We, in the private sector, do not have
4 access to the millions and billion of dollars that
5 government has. Again, we want to evolve with ZEV
6 industry, but let's be smart and lets let the technology
7 catch up, so that we can also make the change frugally.
8 Thank you very much for your time. Have a good day.

9 BOARD CLERK LEVRINI: Thank you.

10 Trevor Gasper, I have activated your mic.

11 TREVOR GASPER: Great. Thank you. My name is
12 Trevor Gasper. I'm the Senior Vice President and General
13 Counsel of Thor Industries, the world's largest producer
14 of recreational vehicles. Thor owns a family of RV
15 companies, including Airstream, Tiffin, Jayco, Entegra,
16 and Thor Motor Coach, all of whom sell motorhomes to
17 dealers and consumers in the state of California, so that
18 they can better connect with nature and the outdoors.

19 As an industry, we've spoken on several occasions
20 about the concerns we have with the ACT. And the
21 amendments discussed today do not alleviate those
22 concerns. Of the vehicles impacted by ACT, motorhomes
23 make up only one quarter of one percent of all miles
24 driven on California roads. Unlike trucks at issue in the
25 regulations, motorhomes spend most of their functional

1 life parked and not emitting GHGs.

2 Like all RV companies, we are a final stage
3 manufacturer. We do not manufacture the chassis and
4 engines that are utilized in our units. Because of this,
5 we are currently beholden to the chassis produced for sale
6 to us by our chassis OEMs. We are being told by these
7 major suppliers that due to the ACT and the unavailability
8 of any electric or zero-emission or near zero-emission
9 product for the RV industry, that they simply will not
10 sell us any products for resale into California or other
11 states that have adopted the ACT beginning in 2025. These
12 chassis manufacturers are not interested in engaging in
13 credit purchasing to assist the RV industry, so even if we
14 can buy credits, they don't want to engage with us. They
15 will not sell us chassis for sale in California period.

16 I want CARB to know that we are taking steps to
17 develop zero-emission and near zero-emission solutions for
18 the industry. Thor has a long-standing partnership with
19 Harbinger Motors out of California to produce both near
20 zero and zero-emission options for the RV industry.

21 As we sit here today, however, despite our best
22 efforts over the last five years, these options are not
23 available and will not be available in any meaningful
24 number for at least 18 months.

25 BOARD CLERK LEVRINI: Thank you.

1 Michael Ochs, I have activated your microphone.

2 MICHAEL OCHS: Thank you. Good afternoon, Chair
3 Randolph and members of the BOARD. My name is Michael
4 Ochs and I am testifying on behalf of the RV Industry
5 Association, whose members produce 98 percent of all
6 recreation vehicles made in the United States, including
7 motorhomes and travel trailers.

8 The RV industry has an annual economic impact of
9 California of \$11 billion and supports more than 51,000
10 jobs. As you have heard, the ACT will devastate the
11 motorhome industry in California. Chassis manufacturers
12 currently have no ZEV chassis that are rated for motorhome
13 applications and have indicated that they will not have
14 any for the foreseeable future. Therefore, they have
15 notified motorhome manufacturers that they will be unable
16 to provide any internal combustion engine chassis for
17 motorhome production to be sold into California.

18 The U.S. EPA has stated that motorhomes are not
19 suitable vehicle applications for EV technology due to the
20 projected impact of the weight of EV batteries. For this
21 reason, the EPA categorizes motorhomes as custom
22 vocational vehicles, similar to ambulances and other
23 emergency vehicles, and did not include more stringent
24 standards for motorhomes certified to the option custom
25 chassis regulatory subcategory.

1 The RV industry would ask that CARB exempt
2 motorhomes from the ACT regulations, as is currently the
3 case with emergency vehicles, or at least defer compliance
4 for motorhomes until such time that ZEV chassis for the
5 motorhome market are readily available and desired by
6 consumers.

7 Thank you. We look forward to working with CARB
8 to ensure that we have an equitable solution.

9 BOARD CLERK LEVRINI: Thank you.

10 Lee Howard, I have activated your mic.

11 LEE HOWARD: Yes. Hi. My name is Lee Howard.
12 Good afternoon, Chair Randolph and Board members. We have
13 eight heavy-duty truck dealerships in California and
14 represent the brands Daimler -- or Daimler brands,
15 Freightliner, Western Star, Class 6 through 8. We sell
16 approximately 2,500 trucks a year and employ over 760
17 Californians. We've been advocate partners of CARB and
18 local air districts for -- and been in business for 95
19 years.

20 With the lack of diesel engines, customers are
21 not able to buy our new product and vehicles, forcing
22 customers to continue using and purchase of old user --
23 old used trucks, instead of fewer and more efficient
24 models. This trend undermines California's air quality
25 and climate goals. We urgently request that CARB take

1 immediate action to address these critical inventory
2 shortages in California truck dealerships, threaten the
3 livelihoods of our employees, but the ability to meet
4 customer demands and move freight throughout California.

5 Freightliner, like other of manufacturers have
6 spent billions of dollars to meet greenhouse gas
7 reductions and NOx diesel engines over the last 30 years,
8 and additionally just launched improved leading safety
9 technologies and mitigating collisions and aerodynamics,
10 which lower greenhouse gases. However, these fleets
11 cannot buy these vehicles, because there's no diesel
12 engines available for California.

13 Additionally, more than be 75 percent of trucks
14 on the road today do not have a BEV replacement available,
15 as you heard from the tow guys today. Charging lower
16 Class, 4 through 6, is easier to find charging. However,
17 Class 7 and 8, it's expensive, costly, and the
18 infrastructure is just not there.

19 Right now, thousands of out-of-state trucks are
20 coming into California on waivers under the Clean Truck
21 Check. Meanwhile, California fleets and dealers are being
22 swallowed alive. We have been labeled a job killer, but
23 we only are outsourcing these jobs to out-of-state
24 truckers and dealerships. We need a runway to land. We
25 can't just turn off the engine and crash at the beginning

1 of the runway.

2 Thank you.

3 BOARD CLERK LEVRINI: Thank you.

4 All right. Next group of five Steven King,
5 Kimberly McCoy, Kristian Corby, Tim Sasseen, and Sam
6 Wilson.

7 Steven King, I have activated your mic. You may
8 unmute and begin.

9 STEVEN KING: Good afternoon, Board members. My
10 name is Steven King and I'm a Clean Energy Advocate with
11 Environment California. I'm speaking in strong support of
12 the Advanced Clean Trucks Rule, which promotes cleaner
13 air, less climate pollution, and healthier communities
14 throughout California. Californians Advanced Clean Trucks
15 rule has helped set the standard for environmental
16 leadership by addressing polluting heavy-duty trucks.

17 Heavy-duty trucks, although a small percentage of
18 vehicles on the road, produce an outsized amount of
19 pollution and greenhouse gas emissions that harm
20 Californians each and every day. According to our *Trouble*
21 *in the Air Report*, millions of Californians experience
22 more than 100 days each year of elevated air pollution,
23 such as ozone and particulate matter, which dirty truck
24 emissions exacerbate.

25 The Advanced Clean Trucks Rule is a crucial step

1 for ensuring that zero-emission trucks are increasingly
2 available, making cleaner air a reality for all
3 Californians. Zero-emission trucks are already being
4 deployed today with over 100 different truck and bus
5 models currently available in the U.S. Their presence is
6 only growing. The Advanced Clean Trucks Rule will make
7 sure this growth continues creating a pathway for greater
8 adoption and greater innovation with incentives for
9 manufacturers to better equip them and meet and exceed
10 targets. Californians continue to breathe some of the
11 dirtiest air in the nation and there's no reason why we
12 need to accept this status quo.

13 We need to embrace and adopt existing
14 zero-emission vehicle technologies that are proven to
15 clean up our air and benefit all Californians. The
16 Amendments under consideration reflect a reasonable
17 balance ensuring the rule remains ambitious, but also
18 adoptable. Importantly, it will give manufacturers
19 flexibility, as the zero-emission vehicle market evolves,
20 without compromising on our clean air progress.

