

MEETING  
STATE OF CALIFORNIA  
AIR RESOURCES BOARD

ZOOM PLATFORM

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

THURSDAY, NOVEMBER 20, 2025  
9:09 A.M.

JAMES F. PETERS, CSR  
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## APPEARANCES

### BOARD MEMBERS:

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John Balmes, MD

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Dean Florez (Remote)

Todd Gloria (Remote)

Eric Guerra

Lynda Hopkins

Assemblymember Corey A. Jackson

Patricia Lock Dawson

Dawn Ortiz-Legg

Tania Pacheco-Werner, PhD (Remote)

Cliff Rechtschaffen

Susan Shaheen, PhD (Remote)

Senator Henry Stern (Remote)

Diane Takvorian

### STAFF:

Steve Cliff, PhD, Executive Officer

Courtney Smith, Principal Deputy Executive Officer

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

Shannon Dilley, Chief Counsel

APPEARANCES CONTINUED

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Communities and Environmental Justice

Christopher Grundler, Deputy Executive Officer, Mobile  
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Edna Murphy, Deputy Executive Officer, Internal Operations

Rajinder Sahota, Deputy Executive Officer, Climate Change  
and Research

Rajinder Sahota, Deputy Executive Officer, Climate Change  
and Research

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Pollutant Policy Section, Industrial Strategies  
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Matt Botill, Division Chief, ISD

Jessi Fierro, Senior Attorney, Legal Office

Matt Harrison, Branch Chief, Project Assessment Branch,  
ISD

Quinn Langfitt, Staff Air Pollution, Short-Lived Climate  
Pollutant Policy Section, ISD

ALSO PRESENT:

Alicia Acevedo

Veronica Aguirre, Greenaction for Health and Environmental  
Justice

Olivia Alves, RMI

Cher Arobalo

Deb Banks, Sacramento Area Bicycle Advocates

Christian Bisher, Central California Environmental Justice  
Network

APPEARANCES CONTINUED

ALSO PRESENT:

Will Breiger, Climate Action California

Gavin Bruce, Valley Improvement Projects

Teresa Bui, Pacific Environment

Kimberly Burr

Mike Caprio, Republic Services

Lim Cheung

Mark de Bie, CalRecycle

Abigail DeSesa

Evan Edgar, Edgar Associates, Compost Coalition

Jennifer Elkins

Raul Engle

Gabriela Facio, Sierra Club California

Kerry Frohling

Carlos Gutierrez, California Advanced Biofuels Alliance,  
Clean Fuels Alliance America

Lee Helfend Full Circle Future

Thomas Helme, Valley Improvement Projects, California  
Environmental Justice Coalition

Claudia Huerta, Metropolitan Area Advisory Committee (MAAC)

Kenneth Holbrook, Central California Asthma Collaborative

Matt Holmes, California Environmental Justice Coalition

Brandy Howse

Steven Howse

APPEARANCES CONTINUED

ALSO PRESENT:

Sara Izant, Deputy Secretary, California Environmental Protection Agency

Molly Johnson, Placer County Air Pollution Control District

John Kennedy, Rural County Representatives of California

Brian Kolodji, Kolodji Corporation, Black Swan

Julia Levin, Bioenergy Association of California

Brian Loma, Green Latinos

Bianca Lopez, Valley Improvement Projects

Leticia Luna

Bill Magavern, Coalition for Clean Air

John Mataka, Grayson Neighborhood Council

Dr. Michael Mulligan, Climate Action California

Gracyna Mohabir, California Environmental Voters

Bill Murphy, Elders Climate Action, Climate Action California

Ileana Navarro, Central California Environmental Justice Network

Oshea Orchid

Erica Parker, Californians Against Waste

Patricia Parra, Health Education Council

Socorro Revolledo

Maria Ramos

Kevin Ruano, Richmond Shoreline Alliance

APPEARANCES CONTINUED

ALSO PRESENT:

Al Sattler

Assemblymember Pilar Schiavo

Laila Sharpe, Environment California

Chris Shimoda, Waste Management

Darcy Stinson

Chrissy Thomas Brewer

Emily Thompson, American Lung Association

Maria Torres

Maribel Villegas

Katy Webb, The Climate Center

Jane Williams, California Communities Against Toxics

LaDonna Williams

Scott Wilson, El Dorado County Air Quality Management  
District

Rob Youngren, Sacramento Area Bicycle Advocates

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PROCEEDINGS

CHAIR SANCHEZ: All right. Good morning. Good morning. The November 20th, 2025 public meeting of the California Air Resources Board will come to order. Board Clerk, will you please -- thank you. Will you please call the roll.

BOARD CLERK FRENCH: Dr. Balmes.

BOARD MEMBER BALMES: Here.

BOARD CLERK FRENCH: Mr. De La Torre.

BOARD MEMBER DE LA TORRE: Here.

BOARD CLERK FRENCH: Mr. Eisenhut.

Senator Florez.

BOARD MEMBER FLOREZ: Florez here.

BOARD CLERK FRENCH: Mayor Gloria.

BOARD MEMBER GLORIA: Here.

BOARD CLERK FRENCH: Councilman Guerra.

BOARD MEMBER GUERRA: Here.

BOARD CLERK FRENCH: Supervisor Hopkins.

BOARD MEMBER HOPKINS: Present.

BOARD CLERK FRENCH: Assemblymember Jackson.

ASSEMBLYMEMBER JACKSON: Here.

BOARD CLERK FRENCH: Mayor Lock Dawson.

BOARD MEMBER LOCK DAWSON: Here.

BOARD CLERK FRENCH: Supervisor Ortiz-Legg.

BOARD MEMBER ORTIZ-LEGG: Here.