21 Thank you.

22 BOARD CLERK LEVRINI: Thank you.

23 Kimberly McCoy.

24 KIMBERLY MCCOY: Can you hear me?

25 BOARD CLERK LEVRINI: Yes, we can.

1 KIMBERLY McCOY: Thank you. Thank you for
2 allowing me to speak this afternoon. My name is Kimberly
3 McCoy. I am an Environmental and Climate Policy associate
4 with Central California Asthma Collaborative.

5 Central California Asthma Collaborative stands in
6 support of this latest changes to the Advanced Clean Truck
7 Rule. Mobile sources emissions from trucks of all classes
8 are responsible for the majority of air pollution and
9 climate emissions in California, and most of the nation.
10 These changes ensure that the wide variety of vehicles are
11 available to the industry to meet both every day and more
12 needs in the numbers to ensure California stays on track
13 to meet the 2045 goal of 100 percent new zero-emissions
14 vehicle truck sales.

15 Most importantly, these changes provide market
16 flexibility without surrounding critical accountability
17 and safety requirements. CCAC also believes that these
18 changes would directly and indirectly create a faster
19 increase in the number of zero-emission vehicle trucks
20 reaching the secondary market, which is critical for
21 smaller trucking concerns who often operate locally in
22 low-income communities that are already bearing the brunt
23 of air pollution and climate impacts to their health and
24 local economy.

25 Thank you.

1 BOARD CLERK LEVRINI: Kristian Corby, I have
2 activated your mic.

3 CHRISTIAN KORBY: Yes. Good afternoon, Chair
4 Randolph and Board members. My name is Kristian Corby and
5 I'm the Deputy Executive Director at the California
6 Electric Transportation Coalition, or CalETC. CalETC
7 strongly supports the proposed changes today and asks that
8 the Board adopt them with one additional change, which we
9 hope can be resolved in the next set of 15-day change
10 language released after the meeting. So we request that
11 sections 1963.5 subsection (a)(2)(A) and (B) be removed
12 from the proposed amendments. These provisions we believe
13 undermine the compliance requirement that trucks be
14 delivered for sale in California.

15 As proposed if a truck manufacturer is unable to
16 meet CARB's newly proposed labeling requirement in section
17 1963(g), which requires that a truck of manufacturer label
18 the trucks as for sale in California, this labeling
19 requirement poses problems for certain truck
20 manufacturers, including implementation of California's --
21 excuse me, including implementation of a California
22 specific labeling requirement in Section 177 states. And
23 if the manufacturers are unable to label their trucks for
24 sale in California, then a manufacturer could be punished
25 if a truck is not registered for sale in California after

1 purchase.

2 We believe this undermines the purpose of the ACT
3 Rule and the Clean Truck Partnership, which is to require
4 truck manufacturers to increase their sales of ZEV trucks
5 in California, not to require them to monitor what dealers
6 and customers do with their trucks after they purchase
7 them. So therefore, we recommend that sections
8 1963.5(a)(2)(A) and (B) be removed from the proposed
9 amendments in this next round of 15-day changes.

10 So thank you very much for your consideration and
11 we look forward to continuing to work with you in this
12 transition to zero-emission trucks.

13 BOARD CLERK LEVRINI: Thank you.

14 Tim Sasseen, I have activated your mic.

15 TIM SASSEEN: Hi. This is Tim Sasseen with Tim
16 Sasseen New Energy Solutions. I'm calling today to thank
17 Chair Randal[SIC] and the esteemed Board for continuing to
18 keep the ACT Regulation flexible and adapted to the market
19 conditions. The importance of the ACT Regulation is shown
20 by the proceeding regulation, the Innovative Clean Transit
21 Regulation, which is a fleet regulation that does not have
22 a manufacturer regulation like the ACT. And we've seen,
23 since the inception of the Innovative Clean Transit
24 Regulation, that the underlying propulsion technology
25 price has gone down, but the vehicle prices have gone up,

1 and the State lacks the ability to influence those. The
2 ACT is a critical lever that the State can use in
3 combination with the Advanced Clean Fleet Rule to keep
4 those prices within reach while getting those vehicles
5 deployed, so the modifications are entirely appropriate.

6 And also, supporting the opening of credits and
7 trading with upfitters, anything to expand the market into
8 smaller businesses, and the smaller vehicle builders that
9 can accept the risk that the larger vehicle builders don't
10 feel comfortable with, it's critical in this timing of the
11 market, along with consideration of NZEV technologies,
12 particularly hydrogen combustion as it evolves into this
13 space.

14 So thank you very much for consideration of the
15 modifications, definitely support these, and continuing
16 work with CARB on the ACT Regulation.

17 Thank you.

18 BOARD CLERK LEVRINI: Thank you.

19 Next commenter Sam Wilson. I have activated your
20 mic.

21 SAM WILSON: Good afternoon, Chair Randolph,
22 Board members, and staff. Thanks so much for the
23 opportunity to speak with you all today. My name is Sam
24 Wilson and I am a Senior Vehicles Analyst with the Union
25 of Concerned Scientists based here in the Bay Area. The

1 ACT is a foundational supply-side policy, critical to
2 accelerating our transition towards a cleaner, healthier,
3 more equitable, and economically stable freight system.

4 Many of the concerns we've heard today from
5 industry so far were related to availability. Thankfully,
6 the ACT is designed to expand this availability and the
7 market for zero-emission trucks. For the tens of
8 thousands of Californians suffering for -- suffering from
9 health impacts from diesel pollution, and also for the
10 planet and future generations who require a stable
11 climate, the importance of an accelerated transition to
12 zero-emission trucks cannot be understated.

13 Today's medium- and heavy-duty vehicles make up
14 just a tiny fraction of the vehicles on our roads, but are
15 responsible for a massively disproportionate amount of
16 pollution from on-road vehicles. Take California's fleet
17 of tractor trucks, for example, combination trucks are
18 just around one percent of the vehicles on our road, but
19 emit around one-third of smog-forming nitrogen oxides, a
20 quarter of lung-damaging fine particulate matter, and just
21 about 15 percent of climate-warming greenhouse gases from
22 our state's on-road vehicles.

23 We have the technology today to begin addressing
24 this problem and ACT will push the market in the right
25 direction. We've seen significant growth with new

1 registrations among zero-emission vocational and delivery
2 trucks over the past two years. But the larger more
3 polluting trucks aren't transitioning to zero-emission
4 vehicles fast enough. ACT is going to help this. We're
5 pleased to see that CARB staff are proposing amendments to
6 ACT that enhance its feasibility and flexibility without
7 sacrificing the environmental and health benefits of the
8 rule. To realize these vital benefits, we need it to be
9 successful in the real world.

10 However, the other side of feasibility coin --
11 I'm sorry. Got to wrap-up. Thanks for your time.

12 BOARD CLERK LEVRINI: Thank you.

13 We have two more commenters. William Salazar and
14 Cristina Marquez. William, I have activated your mic.
15 You may unmute and begin.

16 WILLIAM SALAZAR: Hello. Can you hear me?

17 BOARD CLERK LEVRINI: Yes, sir.

18 WILLIAM SALAZAR: Can you hear me?

19 Thank you.

20 BOARD CLERK LEVRINI: We can hear you.

21 WILLIAM SALAZAR: Good afternoon, Board members.
22 My name is William Salazar. I am the owner of Royal
23 Coaches Towing, a 50-year old family-owned business
24 started by my father and now being run by the third -- our
25 third generation. Our company operates 50 tow trucks,

1 ranging from light to super heavy-duty. We employ 70
2 employees, of which many are non-college graduates, but
3 have the technical skills required to operate a tow truck.