1 BOARD CLERK FRENCH: Dr. Pacheco-Werner.

2 BOARD MEMBER PACHECO-WERNER: Here.

3 BOARD CLERK FRENCH: Mr. Rechtschaffen.

4 BOARD MEMBER RECHTSCHAFFEN: Here.

5 BOARD CLERK FRENCH: Dr. Shaheen.

6 BOARD MEMBER SHAHEEN: Here.

7 BOARD CLERK FRENCH: Senator Stern.

8 Ms. Takvorian.

9 BOARD MEMBER TAKVORIAN: Here.

10 BOARD CLERK FRENCH: Chair Sanchez.

11 CHAIR SANCHEZ: Here.

12 BOARD CLERK FRENCH: Madam Chair, we have a  
13 quorum.

14 CHAIR SANCHEZ: Wonderful. Thank you. I will  
15 cover a few housekeeping items before we get started.

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

1 work in a moment.

2 For safety reasons, please note the emergency  
3 exit to the rear of the room through the foyer. In the  
4 event of a fire alarm, we are required to evacuate this  
5 room immediately, go down the stairs to the lobby, and out  
6 of the building. When the "All Clear" signal is given, we  
7 will return to the auditorium and resume the hearing.

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

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

1 allow the interpreters the opportunity to accurately  
2 interpret your comments.

3 THE INTERPRETER: Good morning, Board members.  
4 (Interpreter translated in Spanish).

5 THE INTERPRETER: Thank you.

6 CHAIR SANCHEZ: Thank you. I will now ask the  
7 Board Clerk to provide more details regarding public  
8 participation.

9 BOARD CLERK FRENCH: Thank you, Chair Sanchez.

10 Good morning, everyone. I will provide  
11 additional information on public participation for today's  
12 meeting. We will first call in-person commenters who have  
13 turned in a request-to-speak card and then call commenters  
14 who are joining us remotely. If you are joining us  
15 remotely and wish to make a verbal comment, you must be  
16 using Zoom webinar or calling in by phone. If you are  
17 watching the webcast, but you wish to comment remotely,  
18 please register for the Zoom webinar or call in.

19 Information for both can be found on the public agenda for  
20 today's meeting.

21 To make a verbal comment, we will be using the  
22 "Raise Hand" feature in Zoom. If you wish to speak on a  
23 Board item please virtually raise your hand as soon as the  
24 item has begun to let us know that you wish to speak. If  
25 you are using a computer or tablet, there is a "Raise

1 Hand" button and if you are calling in on the telephone,  
2 please dial star nine to raise your hand.

3 When the comment period begins, the order of  
4 commenters is determined by who raises their hand first.  
5 We will call each commenter by name and will activate each  
6 commenter's audio when it is their turn to speak. For  
7 those calling in, we will identify you by the last three  
8 digits of your phone number. We will announce the next  
9 three or so commenters in the queue, so you are ready to  
10 testify when we come to you. Please note, your testimony  
11 will not appear by video. For all commenters, please  
12 state your name for the record before you speak. This is  
13 especially important for those calling in by phone.

14 Each commenter will have a time limit of two  
15 minutes, although this may change at the Chair's  
16 discretion. During public testimony, you will see a timer  
17 on the screen. For those calling in by phone, we will let  
18 you know when you have 30 seconds left and when your time  
19 is up.

20 For anyone giving verbal comments today in  
21 Spanish, please indicate so at the beginning of your  
22 testimony and our interpreters will assist you. During  
23 your comment, please follow any instructions the  
24 interpreter provides and please note your time will be  
25 doubled if you require Spanish interpretation.

1           If you have additional remarks regarding other  
2 topics, please sign up to speak during the open public  
3 comment period, which will take place at the conclusion of  
4 the meeting. To submit written comments, please visit  
5 CARB's "Comment on Board Items" box on the public agenda  
6 on our webpage for links to submit your comment. Written  
7 comments will be accepted until the Chair closes the  
8 record.

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

11           Thank you. I will turn the microphone back to  
12 Chair Sanchez.

13           CHAIR SANCHEZ: Thank you. Thank you.

14           Before we dive in, I want to remind everyone that  
15 we are excited to now be accepting nominations from the  
16 public for the Haagen-Smit Clean Air Awards through  
17 January 9th, 2026. Please visit CARB's website to submit  
18 a nomination.

19           All right. The sole item on today's agenda is  
20 Item number 25-8-1, proposed amendments to the regulation  
21 on methane emissions from municipal solid waste landfills.

22           The science is clear, acting now to reduce  
23 emissions of methane and other short-lived climate  
24 pollutants, so-called super pollutants, is the best way to  
25 immediately slow the pace of climate change.

1           Last week, I was honored to travel to Brazil with  
2 Governor Newsom to participate in COP30, the annual United  
3 Nations conference where governments, advocates,  
4 businesses, tribal leaders, and academics from all over  
5 the world gather to talk about how we are going to address  
6 the climate crisis. Methane was a major theme at this  
7 year's COP. In meeting after meeting, we talked about the  
8 importance of collaborating across borders and across  
9 sectors to cut pollution from this potent greenhouse gas.

10           Taking action on methane gives us the chance to  
11 slow the pace of warming in the near term and avoid  
12 catastrophic changes to the climate and the global  
13 community recognizes how important of an opportunity this  
14 is. California has a long history of leadership on  
15 methane and we are continuing to build on that legacy.  
16 During the COP, the Governor signed an agreement with  
17 Chile to work specifically on addressing methane  
18 emissions, and we are actively engaging with jurisdictions  
19 around the world through the Subnational Methane Action  
20 Coalition that he co-founded in 2023.