4 Our primary source of business is freeway service
5 patrol, a service primarily paid for by the State to keep
6 our freeways moving. With the proposed regulations, our
7 company will not be able to operate. There are no
8 zero-emission vehicle technologies available to operate
9 tow trucks. Once the current supply of chassis are gone,
10 there will be no more chassis available to build new tow
11 trucks. In reality, our business will stop, employees
12 will lose jobs, the freeway service patrol program will
13 stop, and California will find itself in a problem of no
14 trucks -- no tow trucks to provide emergency services.

15 So I urge this Board to consider giving the tow
16 truck industry an exemption to the proposed rules as
17 emergency essential services or to give us more time for
18 the technology and the truck manufacturers to come up with
19 a solution. We urge the Board to be proactive in amending
20 the rules now and not reactive to the problem once it's
21 here. Please consider an exemption for the tow trucks
22 industry as essential vehicles or a delay on
23 implementation of rules based on lack of technology to
24 support the towing industry.

25 Thank you.

1 BOARD CLERK LEVRINI: Thank you.

2 Cristina Marquez, I have activated your mic. You
3 may unmute and begin.

4 CRISTINA MARQUEZ: Thank you. Good afternoon,
5 Chair Randolph and esteemed Board members. My name is
6 Cristina Marquez. I'm the Environmental Organizer for
7 IBEW Local 569, representing over 3,700 members in San
8 Diego and Imperial counties. We are the electricians that
9 will be installing this infrastructure. We know the
10 importance of reducing GHGs and fighting climate change,
11 especially in those areas near the truck ports that are --
12 that are hardest hit. We support the ACT and we
13 respectfully support -- we support these amendments and
14 respectfully request that you would do the same, please.

15 There are thousands of well-qualified
16 electricians with the EVITP certification ready to build
17 the infrastructure. As Biden has said previously in some
18 of his speeches, we're the electricians. We'll be
19 building this infrastructure and we're proud of it. We're
20 doing it down here in San Diego. We're doing it all over
21 the state and we want to keep moving forward on this.
22 Please let's keep moving California forward on this and
23 support the amendments. Thank you very much for your time
24 and have a great day.

25 BOARD CLERK LEVRINI: Thank you and that

1 concludes our Zoom commenters.

2 CHAIR RANDOLPH: All right. Thank you.

3 Staff, are there any issues raised in the
4 comments that you want to address before I close the
5 record?

6 EXECUTIVE OFFICER CLIFF: I just wanted to note
7 that there was a comment made regarding the credits that
8 have already been sold. And I, in my opening, mentioned
9 that one in six trucks are now meeting the ACT requirement
10 that are zero emissions. And the comment was that most of
11 the trucks are actually in the smaller size category,
12 which is absolutely true, and, in fact, what we would
13 expect. Because those credits are essentially fungible
14 across all classes, except for Class 8 tractor only, then
15 the amount of credits that are in the system gives that
16 flexibility for all of the trucks. So even though more
17 are being sold that are smaller, it still provides credits
18 that give flexibility overall for the regulation. So I
19 just wanted to clarify that.

20 CHAIR RANDOLPH: So to be clear -- well, you know
21 what, let me close the record, and then -- and then I want
22 to have a little bit of follow-up discussion on that.

23 So all right, I will now close the record on this
24 agenda item. However, it is -- if it is determined that
25 additional conforming modifications are appropriate, the

1 record will be reopened and a 15-day Notice of Public
2 Availability will be issued. If the record is reopened
3 for a 15-day comment period, the public may submit written
4 comments on the proposed changes, which will be considered
5 and responded to in the Final Statement of Reasons for the
6 regulation.

7 Written or oral comments received after this
8 hearing date, but before a 15-day notice is issued will
9 not be accepted as part of the official record on this
10 agenda item. The Executive Officer may present the
11 regulation to the Board for further consideration, if
12 warranted. And if not, the Executive Officer shall take
13 final action to adopt the regulation after addressing all
14 appropriate conforming modifications.

15 Okay. So my question is there's been -- at
16 the -- at the beginning of our comments and the staff
17 report, you know, it was noted that the engine
18 availability issue relates a lot to the Omnibus Regulation
19 and the requires of -- requirements of Omnibus and the
20 legacy versus Omnibus-compliant engines. Okay. So
21 setting that aside, let's talk for a second about ACT. If
22 you are a manufacturer and you have combustion engines
23 that are the size that are typically used for a tow truck,
24 you don't have a zero-emission engine for that use --
25 let's assume that's the case. I don't know that that's

1 the case, but let's assume that's the case, and you wanted
2 to bring more combustion engines into the state, you're
3 saying you would be able to buy from credits for smaller
4 vehicles. As you just mentioned, there are some credits
5 in the market for smaller vehicles, is that correct?

6 EXECUTIVE OFFICER CLIFF: That is correct, yes.
7 And there would be -- there's a factor, so it's not one
8 for one. If they're smaller, we factor that in and the
9 regulation lays that out. So I believe if it's a 2B --
10 Class 2B and 3 credit, there's a 0.8, so you would need
11 more of those credits to count towards a larger amount.
12 And they aren't fully fungible, because they're not
13 fungible with Class 8 tractor only.

14 CHAIR RANDOLPH: Right. Yeah.

15 EXECUTIVE OFFICER CLIFF: But, you know, without
16 getting too far into the weeds -- I already did --

17 (Laughter).

18 EXECUTIVE OFFICER CLIFF: -- effectively --

19 CHAIR RANDOLPH: So it's not -- it's not one for
20 one --

21 EXECUTIVE OFFICER CLIFF: It's not one for one.

22 CHAIR RANDOLPH: -- but it is possible --

23 EXECUTIVE OFFICER CLIFF: Right, and there's
24 still enough --

25 CHAIR RANDOLPH: -- Class 8 accepted. Okay.

1 EXECUTIVE OFFICER CLIFF: And as we noted,
2 there's enough credits to meet the compliance with ACT for
3 a couple of years that credits that are already out there.

4 The question about tow trucks, they're -- those
5 would probably be -- the ones that were talking about or
6 that we're hearing most about today, probably in the Class
7 6 range, they could be -- they could be smaller, not
8 always the case. But even if they're in that Class 6
9 range, there's no requirement for those tow trucks to be
10 zero emissions. The requirement is for manufacturers that
11 would sell an engine that would meet that need to also
12 sell zero emissions. The requirement for this year is
13 nine percent and it goes up to 11 percent next year.

14 So, you're talking about one out of 10 of those
15 roughly would have to be zero emissions. It wouldn't need
16 to be a zero-emission as a tow truck just across the
17 board. And because there are these credits and they're
18 fungible with some scaling for those lighter trucks that
19 are being readily sold, including the vans, like delivery
20 vans that you see on the road today.

21 So that gives kind of a sense of where we might
22 expect the market to expand zero emissions most quickly
23 and then allowing those credits to be spread out to other
24 vehicles. By 2036, because of the Advanced Clean Fleets
25 Regulation, all vehicles in all these classes would need

1 to be zero emissions. That's also consistent what the
2 manufacturers agreed to in the Clean Truck Partnership.

3 CHAIR RANDOLPH: Okay. Thank you. I just wanted
4 to clarify that point before getting into the larger
5 discussion.

6 Board Member Pacheco-Werner had a comment.

7 BOARD MEMBER TAKVORIAN: I just wondered if you
8 could clarify essentially the same situation as it relates
9 to RVs that you just explained for tow trucks, because I
10 wanted to understand that better.

11 EXECUTIVE OFFICER CLIFF: Yeah. It would be very
12 similar. The RVs probably wouldn't be in that same weight
13 class. They'd probably be closer to Class 4, but it would
14 be a similar situation. So we would not expect RVs to be
15 zero emissions today by 2036. Then when all heavy-duty
16 has to be zero emissions, then they would also have to
17 meet that requirement. But today, we would expect those
18 that are most readily available to be zero emissions. And
19 I did focus a lot on Class 8 tractors, they actually are
20 selling pretty well in zero emissions as well thanks in
21 part to our HVIP Program and other incentives at the
22 federal level under the Inflation Reduction Act. So we
23 are actually seeing in every category zero emissions
24 rollout.