21           This is an especially exciting moment to take  
22 action on this area of work, because we have technologies  
23 to now help us detect, measure, and address methane  
24 emissions. When combined with strong regulations, these  
25 technologies can help us make real progress on cutting



1 pollution here and now. CARB and California continue to  
2 lead the way on scientific advances in this space.

3 I also want to recognize the work that our  
4 partners at the local level do to ensure that we are  
5 pursuing responsible and sustainable waste management  
6 practices, including my fellow Board members who represent  
7 local jurisdictions and agencies, including two who also  
8 traveled to the COP this year. This work at the local  
9 level is critical to California's efforts to achieve our  
10 climate and pollution targets.

11 I want to recognize that addressing health and  
12 environmental impacts from landfills is something that  
13 requires action also across multiple State government  
14 agencies. While we are here today to talk about landfill  
15 methane emissions, the reality is that methane is just one  
16 of the many impacts that our waste system has on  
17 environment and communities. In this space, as with many  
18 other areas, CARB works closely with our sister agencies -  
19 I see a few of them in the room - at the State level and  
20 with our colleagues at local and regional governments.

21 Most importantly, I want to recognize the  
22 community members, advocates, and local representatives  
23 who have raised concerns about landfill impacts and to  
24 thank them for continuing to engage with CARB and our  
25 sister agencies on this critical issue. While our team at

1 CARB does not have a direct role in the State's response  
2 to the ongoing crisis at the Chiquita Canyon Landfill, we  
3 have been engaged on this issue through a multi-agency  
4 response item, teams, hearings, and community meetings.

5 I know that community members have provided  
6 critical feedback that has informed the proposal before us  
7 today. Hearing from community members and advocates has  
8 helped us better understand the importance of prevention  
9 and early intervention to avoid health and economic  
10 impacts. These stakeholders help us realize an  
11 opportunity to strengthen our landfill regulation, so that  
12 operators and regulators have additional preventative  
13 tools, which is an important contribution to help ensure  
14 other communities don't experience similar impacts around  
15 the state. Thank you for all of -- to all of you who have  
16 engaged and made your voices heard.

17 As we tackle the challenges of both local  
18 pollution and global climate change, it is essential that  
19 we all step up and work together. Coordinating local  
20 action and State policies is critical to achieving cleaner  
21 air and addressing climate as is collaboration with our  
22 partners around the world. Together, we can take  
23 ambitious action to reduce emissions, protect the health  
24 of our communities, and our planet. Today's vote provides  
25 an important opportunity for us to protect California

1 communities and continue our leadership by tackling  
2 methane pollution.

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

4 EXECUTIVE OFFICER CLIFF: Thank you, Chair  
5 Sanchez.

6 As you mentioned, landfills are a significant  
7 source of methane emissions in California. The Landfill  
8 Methane Regulation was adopted in 2010 as an early action  
9 measure under AB 32. It set the most stringent landfill  
10 methane control requirements in the nation, serving as a  
11 model for other jurisdictions. Over time, we've gained an  
12 improved understanding of the sources and causes of  
13 methane emissions from landfills. The proposed amendments  
14 that staff will present today reflect the best available  
15 science.

16 Staff's proposal would improve the effectiveness  
17 of gas collection and control systems to reduce methane,  
18 air pollution, and odors. The proposed changes would also  
19 strengthen monitoring and reporting requirements to enable  
20 better oversight by CARB and air districts and make data  
21 available sooner.

22 Through research and technological advancement,  
23 experience implementing the Regulation, and an extensive  
24 public process, staff has identified numerous  
25 opportunities to further reduce methane emissions from

1 landfills that have resulted in the amendments before us  
2 today.

3 It is important to recognize that capturing and  
4 destroying more landfill gas and preventing leaks also  
5 reduces emissions of co-pollutants in landfill gas, such  
6 as volatile organic compounds, toxic air contaminants, and  
7 odorous compounds. These updates would set a new bar that  
8 can serve as a model for other jurisdictions.

9 Landfills and their emissions directly impact  
10 local communities. Following significant community  
11 engagement at the March Board hearing earlier this year,  
12 staff engaged directly with community members near the  
13 Chiquita Canyon Landfill and other impacted communities on  
14 these regulatory updates.

15 If adopted by the Board, CARB is committed to  
16 continuing to coordinate closely with our air district  
17 partners to support them in their work and to ensure that  
18 they are able to implement the Landfill Methane Regulation  
19 feasibly and effectively.

20 I will now ask Dr. Quinn Langfitt of the  
21 Industrial Strategies Division to introduce staff's  
22 proposal for this regulatory update. Dr. Langfitt will  
23 also update us on the ongoing collaboration with community  
24 members on this regulation.

25 Quinn.

1 (Slide presentation).

2 ISD STAFF AIR POLLUTION SPECIALIST LANGFITT:

3 Thank you, Dr cliff. Good morning, Chair Sanchez  
4 and members of the Board. I'm pleased to be presenting  
5 staff's proposed amendments to the Regulation on Methane  
6 Emissions for municipal solid waste landfills, also known  
7 as the Landfill Methane Regulation.

8 [SLIDE CHANGE]

9 ISD STAFF AIR POLLUTION SPECIALIST LANGFITT:

10 In this presentation, I'll start by providing  
11 background information on California's climate and  
12 landfill policy. I'll then discuss the process we used to  
13 gather public input and feedback to develop the proposal,  
14 the goals and scope, and an overview of the changes being  
15 proposed

16 Next, I'll discuss some key benefits, then, I'll  
17 cover some potential next steps, And finally, I'll provide  
18 staff's recommendation to the Board.

19 [SLIDE CHANGE]

20 ISD STAFF AIR POLLUTION SPECIALIST LANGFITT:

21 Over the years, California's Legislature has  
22 enacted several key greenhouse gas and methane emission  
23 reduction targets. California's leadership started with  
24 the passage of Assembly Bill 32, which required the State  
25 to reduce greenhouse gas emissions to 1990 levels by 2020.

1 California strengthened this commitment in 2016  
2 with the passage of Senate Bill 32, which requires  
3 statewide greenhouse gas emissions to be reduced to 40  
4 percent below 1990 levels by 2030.

5 And then more recently, with the passage of AB  
6 1279 in 2022, the Legislature set targets reducing  
7 anthropogenic GHG emissions to at least 85 percent below  
8 1990 levels by 2045 and achieving carbon neutrality no  
9 later than 2045.

10 The Legislature also enacted SB 1383 in 2016,  
11 setting specific methane reduction requirements that  
12 complement our broader statewide GHG reduction targets.  
13 While the State has made meaningful progress towards the  
14 SB 1383 emission reduction targets across all major  
15 methane-emitting sectors, there's still a lot of work  
16 ahead to achieve the statewide target.

17 According to CARB's Greenhouse Gas Inventory,  
18 landfills are the second largest source of methane  
19 emissions in California, making reductions in this sector  
20 critical to achieving the State's methane emission  
21 reduction targets.

22 [SLIDE CHANGE]

23 ISD STAFF AIR POLLUTION SPECIALIST LANGFITT: As  
24 implied by the name, the Landfill Methane Regulation is  
25 targeted at reducing emissions of methane. So why is

1 methane important?

2 Methane is the second largest contributor to  
3 human-caused climate change, and scientists estimate that  
4 it's responsible for around 25 percent of the climate  
5 warming that we're currently experiencing. On a 20-year  
6 time horizon, methane is about 80 times more potent than  
7 carbon dioxide per ton released. It's also a short-lived  
8 climate pollutant with a lifetime of about 12 years.

9 Because of its outsized short-term effects and  
10 short atmospheric lifetime, reducing emissions leads to  
11 rapid reductions in warming. There's a strong scientific  
12 consensus on the immediate need to reduce methane  
13 emissions to stabilize global warming over the short-term  
14 and achieve our climate goals.

15 The waste sector is an important part of the  
16 State's short-lived climate pollutant reduction strategy.  
17 As described in the 2022 Scoping Plan Update, although  
18 reducing organic waste disposal is the most effective way  
19 to reduce methane emissions from the waste sector, the  
20 proposal we're presenting today will reduce methane from  
21 waste already in place at landfills, which is something we  
22 can do now to deliver immediate climate benefits.

23 [SLIDE CHANGE]

24 ISD STAFF AIR POLLUTION SPECIALIST LANGFITT:

25 Before I go any deeper on CARB's Landfill Methane

1 Regulation, I want to talk for a moment about the broader  
2 landscape of landfill oversight.

3 Landfills are regulated by a number of local,  
4 State, and federal agencies. And these agencies set  
5 standards, and implement and enforce requirements to  
6 minimize impacts of landfill operations.

7 The U.S. Environmental Protection Agency, local  
8 air districts, five of the six departments under CalEPA,  
9 and others not shown in this graphic, have lead roles  
10 regulating various aspects of landfill operations,  
11 including controlling local air pollutants, landfill  
12 permitting and design, protecting water quality, and  
13 managing hazardous or toxic waste.

14 CARB's role is methane emission control, and we  
15 work together with all our agency partners to coordinate  
16 regulation of landfills.

17 [SLIDE CHANGE]

18 ISD STAFF AIR POLLUTION SPECIALIST LANGFITT:

19 This Board adopted the Landfill Methane  
20 Regulation, abbreviated LMR, in 2010 as an early action  
21 measure under Assembly Bill 32. The Regulation is  
22 designed to reduce methane emissions by requiring  
23 landfills to install gas collection and control systems.

24 Controlling landfill gas not only reduces methane  
25 emissions, but it also reduces odors and destroys



1 co-pollutants, including volatile organic compounds and  
2 toxic air contaminants, which can deliver important local  
3 air quality and health benefits. The LMR established  
4 standards that have since been replicated by several other  
5 states.

6 California has 35 local air districts, and 22 of  
7 those districts have entered into voluntary agreements  
8 with CARB to primarily implement and enforce the  
9 regulation.

10 For landfills not covered by a voluntary air  
11 district MOU, CARB implements the regulation and enforces  
12 it. And CARB staff provide enforcement support,  
13 resources, training, and additional oversight across the  
14 state where needed.

15 In total, the LMR applies to 188 landfills, of  
16 which 153 are required to control emissions. The  
17 remaining 35 are smaller landfills that have not yet  
18 reached the threshold that requires control.

19 [SLIDE CHANGE]

20 ISD STAFF AIR POLLUTION SPECIALIST LANGFITT: At  
21 the core of controlling methane emissions from landfills  
22 is what's called a gas collection and control system, or  
23 GCCS. A GCCS is a system of wells, pipes, and blowers to  
24 collect the gas, and control devices that combust the gas  
25 to destroy methane.

1           To collect landfill gas, extraction wells are  
2 drilled into the landfill waste mass, where the gas is  
3 generated. A blower creates suction to draw the landfill  
4 gas into the wells and to the control device, where the  
5 gas is ultimately flared or put to beneficial use, like  
6 electricity generation.

7           The surface cover is also an important part of  
8 the collection system. It creates a barrier that keeps  
9 landfill gas from escaping into the atmosphere and keeps  
10 the wells from pulling in air from above the landfill.  
11 Minimizing emissions requires all the elements of this  
12 system to be well maintained and functioning optimally.