25 Even if they're not in these kind of specialized

1 applications, like RVs or tow trucks, there are plenty of
2 others that are being put out there that are zero
3 emissions. The constraint that's being applied, as we
4 hear it, is that the manufacturers are saying if you want
5 to get any combustion product, you have to -- you have to
6 complement that with a zero emissions in order to -- for
7 us to comply with the regulation. That's actually not
8 what our regulation says. There are a lot of
9 flexibilities built in. That appears to be a manufacturer
10 constraint that's being put on these specialized
11 applications.

12 BOARD MEMBER PACHECO-WERNER: Thank you. That
13 was helpful. Okay. Thank you so much.

14 I wanted to start by thanking staff for their
15 work on this and working with the manufacturers to further
16 understand the issue. And thank you to the dealers and
17 the impacted sectors for showing up time and time again
18 and working with us on this. It is a deep commitment of
19 mine and I know of staff and fellow Board members to have
20 a workable solution that also has a public health benefit.
21 I also thank the manufacturers for their ongoing
22 engagement with staff to help shift this program to be
23 more workable.

24 I'll repeat myself from what I said in May. I
25 remain concerned about what we have heard from

1 stakeholders about OEMs leaving dealers and people with
2 little to no options, because they are not taking
3 advantage of the current flexibilities, such as buying
4 credits, to make the combustion vehicles that are needed
5 for these essential services in our state. We need that
6 part to work for this to really feel like a partnership is
7 being successful. And we need that part to work for our
8 transition to be successful.

9 I would say that our flexibilities today will
10 make the air cleaner, because as I've said before, when we
11 try to implement something that can't be implemented, the
12 stat -- and the status quo remains, it just incentivizes
13 the oldest, dirtiest trucks to continue on the road and
14 that has no public health benefit.

15 I do have a couple of questions and I think I'll
16 just ask them and then you can answer from there. One of
17 the questions I had is around this ongoing issue around
18 the emergency vehicle classification. Could staff tell us
19 if the change to that is needed at the DMV level or the
20 legislation level? Where do the opportunities lie there?

21 And then in terms of we ask -- we were asked for
22 a lot of -- on the Board -- on the comments, we were asked
23 for ongoing tracking of the new and used vehicle
24 registrations. And I believe those are already being
25 tracked through some of these -- some of our programs. So

1 could you clarify that for us and also tell us a little
2 bit about what your future plans are with that data?

3 Also, there were concerns about opening up the
4 credit market for people that are not familiar with the
5 system. So my question is will there be additional
6 support available to help folks that are going to be
7 trading credits and are new to that process?

8 Finally, if you can please speak to the Class 8
9 issue and remaining opportunities for -- or emerging data
10 about the sale of Class 8 and availability for those
11 dealers. Is it a credit question in that class or is it a
12 certification pathway delay? What are things that maybe
13 we won't solve today, but can -- we can continue to look
14 at as this -- these regulations continue to be
15 implemented?

16 Thank you.

17 EXECUTIVE OFFICER CLIFF: Thank you, Dr.
18 Pacheco-Werner. So I'll go ahead and tackle those, if I
19 can. The emergency vehicle provision is in the Vehicle
20 Code, so that is in law. And we use the same definition
21 in our regulation for what is considered an emergency
22 vehicle. Those are exempt. We have heard that other
23 vehicles, there is a request for us to consider those
24 emergency vehicles, but they're not considered that as
25 defined in law.

1 For the track -- the question around tracking,
2 there's kind of several things there. We are certainly
3 tracking the number of zero-emission vehicles that are
4 being sold. We have a data dashboard. And, you know, we
5 look at this issue. In terms of vehicles that would come
6 from out of state that would try and get around the
7 requirement for being sold in state as zero emissions, we
8 heard some comments around that issue. The law provides
9 that if the vehicle has 7,500 miles or more, that it can
10 be brought into the state as a used vehicle, and that is
11 checked by the Department of Motor Vehicles. They do a
12 VIN verification, either themselves or through a certified
13 agent of the DMV, and then they, you know, look to see
14 that that vehicle would otherwise meet the requirements.
15 There's nothing that we could do to stop that issue. I
16 just wanted to make that clear. That would not be illegal
17 to bring in a vehicle.

18 We don't really have the ability to track that
19 directly. What we do instead is we get data dumps every
20 like quarter or every six months. It takes us a while to
21 look at those data, and clean them up, and incorporate
22 that into our modeling work. So we're not looking at that
23 necessarily for the purposes of compliance for the
24 regulation, because it's not out of compliance with the
25 regulation. It would be legal. Instead, we use that to

1 feed into our work for future regulatory activity and for
2 our SIP commitments. And that would go into the modeling,
3 for example, like EMFAC. If, for example, we had more
4 vehicles coming from out of state, then we wouldn't be
5 getting the reductions from this regulation that we
6 expect, so then we would have to maybe accelerate the
7 requirements of this regulation to make that up or think
8 about other opportunities to reduce emissions.

9 Okay. The next one was about the market and
10 whether or not those who are not necessarily typically in
11 the marketplace would get support. I don't think we've
12 really tackled that issue or discussed it. You know,
13 certainly we're always available to answer questions for
14 stakeholders, and it's probably something that we'll have
15 to evaluate as we go forward, if that becomes an area of
16 interest for stakeholders who want to be in the
17 marketplace.

18 My sense is that this is much more likely to be a
19 bilateral type of an agreement than a real open
20 marketplace trading. It's like, hey, I have a credit. We
21 want to get this allocation. Can we work through a dealer
22 and transfer that credit to -- as if you're a secondary
23 manufacturer, for example?

24 And then the last one you asked was about the
25 Class 8 availability issue. And I think I've exhausted

1 all of my knowledge.

2 (Laughter).

3 EXECUTIVE OFFICER CLIFF: So I'll have to ask
4 staff to answer that for me. And I'm not sure who behind
5 me. Kim, maybe you can -- you can answer this question.

6 MSCD MOBILE SOURCE REGULATORY DEVELOPMENT BRANCH
7 CHIEF HEROY-ROGALSKI: Thanks. Yeah. Kim Heroy-Rogalski.
8 My team wrote the Omnibus Regulation and has been working
9 on recent enforcement discretion actions related to that
10 to try to ease some of the shortage -- shortages. I did
11 want to mention that -- so we are in this transition
12 period where the Omnibus standards just took effect and
13 we're at the first of three years where California
14 standards will be more stringent than the federal
15 standards.

16 And so, we knew this wouldn't be like a super
17 smooth process, but we are seeing a lot of progress. A
18 number of manufacturers have certified engines now to
19 California's Omnibus standards, including just last month,
20 Paccar certifying an engine at the 0.05 gram level, so
21 it's not -- and that doesn't even spend credits. It
22 actually total meets the Omnibus standards. And several
23 other manufacturers have engines that use credits to meet
24 the Omnibus standards, including Daimler and Volvo.

25 So we think those recent certification actions

1 will help ease some of the shortages on the Class 8 end
2 that we're hearing about.

3 BOARD MEMBER PACHECO-WERNER: Can I just say that
4 I hope if they're on the -- on your answer around the --
5 looking at the data on the new and used vehicle
6 registrations and then those vehicles that are coming in
7 from out of state, as -- it's probably obvious, but I do
8 want to say that my hope is that if that is happening that
9 we are losing the benefit of the regulation that we would
10 hear back to find those new opportunities, sooner than
11 later. Thank you.

12 EXECUTIVE OFFICER CLIFF: Yes, for sure.

13 CHAIR RANDOLPH: Okay. Any other questions,
14 comments?

15 Board Member Rechtschaffen.

16 BOARD MEMBER RECHTSCHAFFEN: Could you respond to
17 the argument we heard earlier that permitting the
18 secondary vehicle manufacturers to opt in to ACT will
19 raise prices? Can -- do you have a response to that?