13                               [SLIDE CHANGE]

14           ISD STAFF AIR POLLUTION SPECIALIST LANGFITT: And  
15 this is where the Landfill Methane Regulation comes in.  
16 Under the LMR's existing requirements, owners and  
17 operators must:

18                 Install a gas collection and control system if  
19 the landfill meets certain thresholds, and properly  
20 operate the system;

21                 Perform monitoring for leaks from the landfill's  
22 surface, wells, and other components, and repair any leaks  
23 found;

24                 Monitor and correct other performance parameters,  
25 such as loss of vacuum in wells;

1           Test control devices to ensure they destroy at  
2   least 99 percent of the collected methane, and;

3           Keep records and report data to CARB and local  
4   air districts about their operations, monitoring, and  
5   corrective actions.

6                               [SLIDE CHANGE]

7           CHAIR SANCHEZ:   Okay.   Great.   Thank you.

8           EXECUTIVE OFFICER CLIFF:   Just a moment.

9           (Off record:   9:33 a.m.)

10          (Technical difficulties.)

11          (Thereupon a recess was taken.)

12          (On record:   9:49 a.m.)

13          CHAIR SANCHEZ:   Okay.   We're ready to reconvene?

14          We're set.   Technical.   Okay.   Apologies for the  
15   technical difficulty.

16          Dr. Cliff, I'll pass it back to staff to continue  
17   the presentation.   Thank you.

18          ISD STAFF AIR POLLUTION SPECIALIST LANGFITT:   All  
19   right.   Thanks.   We're going to back up one slide to  
20   accommodate interpretation in the room.

21          So this is where the Landfill Methane Regulation  
22   comes in.   Under the LMR's existing requirements, owners  
23   and operators must:

24          Install a gas collection and control system if  
25   the landfill meets certain thresholds and properly operate

1 the system;

2 Perform monitoring for leaks from the landfill's  
3 surface, wells, and other components, and repair any leaks  
4 found;

5 Monitor and correct other performance parameters,  
6 such as loss of vacuum in wells;

7 Test control devices to ensure they destroy at  
8 least 99 percent of the collected methane, and;

9 Keep records and report data to CARB and local  
10 air districts about their operations, monitoring, and  
11 corrective actions.

12 [SLIDE CHANGE]

13 ISD STAFF AIR POLLUTION SPECIALIST LANGFITT: I'd  
14 now like to provide an overview of the goals and scope of  
15 Staff's proposal to update this important regulation.

16 First, our overarching goal is to improve methane  
17 emissions control to help California achieve its climate  
18 targets. To accomplish that goal, our proposal leverages  
19 over a decade of technological advances, findings from  
20 research, including studies conducted and funded by CARB,  
21 lessons learned through implementation and enforcement of  
22 the LMR, and the important feedback we've received through  
23 our public outreach efforts.

24 For example, methane plume mapping studies have  
25 improved our understanding of the most common causes and

1 sources of large emissions and informed new mitigation  
2 strategies. We're also proposing changes throughout to  
3 enhance enforceability and clarity, and improve the data  
4 reporting process, which will enable better public  
5 transparency. Finally, we're aware that other states and  
6 nations look to California as a leader in crafting their  
7 own climate strategies. Several states have done so based  
8 on our existing Landfill Methane Regulation, so these  
9 amendments would be a resource for other states looking to  
10 address landfill emissions using targeted, science-driven  
11 solutions.

12 [SLIDE CHANGE]

13 ISD STAFF AIR POLLUTION SPECIALIST LANGFITT:

14 Before I get into specifics, I want to take a  
15 moment to talk through the public engagement efforts and  
16 feedback from stakeholders that helped shape this  
17 proposal.

18 Beginning in 2022, we hosted multiple workshops  
19 to summarize the state of landfill methane emissions  
20 science, learn about best practices and emerging  
21 technologies, share preliminary ideas, and gather input on  
22 regulatory concepts. In response to community member  
23 concerns at the March Board meeting, at former Chair  
24 Randolph's direction, we also held a community meeting in  
25 Southern California along with staff from our regulatory

1 partner agencies.

2 A panel of local residents, some of whom are here  
3 today, shared their perspectives and experiences living  
4 and working in communities impacted by landfill  
5 operations. In response, we developed and presented  
6 additional regulatory concepts that are included in the  
7 proposal we're presenting today.

8 In addition to public meetings, we also  
9 participated in dozens of direct meetings with individual  
10 stakeholders, including community-based organizations,  
11 community members, environmental advocacy groups, landfill  
12 operators, industry groups, technology providers, and  
13 academic researchers. Throughout the process, we also  
14 coordinated closely with State and local regulatory  
15 partners to leverage their expertise. And since 2022,  
16 we've received over 75 written comment letters.

17 I'll now discuss the expected outcomes and  
18 provisions in the proposed amendments.

19 [SLIDE CHANGE]

20 ISD STAFF AIR POLLUTION SPECIALIST LANGFITT: The  
21 first outcome of this proposal is integrating remote  
22 methane plume detection into the regulation. The proposed  
23 amendments require operators to take action when notified  
24 by CARB of a remotely-detected methane plume, such as one  
25 detected by a satellite or airplane. CARB's California

1 Satellite Methane Project, which staff presented to the  
2 Board last month, provides a framework for detecting  
3 methane plumes, identifying the source facility, and  
4 rapidly providing actionable data to the operator.

5           The proposed amendments would require operator  
6 action and would specify exactly what operators need to do  
7 on what timelines, including monitoring for leaks using  
8 on-the-ground tools, making repairs if leaks are found,  
9 and reporting the outcomes of those efforts. Importantly,  
10 this provision does not replace the operator's quarterly  
11 leak monitoring. It supplements it to address large  
12 emission sources faster.

13                               [SLIDE CHANGE]

14           ISD STAFF AIR POLLUTION SPECIALIST LANGFITT: The  
15 second outcome is improving requirements for the routine  
16 leak monitoring performed by operators. This is a key  
17 strategy in the proposed amendments to reduce methane  
18 emissions.

19           First, the proposal would expand the spatial  
20 coverage of surface emissions monitoring, because  
21 alternative technology now exists to screen areas that  
22 were previously excluded. The proposal updates monitoring  
23 procedures to increase the frequency, require faster  
24 repairs, and ensure that repairs continue to be effective.

25           Importantly, staff propose adding a process for

1 CARB to evaluate and approve advanced leak detection  
2 technologies and procedures, like drones or handheld  
3 lasers, that any operator could choose to use instead of  
4 traditional walking methods. We believe that many  
5 operators would be interested in adopting these  
6 technologies to reduce the need for costly labor,  
7 especially as the number of mature technologies increases  
8 over time.

9 [SLIDE CHANGE]

10 ISD STAFF AIR POLLUTION SPECIALIST LANGFITT: The  
11 third outcome is expanding wellhead monitoring to support  
12 safe and effective performance.

13 The proposal adds temperature, gas composition,  
14 and flow rate measurements to the existing monthly  
15 monitoring requirements. These parameters are commonly  
16 measured by landfill operators and can signal potential  
17 issues with the gas collection system indicating the need  
18 for system adjustments, cover maintenance, or component  
19 repairs. The proposed amendments introduce enforceable  
20 standards and mitigation measures triggered by elevated  
21 temperatures and other indicators.

22 Operators would be required to observe trends in  
23 the wellhead data to identify and respond early to  
24 changing conditions. Finally, the proposed amendments  
25 require semi-annual monitoring of the liquid level in gas



1 collection wells to detect and remove accumulated liquid  
2 that can block gas flow.

3 [SLIDE CHANGE]

4 ISD STAFF AIR POLLUTION SPECIALIST LANGFITT: The  
5 fourth outcome is strengthening operational requirements  
6 for the gas collection and control system.

7 Operators of the largest landfills would be  
8 required to install gas collectors at the working face -  
9 that's the area where waste is being deposited - using  
10 specialized types of wells that allow for gas collection  
11 during filling. This is key to reducing methane emissions  
12 from the working face, which research indicates is one of  
13 the main sources of landfill emissions. The proposal  
14 limits downtime of the gas collection and control system  
15 and sets a limit on the number of wells that can be  
16 offline at once. The proposal provides several  
17 alternatives, and the flexibility to demonstrate effective  
18 mitigation measures are in place when a component cannot  
19 be repaired promptly. And operators would be required to  
20 continuously monitor their total system pressure for  
21 consistent gas extraction.

22 [SLIDE CHANGE]

23 ISD STAFF AIR POLLUTION SPECIALIST LANGFITT:  
24 Finally, this slide summarizes additional  
25 changes, including:

1           A more comprehensive process for shutting down  
2 the GCCS at old, closed landfills with declining gas  
3 generation; adjustments to ensure all systems, even those  
4 owned by third parties, are being monitored and tested;  
5 improved reporting to submit data in a standardized format  
6 that would improve oversight and make it easier to  
7 proactively share that data with the public; and various  
8 additional changes that would enhance clarity, adjust  
9 processes, improve enforceability, and update data.

10                           [SLIDE CHANGE]

11           ISD STAFF AIR POLLUTION SPECIALIST LANGFITT:

12           Staff anticipate the proposed amendments will  
13 provide several types of benefits.

14           First, in line with our overall climate goals,  
15 the proposal would result in additional methane emission  
16 reductions. The amendments will also reduce emissions of  
17 co-pollutants including volatile organic compounds, toxic  
18 air contaminants, and odorous compounds, which will  
19 contribute to improved air quality for landfill workers  
20 and communities surrounding landfills.

21           Besides emissions benefits, the proposed  
22 amendments also provide more timely compliance data, in a  
23 standardized electronic format. This would allow CARB and  
24 air districts to more quickly share data with the public  
25 and to assess compliance with the regulation. And we

1 anticipate that the Proposed Amendments will encourage  
2 further development of advanced monitoring technology,  
3 which can improve leak detection, allow real-time  
4 monitoring of GCCS operations, and provide potential  
5 future cost savings for operators.

6           The benefits of staff's proposal outweigh the  
7 incremental additional costs to implement these regulatory  
8 updates. Using conservative values for the social cost of  
9 methane, we estimated the benefits of just the reduced  
10 methane emissions to be at least \$34 million per  
11 year. Staff estimate the cost of this proposal to be  
12 approximately \$12 million per year cumulatively across all  
13 landfills.

14           We also targeted our regulatory updates to help  
15 maximize benefits and minimize costs where possible. For  
16 instance, under the proposal, uncontrolled landfills would  
17 experience no added costs, and the proposal maintains  
18 existing cost-saving measures for well-managed, closed  
19 landfills.

20                           [SLIDE CHANGE]

21           ISD STAFF AIR POLLUTION SPECIALIST LANGFITT:

22           We've received extensive feedback during the  
23 pre-rulemaking phase and following the release of the  
24 proposal. While we cannot include all of this feedback on  
25 a single slide, we've summarized a selection of the

1 comments received here, which includes to:

2 Improve public data transparency; require  
3 emerging technologies for advanced leak detection as they  
4 become available; support for increased data collection,  
5 new standards, shorter repair timelines, and increased  
6 reporting frequency; add flexibility on repair timelines,  
7 reduce monitoring and reporting frequency; and concerns  
8 about additional costs for closed landfills.

9 As you can see, there are requests to both  
10 increase and decrease the stringency of the proposal,  
11 reflecting the strong, and often conflicting, views of a  
12 diverse set of stakeholders.