20 EXECUTIVE OFFICER CLIFF: I could try and address
21 that. And staff may have some additions to add. Just
22 intuitively, I guess, I would say that if the credits are
23 there and manufacturers are reluctant to purchase those
24 credits, then they don't have inherent value. If instead,
25 a secondary manufacturer purchases that credit and

1 transfers it to a manufacturer, assuming the manufacturer,
2 the OEM, accepts it, I don't see how that would actually
3 impact the credit price. So I'm not understanding any
4 scenario where there's some sort of excess demand on these
5 credits. What we're hearing is that OEMs aren't
6 purchasing them in the first place. That's why they're
7 putting that requirement on the secondary manufacturer on
8 the dealer.

9 BOARD MEMBER RECHTSCHAFFEN: Okay. Well, I
10 didn't quite understand it either. And if anything, I
11 thought it would lead to a more fluid market and maybe
12 less cost pressure, so I'm glad I'm not missing anything.

13 CHAIR RANDOLPH: Board Member Kracov.

14 BOARD MEMBER KRACOV: You rarely miss anything.
15 (Laughter).

16 BOARD MEMBER KRACOV: So very supportive of this
17 item and understanding that it's a bit of a changing
18 situation. And we don't know exactly how things will work
19 out. You know in the past, the Board has been
20 comfortable, and I'm comfortable, in delegating to staff
21 and the Executive Officer the ability to be nimble in the
22 short term, you know for 2024, 2025, if we need it.

23 So let me just ask you this, Dr. Cliff. We're
24 going to pass this today, I'm hopeful. Do you feel that
25 you need additional enforcement discretion or regulatory

1 flexibility in these upcoming months to be nimble? I did
2 hear the commenters today saying that, you know, there's
3 concern that if we have to keep coming back to the Board,
4 it's too formal of a process. It takes too long. So I
5 just want to make sure that hopefully things will work out
6 as planned, but it is a fluid situation. Do you feel that
7 you have the appropriate amount of flexibility to be
8 nimble to respond to the marketplace and make sure that we
9 address the problems that we're talking about today, if
10 they continue to persist?

11 EXECUTIVE OFFICER CLIFF: Thanks for the
12 question. I do. I believe that we have a lot of
13 flexibility in how we can analyze this. And just to be
14 clear, even if -- even if there were Executive Officer
15 authority to promulgate regulations versus taking a reg to
16 the Board, we would still be doing all the same public
17 process. We would hold a hearing, if so requested, and
18 going through the full Administrative Procedure Act
19 requirements, so it wouldn't eliminate any of that anyway.
20 We certainly, you know, feel like we have plenty of
21 opportunity to bring items back to the Board should that
22 be necessary.

23 That said, we are very confident in the work that
24 we've done today that we've addressed the issues to the
25 greatest extent we're able to and we'll be continuing to

1 monitor the issue going forward, and stakeholders will
2 certainly bring issues to our attention. And we know we
3 can bring that back to the Board, if necessary.

4 CHAIR RANDOLPH: Dr. Shaheen.

5 BOARD MEMBER SHAHEEN: Thank you, Chair. And I
6 just wanted to thank everyone for all their time providing
7 comments and feedback from the May meeting, but also
8 today. But one of the things I wanted to do was piggyback
9 on Dr. Pacheco-Werner's first comment. But I wanted to
10 thank the staff for all the hard work. I'm sitting here
11 looking at your 10-page memo and there's a quote that
12 jumps out that concerns me. "Further, it appears that
13 there is a discrepancy between what manufacturers are
14 communicating as the main cause of the current product
15 shortages to CARB staff versus to the dealers and fleets."
16 Then there's some more. And then I go down to the bottom
17 of that paragraph and it says, "The inconsistencies in
18 communication have led dealers and fleets to believe that
19 the ACT Regulation's requirements are leading to product
20 shortages in the medium- and heavy-duty space, which upon
21 discussions with all affected parties is not backed by
22 available data." So that's concerning.

23 And I have one question related to that and
24 that's what can we do about miscommunication? I'm sure
25 that this has been on your minds.

1 EXECUTIVE OFFICER CLIFF: Well, we certainly have
2 lots of outlets to be able to communicate to stakeholders
3 that are affected by this, including one-on-one meetings.
4 We have our, what we call, the TRIG, that's our truck
5 information sessions that we hold throughout the state and
6 other types of opportunities such as putting things on our
7 website or providing memos to the Board. I think that the
8 memo was just a good opportunity to do a deep dive to
9 address the stakeholder concerns that we heard at our last
10 hearing and at the Board's direction to go dig into this
11 issue.

12 We're going to continue to monitor, as we go
13 forward, and I do think that we understand that there's a
14 sense of anxiety about these rules as they -- as they
15 impact the marketplace. So we just need to be the very
16 neutral arbiters of the data that we have and the
17 information that we have and provide that in a very
18 neutral way to all of the public. And I hope that that's
19 what we were able to do in that memo. I know staff worked
20 really hard in meeting with all of the affected entities
21 and the regulated parties to better understand what issues
22 were impacting it. And as we noted, ACT was not an effect
23 on the industry this year. We are hearing concerns, or
24 potential concerns, theoretical concerns for next year.
25 And so that's certainly things that we'll keep following

1 as we moved forward.

2 BOARD MEMBER SHAHEEN: Well, thank you for your
3 hard work in monitoring and raising the issue of
4 miscommunication and documenting it. I was also pleased
5 in a memo though to hear some good news about new
6 heavy-duty engines coming on board that are compliant with
7 the Omnibus Standard. And so that's alleviating concern
8 that those are not going to be available for the
9 marketplace. I'm delighted to hear that monitoring is
10 going to be part of this. We heard from Anthony Bento's
11 comments from the California New Dealers Association that
12 that type of monitoring of the new and used market is
13 going to be essential, I think, to the marketplace.

14 My final comment is regarding another comment
15 that's come up in the docket associated with the secondary
16 vehicle market and its implications for ZEV and NZEV
17 credits in addition to the OEMs that this could lead to
18 some kind of instability of the market. I just wonder if
19 you could address that, please.

20 EXECUTIVE OFFICER CLIFF: Maybe I can ask staff
21 to address that.

22 MSCD CHIEF KITOWSKI: Yeah. This is -- this is
23 similar to opening up that secondary market again. I
24 would repeat what Dr. Cliff, says we don't see a scenario
25 where this upsets the credit -- the marketplace itself.

1 At this point, manufacturers -- at the end of last year,
2 manufacturers have generated about 20,000 credits. At
3 this point in this year, we haven't gotten official
4 results, but they're probably somewhere between 30,000 and
5 40,000 credits, and there have been trades of less than
6 2,000 credits.

7 BOARD MEMBER SHAHEEN: Okay

8 MSCD CHIEF KITOWSKI: So there really isn't --
9 it's a pretty stagnant market at this point. And actually
10 what we want to do is revitalize a little bit and --

11 BOARD MEMBER SHAHEEN: Wonderful. I just wanted
12 to be reassured before the vote that the credit market is
13 going to remain stable. And introducing a secondary
14 market is going to destabilize it in any way.

15 Thank you.

16 CHAIR RANDOLPH: Board Member Guerra.

17 BOARD MEMBER GUERRA: Thank you very much Madam
18 Chair. My question was answered about the resale --
19 access to information on the -- on the used car vehicles
20 coming in. So I guess this is more of a request. I think
21 it's important that, at least for the -- in the short term
22 for this next upcoming year we -- that the Board receive
23 that quarterly report number on the -- on the used car
24 information that we're getting from DMV, because I would
25 like to see that if all of a sudden we see some

1 correlation of cheating of the regulation by sales outside
2 the state, and then all of a sudden an unexpected rise of
3 used vehicles coming in, I'd like to be aware of it and I
4 think the whole Board should be aware of it. And I'm glad
5 to hear that we already get that information, so I
6 appreciate that.

7 The last -- I just wanted to, first, you know,
8 thank the commenters here, and, you know, particularly,
9 you know, the Wheeler family, James and Frank, for your
10 consistent engagement in this and you're willing to
11 partner. I understand, you know, locally how of a
12 challenge it is and how many, you know, local employees
13 you all hire and support. And this has to be frustrating
14 that the -- you know, that the -- an OEM would not be
15 willing to, you know, take the credits, even if you had
16 them. So I think this is a -- I can appreciate the
17 frustration that you have and the fact that your local
18 commitment to the community here has been strong. And I
19 think that the -- I appreciate the staff really working
20 hard to find this and your comments today about helping
21 us, I think, is helpful as well.

22 So with that, thank you, Chair. And I would love
23 to get that information to make sure that the used resale
24 market isn't undercutting the regulation.

25 EXECUTIVE OFFICER CLIFF: Can I address that?

1 As I mentioned, I believe we get some frequency
2 of data dump regarding the registrations of vehicles. And
3 I think it's on the order of quarterly. It might be every
4 six months. I don't have those details. It takes a long
5 time to process that and understand exactly what it means.
6 So I didn't want to give the misimpression that we would
7 be able to report back to the Board on some sort of
8 frequency, like quarterly. That just simply wouldn't be
9 possible. We don't have the information to do that. I
10 think, at the end of next year, we will have a better
11 sense of the information that we get and can take a look
12 at what is actually possible. I take the point and
13 understand the information you want to get. I just -- I
14 don't want to -- I don't want to leave you with the
15 impression that we'd be able to get --

16 BOARD MEMBER GUERRA: Well, that's good you said
17 that, because you did leave me with that impression.

18 (Laughter).

19 BOARD MEMBER GUERRA: You left me with the
20 impression that you get it quarterly and that we could get
21 it, so --

22 EXECUTIVE OFFICER CLIFF: We get raw data on
23 registration determining exactly what that -- you have to
24 decode the VIN. You have to understand where that vehicle
25 originally came from, what kind of vehicle it is --

1 BOARD MEMBER GUERRA: Sure.

2 EXECUTIVE OFFICER CLIFF: -- and all that. And
3 I'm not actually sure specifically what sort of mileage
4 information comes in those data. So we're going to have
5 to look at that issue a little bit more.

6 I should also maybe broaden this discussion
7 slightly, and this will probably be a discussion that we
8 have in January, which is we're faced with a pretty severe
9 budget cut.

10 BOARD MEMBER GUERRA: Um-hmm.

11 EXECUTIVE OFFICER CLIFF: And it's going to be
12 challenging for us to prioritize a lot of new things when
13 we're having to also reduce our budget by about eight
14 percent and we've had to give up vacancies. So we're
15 looking very carefully at the types of things we can do
16 going forward. So I just don't want to overpromise here
17 and -- but I do take the point and want to look very
18 sincerely at what we can provide and the best way to
19 provide that.

20 BOARD MEMBER GUERRA: I can appreciate. And I
21 think this is also where, in our sister agency, the DMV,
22 you know, I mean I would hope we would ask that they help
23 us in this effort as well, and if we can -- and again,
24 this is all staff resources -- by class and type would
25 help us understand, you know, exactly where that's

1 happening, so --

2 EXECUTIVE OFFICER CLIFF: Yeah.

3 BOARD MEMBER GUERRA: -- but thank you for
4 clarifying that and for clarifying the impression that you
5 did give me, but...

6 (Laughter).

7 EXECUTIVE OFFICER CLIFF: And just to note, we do
8 have a really good relationship with DMV, a great
9 partnership, and we worked with them very closely, for
10 example, on the Clean Truck Check.

11 BOARD MEMBER GUERRA: Thank you, Dr. Cliff.

12 CHAIR RANDOLPH: Board Member Hurt had a quick
13 follow-up to the same -- on the same topic.

14 BOARD MEMBER HURT: Yeah. I want to thank Board
15 Member Guerra for his comments and questions. And I know
16 no one has a crystal ball to predict the future perfectly,
17 but I'm wondering, now more than ever, what the monitoring
18 or the outlook is planned from staff, if this regulation
19 does pass, and we need to pivot again or we need to have
20 another conversation? Maybe the public would be really
21 interested in knowing how we're going to come back and do
22 further modifications, if necessary and what that time
23 frame, if anything, looks like, because I'd hate for us to
24 have the Spiderman meme going. It's their fault. It's
25 our fault.

1 (Laughter).

2 BOARD MEMBER HURT: I'm glad some people got
3 that. Okay.

4 (Laughter).

5 EXECUTIVE OFFICER CLIFF: So I think just at the
6 high -- at the highest levels, we're really optimistic
7 about this. We've seen advancements in technology. We're
8 seeing a -- an excess of credits relative to what's
9 necessary to comply with the regulation. We will be
10 coming back with more amendments to enact the Clean Truck
11 Partnership, not just with this rule, but with other
12 rules. So there will be much -- many more touchpoints and
13 we'll want to continue to either address issues, if we
14 find them, or tout successes as we go along.

15 I don't -- we don't have -- I would -- I would
16 say that we feel like these amendments, while they don't
17 impact emissions, we already have a waiver for this
18 particular regulation. So it's being implemented today.
19 Plus, we have the Clean Truck Partnership. We're -- we
20 feel really good about where we are on this overall. As
21 we implement regulations, we do find that there's some
22 tweaks that are necessary to help implement things a
23 little more thoughtfully, and so that's what you're seeing
24 here. There were some issues in how we define things and
25 who the final manufacturer is and so forth.

1 So we had to -- and making these tweaks, I think,
2 are necessary to make implementation smoother. I feel
3 like we're in a pretty good place once this one is done.

4 BOARD MEMBER HURT: Thank you.

5 CHAIR RANDOLPH: Board Member De La Torre.

6 BOARD MEMBER DE LA TORRE: Thank you. We're just
7 full of pop culture today.

8 (Laughter).

9 BOARD MEMBER DE LA TORRE: First of all, for the
10 dealers and the specialty truck users, we are absolutely
11 understanding and want to help. We want to make sure that
12 this transition -- transitions are always hard, and that
13 this transition happens as quickly and painlessly as
14 possible, even though I acknowledge, because I've heard
15 from you, that there already has been pain, but we're
16 trying to work our way through this.

17 And so just -- we'll keep listening, let's keep
18 talking, let's keep identifying issues that we can adjust
19 along the way, however that plays out and whenever it
20 plays out. This Board has made it clear that we want to
21 make sure that you're continuing to do what you do all the
22 way through, so that's very important.

23 And then secondly, to the -- to the broader point
24 of the Advanced Clean Trucks Regulation. So I want to
25 highlight something that was in the presentation, because

1 it's a take-off point for a problem that I have with the
2 manufacturers. So we're in good shape in terms of the
3 transition to zero. We have met our 2025 goal two years
4 early, in 2023. Sixteen percent of medium- and heavy-duty
5 trucks sales were zero-emission. By comparison, in the
6 passenger vehicle market, which has been around for, I
7 don't know 15 years now roughly, we're up to 27 percent of
8 new car sales. And this has only been a couple years. So
9 obviously, there's less vehicles, so it's a smaller
10 universe.

11 But that's a really impressive jump from 0 to 16
12 percent in a couple of years. And 10 other states have
13 adopted the ACT, including in a Couple provinces in
14 Canada, which is always fun with our Canadian neighbors.
15 And so that grows the market, not just in California, but
16 to about 25 percent of U.S. truck sales. That's a pretty
17 robust market, and we're all in the same place. So I
18 think that's important to emphasize, because it's
19 happening.

20 It's -- you know, again, there's a transition
21 here, but it is happening, and we are very pleased that
22 it's happening at this pace, right, after just a couple of
23 years to be at 16 percent versus 15 years to get to 27
24 percent. I mean, do the math.