13 [SLIDE CHANGE]

14 ISD STAFF AIR POLLUTION SPECIALIST LANGFITT:

15 Through stakeholder meetings and written comments  
16 following the release of the proposal, we've identified a  
17 few areas where adjustments may be needed. So we  
18 anticipate proposing additional changes to address  
19 specific concerns that would be released for a 15-day  
20 comment period.

21 Among the areas we've identified are adjusting  
22 timelines for simplicity and consistency across the  
23 regulation, adjusting specific details of some provisions  
24 to better recognize unique facility characteristics, and  
25 providing greater flexibility for circumstances outside of

1 the operator's control, such as when they lose utility  
2 power.

3 In addition, our air district partners have  
4 recommended some ways we can further improve our ability  
5 to oversee compliance with additional streamlining to  
6 reduce resource demands. Over the coming months, we're  
7 committed to working with our regulatory partners to  
8 ensure smooth implementation.

9 [SLIDE CHANGE]

10 ISD STAFF AIR POLLUTION SPECIALIST LANGFITT:

11 I'll now wrap up with a summary of the high-level  
12 outcomes we expect this proposal would deliver. It would  
13 result in a greater role for advanced technologies. It  
14 would result in fewer methane leaks. It would result in  
15 improved performance of the gas collection and control  
16 system. It would result in stronger actions being taken  
17 where there are recurring problems, including more  
18 comprehensive monitoring and assessments. And it would  
19 provide an important opportunity to share useful and  
20 timely data with the public and regulatory partners.

21 With that, staff recommends the Board adopt  
22 Resolution 25-14. That concludes staff's presentation,  
23 and I'll now invite some of our agency partners to discuss  
24 broader efforts related to the landfill sector, starting  
25 with Sarah Izant, Deputy Secretary for Climate Policy at

1 CalEPA followed by Mark de Bie, Deputy Director of the  
2 Division of Waste Permitting, Compliance, and Mitigation  
3 at CalRecycle.

4 Sarah

5 CALEPA DEPUTY SECRETARY IZANT: Thank you.

6 Good morning, Chair Sanchez, members of the  
7 Board. My name is Sarah Izant. I'm the Deputy Secretary  
8 for Climate Policy here at the California Environmental  
9 Protection Agency. And I am here today to provide some  
10 context on how CalEPA and its boards and departments are  
11 working together on landfill oversight and how the  
12 Landfill Methane Regulation fits into that broader  
13 picture, while advancing the State's climate goals.

14 Municipal solid waste landfills are an essential  
15 part of how we manage waste in California. And this  
16 sector is the second largest source of methane in  
17 California. Every year, more than 40 million tons of  
18 waste are disposed in about 120 landfills statewide. So  
19 these facilities present an important opportunity to  
20 reduce emissions from the sector, both through reductions  
21 in organic waste disposal and through managing waste  
22 already at those landfills.

23 These landfills are also subject to a wide array  
24 of environmental and public health requirements at the  
25 federal, State, and local levels. Effectively managing

1 these system requires strong interagency coordination,  
2 which is the focus of my remarks today.

3           Local agencies regulate land use and establish  
4 permitting and operating requirements. U.S. EPA and  
5 CalRecycle require minimum standards such as liners,  
6 leachate capture, daily cover, vermin control and  
7 financial assurance enforced by local enforcement  
8 agencies. U.S. EPA and State and regional water boards  
9 regulate wastewater discharges, stormwater, and releases  
10 to groundwater. The Department of Toxic Substances  
11 Control addresses hazardous waste and contamination  
12 issues. The Office of Environmental Health Hazards  
13 Assessment provides risk assessment and health science  
14 expertise. U.S. EPA, CARB, and local air districts  
15 regulate greenhouse gases, VOCs, and toxic air emissions  
16 from landfills, including landfill gas collection and  
17 destruction systems and enforce these requirements. And  
18 together, these agencies form a coordinated oversight  
19 network that looks not just at greenhouse gases, but also  
20 at water, toxics, odors, and community health.

21           One area where this coordination has been  
22 especially important is at subsurface elevated temperature  
23 events at landfills. Under normal operating conditions,  
24 landfills generate methane and other volatile organic  
25 gases, which are destroyed by emissions control systems.

1 Sometimes, however, wellhead temperatures rise. And if  
2 not properly managed, this can escalate into a subsurface  
3 elevated temperature event. These elevated temperatures  
4 can trigger chemical reactions underground leading to  
5 increased emissions of greenhouse gases, toxic air  
6 contaminants and leachate, and odors that impact the  
7 environment and public health.

8           CalEPA has convened cross-agency teams to respond  
9 quickly when these events occur, ensuring that monitoring,  
10 enforcement, and corrective actions are aligned. One  
11 example of an active engagement of the cross-agency  
12 coordination team is at Chiquita Canyon Landfill in Los  
13 Angeles County, which has been experiencing a Subsurface  
14 Elevated Temperature, or SET, event since 2022.

15           Multiple agencies, including U.S. EPA, LA County  
16 Department of Public Health, South Coast Air Quality  
17 Management District, and DTSC have issued orders to manage  
18 the reaction and to address noncompliance. The public has  
19 been profoundly impacted with ongoing health concerns from  
20 toxic gases and noxious odors.

21           Recognizing the scale and complexity of the  
22 issue, CalEPA has organized the Multi-Agency Critical  
23 Action Team, MCAT, meeting several times per week with  
24 U.S. EPA, CalEPA boards and departments, LA County  
25 agencies, and South Coast AQMD to coordinate enforcement



1 and response. And this multi-agency response has included  
2 enhanced monitoring, enforcement orders, and direct  
3 engagement with the community.