25 But, back in May, we flagged -- I flagged

1 something that I'd heard as just a rumor, that the
2 European truck prices were less than ours for
3 zero-emission trucks. And that was very concerning,
4 because we've poured billions of dollars into this
5 transition, the State of California has, taxpayers have,
6 users have. And so staff looked into it and they compared
7 zero-emission Class 8 tractors here in the U.S. with Class
8 5 long-haul tractors in Europe. That's what they call
9 them. And it's a lot of the same manufacturers. It's not
10 a big market.

11 So Daimler owns Mercedes-Benz trucks in Europe,
12 and Freightliner here among other brands. Traton is the
13 parent company of MAN and Scania trucks in Europe and
14 Navistar here. PACCAR is the parent company of DAF in
15 Europe and Peterbilt and Kenworth here. Volvo operates in
16 both Europe and the U.S. as Volvo, but they also own Mack
17 Trucks in the U.S. So we're talking about the same
18 companies. They are the same companies operating in both
19 places. It's not like you can say, oh, they've got a
20 different company. No, it's the same companies producing
21 these vehicles.

22 So we took our pricing data in California and
23 compared it to sources in the EU from '21-'22 pricing to
24 pricing in 2024. This really pisses me off. In 2024, the
25 Class 8 tractors in California were at about \$435,000. A

1 similar tractor, again the Class 5 LH in Europe, was
2 347,000. That's \$88,000 difference. And we are
3 subsidizing these purchases.

4 Some people might say, well, they have different
5 requirements in Europe than we do here for the trucks
6 themselves. Okay. A Powertrain, is a powertrain, is a
7 powertrain. So we looked at the powertrains between here
8 and there. The powertrains for zero-emission trucks are
9 essentially the same, again heavy-duty Class 8. Class 8
10 ZET powertrains, \$279,000. European Class 5 LH ZETs
11 average \$228,000. That's a \$51,000 difference and the
12 bulk of the \$88,000 difference for the whole truck.
13 Fifty-one thousand dollars difference. That means --
14 (clears throat) -- excuse me. When we subsidize a truck,
15 we're overpaying by 51 -- by 88 to -- \$88,000 roughly.
16 That's how much more we're having to pay to get the price
17 of that truck down, so that our California fleets can use
18 them.

19 So, okay, that -- so that's a price difference.
20 What about the changes in prices? In California, our
21 Class 8 zero-emission trucks have increased in price since
22 '21-'22, so over about a three-year period, increased,
23 even as battery prices are going down, even as some of
24 these other components are going down, they've increased
25 by \$86,000. In Europe, their prices have decreased by

1 \$12,000. That's \$100,000 delta between us and them in
2 three years.

3 There is something rotten here and the comp --
4 the volumes are comparable between us. There is no
5 explanation for this, other than they are making an active
6 choice to screw California fleets and buyers and the State
7 of California for subsidizing them, while taking care of
8 the folks in Europe. This is wrong. And we, CARB, we,
9 the State of California, need to look into this.

10 Thank you.

11 CHAIR RANDOLPH: All right. Thank you.

12 I think most of my colleagues have covered the
13 main issues I was thinking about. I am very appreciative
14 that we -- you know, we are able to provide some
15 additional flexibility, all the work that all of you did
16 in this room, all the conversations you had, all the
17 information you shared and gathered. Good to know that
18 there are -- there are more Omnibus-compliant engines that
19 are becoming available, and that the combination of that
20 and these additional flexibilities will help loosen things
21 up. I am concerned -- there was a conversation earlier
22 about incorrect information being provided,
23 misinformation, however you want to characterize it, you
24 know, creating the impression that it is ACT that's
25 placing manufacturer limitations on product to dealers,

1 right? That is not an ACT limitation. That is the
2 manufacturers choosing to say I want you to buy X amount
3 of zero-emission vehicles in order to get Y amount of
4 internal combustion engines.

5 And, you know, various conversation like that,
6 that are not part of the rules. What they are part of is
7 sort of manufacturers developing a compliance strategy
8 that's not taking into account their customer needs.
9 They're sort of like looking at the compliance strategy,
10 you know, what engines they bring, what credits they buy,
11 in isolation of the needs of their customers. And that's
12 what we are trying to avoid here. So we are trying to
13 avoid that perk by providing more flexibility options,
14 trying to smooth that interplay between omnibus an ACT.

15 But at the end of the day, you know, the
16 manufacturers have to keep their customers in mind. And I
17 have not spoken with nearly as many of them as staff has.
18 The couple that I spoke to, you know, they said they want
19 to serve their customers. And so, we would like them to
20 do that. So, I agree with my colleagues that we are open
21 to whatever suggestions you have, as you work through all
22 these problems. If you need to come back to us with any
23 more tweaks, we're open to hearing those tweaks, but we
24 really need the manufacturers to be serving the market and
25 not trying to blame the regulatory framework, given that

1 the regulatory framework should provide the flexibility
2 that they need.

3 So with that, we have a resolution before us to
4 adopt the ACT amendments. Do I have a motion and a
5 second.

6 BOARD MEMBER KRACOV: I'll move the resolution.

7 CHAIR RANDOLPH: Moved by Board Member Kracov.

8 Is there a second?

9 BOARD MEMBER HURT: Second.

10 CHAIR RANDOLPH: Board Member Hurt.

11 Clerks, will you please call the roll.

12 BOARD CLERK MOORE: Yes.

13 Dr. Balmes?

14 BOARD MEMBER BALMES: Yes.

15 BOARD CLERK MOORE: Mr. De La Torre?

16 BOARD MEMBER EISENHUT: Hector.

17 BOARD MEMBER DE LA TORRE: Yes.

18 BOARD CLERK MOORE: Mr. Eisenhut?

19 BOARD MEMBER EISENHUT: Yes.

20 BOARD CLERK MOORE: Senator Florez?

21 BOARD MEMBER FLOREZ: Florez, aye.

22 BOARD CLERK MOORE: Mr. Guerra?

23 BOARD MEMBER GUERRA: Guerra, aye.

24 BOARD CLERK MOORE: Ms. Hurt?

25 BOARD MEMBER HURT: Davina Hurt, aye.

1 BOARD CLERK MOORE: Mr. Kracov?

2 BOARD MEMBER KRACOV: Yes.

3 BOARD CLERK MOORE: Dr. Pacheco-Werner?

4 BOARD MEMBER PACHECO-WERNER: Yes.

5 BOARD CLERK MOORE: Mr. Rechtschaffen?

6 BOARD MEMBER RECHTSCHAFFEN: Yes.

7 BOARD CLERK MOORE: Dr. Shaheen?

8 BOARD MEMBER SHAHEEN: Aye.

9 BOARD CLERK MOORE: Ms. Takvorian?

10 BOARD MEMBER TAKVORIAN: Yes.

11 BOARD CLERK MOORE: Chair Randolph?

12 CHAIR RANDOLPH: Yes.

13 BOARD CLERK MOORE: Madam Chair, the motion
14 passes.

15 CHAIR RANDOLPH: All right. Thank you very much.

16 Okay. The --

17 (Applause).

18 CHAIR RANDOLPH: You're welcome.

19 The last item on our agenda is open public
20 comment. We provide the opportunity for those who wish to
21 provide a comment regarding an item of interest within the
22 jurisdiction of the Board that is not on today's agenda.
23 The Clerk will call on those who have submitted a request
24 to speak card. And if you are joining us remotely and
25 wish to comment, please click the raise hand button or

1 dial star nine now. Will the Board Clerk please call on
2 those who have raised their hand or signed up to speak.

3 BOARD CLERK MOORE: Yes. We currently have two
4 speakers who have signed up to speak in person and four
5 over Zoom.

6 Our first speaker is Mandi Strella.

7 MANDI STRELLA: Chair Randolph and Board members.
8 I am Mandi Strella, speaking on behalf of Californians
9 Against Waste. You may recall a letter, CAW -- can you
10 hear me?

11 Okay. Sorry. You may recall -- I'm Mandi with
12 Californians -- here on behalf of Californians Against
13 Waste. You may recall letters that CAW and a coalition of
14 supporters have recently shared with you and your staff
15 encouraging the update of the Landfill Methane Regulation.
16 CAW echoes those sentiments expressed in that letter and
17 in previous comments to the Board.

18 New regulations should address key issues,
19 including, but not limited to, requiring all landfills
20 regulated by the LMR to use the most effective methane
21 monitoring technology, using the significant advancement
22 in remote sensing technologies to expand the frequency and
23 scope of surface emissions monitoring to cover the entire
24 landfill surface, as well as requiring earlier
25 installation and expansion of gas capture and control

1 systems, and frequent monitoring for gas collection system
2 links.

3 While disappointed, the LMR concept paper is not
4 yet finished, we do appreciate the thorough and thoughtful
5 work of staff and look forward to its release. We
6 appreciate your continued time, attention, and work on
7 these issues.

8 Thank you.

9 BOARD CLERK MOORE: Thank you.

10 Our next in-person commenter is Gary Hughes who
11 has provided slides.

12 (Slide presentation).

13 GARY HUGHES: All right. Hello, Chair. Hello,
14 members of the Board. My name is Gary Hughes and I work
15 as the Americas Program Coordinator with the international
16 climate justice organization Biofuelwatch. Biofuel Watch
17 is an international civil society organization that works
18 to increase public understanding and civic engagement on
19 the land use implications of climate policy. And I'm here
20 today to follow up on one of the most controversial issues
21 that has ever been heard before the California Air
22 Resources Board, that of tropical forest based offsets.

23 In particular, I'm here to address the total
24 failure of the agency to fulfill the reporting
25 requirements specified in the September 2019 endorsement

1 of the California Tropical Forest Standard.

2 Next slide, please.

3 [SLIDE CHANGE]

4 GARY HUGHES: It has now been more than five
5 years since after an extremely contentious process, one
6 that if looked at carefully as an environmental historian,
7 reveals extremely irregular governance that the Board
8 endorsed the CTFS. Biofuel Watch sent a letter to the
9 Board last December highlighting the failure to fulfill
10 the reporting requirements and that also included a long
11 list of recent reports exposing problems with tropical
12 forest based offsets. We've never received any response
13 to that letter. Yet, since we provided that December
14 letter, the avalanche of reporting exposing the problem
15 with tropical forest offsets has continued.

16 Anyone paying attention to global climate policy
17 is highly aware of the multitude of reports documenting
18 problems with tropical forest offsets, including land
19 grabs, human rights violations, sexual violence, failures
20 to meet climate mitigation objectives, greenwashing,
21 illegal logging, and so much more.

22 Unfortunately, there's no way in the little bit
23 of time that I have right now to go into depth on this
24 long list. But the fact that there's never been think
25 effort to follow through on the requirements of the

1 endorsement in 2019 of the California Tropical Forest
2 Standard is a red flag.

3 We're very concerned about this and we think it
4 goes on beyond just offsets. It goes into the long list
5 of speculative technologies and dubious mechanisms that
6 the Board is relying on to ostensibly respond to climate
7 change.

8 BOARD CLERK MOORE: Thank you.

9 GARY HUGHES: So thank you.

10 BOARD CLERK MOORE: Okay. We'll move to the Zoom
11 commenters. It looks like there's now two with their
12 hands raised in Zoom. Our first commenter is Sean Edgar.
13 I have activated your microphone. You may unmute and
14 begin.

15 SEAN EDGAR: Hi. Good afternoon, Board members.
16 I was just -- I missed testifying on the last item, but
17 just to say that I think TRIG is the best venue for the
18 Board to consider the variety of these issues that came up
19 in today's hearing. You know, the towers are not alone.
20 The waste industry is also captured, as other providers
21 essential public service are, in the multiple issues
22 between ACT, Omnibus in preparing for ACF to roll out. So
23 my positive message of just today is let's make TRIG
24 relevant. Unfortunately, the outreach committee that I
25 serve on just put out a cancellation earlier today and

1 won't meet again till January. So my suggestion humbly
2 would be let's make TRIG relevant. Let's meet monthly or
3 more frequently, if needed, to hash these issues out, and
4 invite the Board members to sit in on those meetings. And
5 that's all I have for today. Thank you very much for
6 allowing me to share a few thoughts.

7 BOARD CLERK MOORE: Thank you.

8 Our final commenter is Kim Mesfin. I have
9 activated your microphone. Please unmute and you may
10 begin.

11 KIM MESFIN: I'm Kim Mesfin, President of
12 Affinity Truck Center. I am California Truck Dealer Chair
13 representing all brands in the state. We are all in on
14 sustainable transport, but it is in a failed state at
15 present. I will share my dealership facts. I normally
16 sell 400 trucks per year. I sold two EVs in 2021 and one
17 in '22, and none since. I have been unable to sell a
18 single diesel truck built after 1-1 of '24 into the state
19 of California.

20 Our business was selling 70 million a year in
21 diesel trucks and are down to four million in used and
22 older production diesel trucks. This is a huge hit to our
23 State's tax revenue. I cannot order a diesel in 2025
24 without first selling an EV. Instead of ordering 100
25 trucks in quarter one of 2025, I am able to order zero due

1 to NOx credit requirements. Customers that cannot find
2 new clean diesel trucks are running their older trucks
3 longer or buying used, both of which are more polluting.

4 It has been three and a half years since I signed
5 contracts to install chargers at our dealerships. And it
6 will be a 12-month wait before that infrastructure is
7 completed. Customers will not purchase EVs without
8 infrastructure on their site. We need to keep pushing
9 electric into routes that will accommodate the shorter
10 ranges. Electric is amazing technology where it works.
11 This is not the case in Class 7 and 8 trucks today. We
12 all want our garbage picked up and affordable food at the
13 store.

14 I implore CARB to take the facts that continue to
15 learn from dealers, fleets, OEMs and pivot with the
16 regulation modifications to drive success.

17 Potential modifications. Permit the cleanest
18 Class 8 diesel trucks in the marketplace not to create a
19 NOx credit deficit. California becomes technologically
20 neutral, like the rest of the world, encouraging ongoing
21 innovation. California allows near zero and zero-emission
22 technologies. California mandates renewable diesel and
23 other cleaner fuels in ICE engines. California
24 incentivizes the purchase of clean diesel trucks in
25 exchange for older polluting trucks.

1 The above would allow time for electric
2 technology and infrastructure to catch up with the
3 functional and economic needs of the fleets. Please
4 continue to modify these regulations.

5 BOARD CLERK MOORE: Thank you.

6 That concludes our commenters for open comment.

7 CHAIR RANDOLPH: All right. Thank you.

8 Today's meeting of the Air Resources Board is now
9 adjourned.

10 (Thereupon the California Air Resources Board
11 meeting adjourned at 4:08 p.m.)
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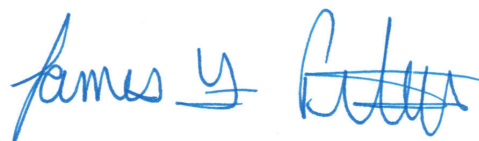
CERTIFICATE OF REPORTER

I, JAMES F. PETERS, a Certified Shorthand Reporter of the State of California, do hereby certify:

That I am a disinterested person herein; that the foregoing California Air Resources Board meeting was reported in shorthand by me, James F. Peters, a Certified Shorthand Reporter of the State of California, and was thereafter transcribed, under my direction, by computer-assisted transcription;

I further certify that I am not of counsel or attorney for any of the parties to said meeting nor in any way interested in the outcome of said meeting.

IN WITNESS WHEREOF, I have hereunto set my hand this 4th day of November, 2024.



JAMES F. PETERS, CSR
Certified Shorthand Reporter
License No. 10063