4           The efforts at Chiquita have helped inform  
5 oversight at landfills experiencing and not experiencing  
6 SET events. For example, at the El Sobrante Landfill in  
7 Riverside County, elevated temperature conditions have  
8 required active engagement with an MCAT to coordinate  
9 oversight to ensure comprehensive and effective corrective  
10 measures are taken.

11           And at Avenal Regional Landfill, where elevated  
12 temperatures have been observed in several wells, but  
13 inspections and testing show that conditions are not yet  
14 hazardous, monitoring continues to ensure that conditions  
15 remain controlled.

16           Together, with various local, State, and federal  
17 agencies, the CalEPA Environmental Justice Task Force is  
18 also working to ensure that community input and concerns  
19 are considered by agencies with regulatory authority at  
20 the Avenal Landfill. This includes working with the  
21 community in both English and Spanish on how to file a  
22 complaint, what to look for, how to document, and who to  
23 contact, as well as engaging directly with the community  
24 at meetings and other public events.

25           The complex regulatory framework for landfills

1 requires the strong coordinated oversight effort. In  
2 addition to being a climate tool, the Landfill Methane  
3 Regulation provides critical data that strengthens  
4 landfill oversight. Monitoring and reporting under the  
5 regulation will give us better visibility into landfill  
6 gas trends, which help to detect elevated temperature  
7 events earlier, identify areas for corrective action, and  
8 provide transparent science-based information to other  
9 regulators and communities.

10 In short, the data generated under CARB's  
11 regulation is helping CalEPA agencies work more  
12 effectively together and will continue to help identify  
13 potential emerging issues that require this coordinated  
14 response.

15 Going forward, CalEPA will continue to work  
16 across our boards, departments, and offices to ensure that  
17 methane reductions are paired with strong protections for  
18 public health and the environment, and we are committed to  
19 making sure that impacted communities see real  
20 improvements in air quality, water quality, and quality of  
21 life.

22 Thank you for your time.

23 MARK de BIE: Good morning, Madam Chair and Board  
24 members. I'm Mark de Bie, Deputy Director at CalRecycle,  
25 where I oversee permitting and enforcement of

1 non-hazardous solid waste facilities in California.

2 CalRecycle works closely with CARB on various  
3 issues, like developing and implementing the State's  
4 climate policies, including the Scoping Plan and the  
5 Short-Lived Climate Pollutant Reduction Strategy. This  
6 strategy centers on cutting landfill methane emissions by  
7 recovering organic materials and rescuing unsold food for  
8 the 1 in 5 Californians facing hunger.

9 CalRecycle oversees local enforcement agencies  
10 who permit and inspect facilities, along with our  
11 colleagues in local air boards and water districts.  
12 Jurisdictions who run their own local waste and recycling  
13 program are also overseen by CalRecycle, as well as a  
14 number of producer responsibility programs.

15 Local enforcement agencies inspect landfills at  
16 least monthly to ensure compliance with permit and  
17 operational design requirements in Title 27 of the  
18 California Code of Regulations. One critical requirement  
19 is protecting the public from -- by preventing landfill  
20 gas from migrating beyond the boundary of the landfill.  
21 Effective gas monitoring and control systems are key to  
22 this effort.

23 As you know, landfilled organic waste is one of  
24 California's largest sources of methane. Under SB 1383,  
25 CalRecycle has worked with local governments to implement

1 programs to significantly increase diversion of organic  
2 waste away from landfills, which the 2022 Scoping Plan  
3 update identifies as the most effective way to reduce  
4 methane emissions from this sector.

5           These actions are making a difference. We are  
6 three years into statewide organic recovery and food  
7 rescue requirements with nearly half a billion dollars in  
8 State grants to support local programs. Ninety-seven  
9 percent of required jurisdictions report residential  
10 organic collection. All jurisdictions expanded food  
11 recovery, rescuing over 700 million meals for Californians  
12 in need. We expect those numbers to increase as we look  
13 at the 2024 and '25 data.

14           CalRecycle continues to elevate local compliance  
15 efforts by overseeing and supporting local governments  
16 with training tools and technical assistance. As the  
17 world's fourth largest economy, California is showing the  
18 world how to create a circular economy that turns waste  
19 into resources, instead of pollution. Effectively  
20 controlling emissions and reducing the sources of methane  
21 now is one of the fastest most impactful ways to fight  
22 climate change and see the results in our lifetime.

23           Thank you.

24           ISD STAFF AIR POLLUTION SPECIALIST LANGFITT:

25           Thank you Sarah and Mark. And back to you, Chair

1 Sanchez --

2 CHAIR SANCHEZ: Wonderful. Thank you to both of  
3 our interagency partners for those remarks and to staff  
4 for the presentation.

5 We will now hear from members of the public who  
6 have signed up to speak on this item. I will ask the  
7 Board clerks to begin calling the public commenters.

8 Never mind. We have been joined by Assembly  
9 Member Schiavo on the Zoom. Thank you, Assemblymember, a  
10 champion of these efforts. Assemblymember, the floor is  
11 yours.

12 ASSEMBLYMEMBER SCHIAVO: Thank you. I'm trying  
13 to find a quiet space for once second.

14 Okay. Thank you. Sorry. I'm on a tour and  
15 stepping out. So thank you so much for taking me and  
16 making space for me. I am very happy to see this CARB  
17 rule moving forward and really want to thank you for the  
18 robust process, but also the speedier process. We know  
19 that this is an urgent issue, and as has been mentioned  
20 multiple times, our community is really an example of why  
21 it is such an urgent issue.

22 So as many on the Board knows, and as has been  
23 discussed, Chiquita, in my district, has millions of  
24 gallons of toxic liquids that have been created and are  
25 continually being released. Cancer-causing gases, noxious

1 fumes have been a result of the uncontrollable fire that's  
2 happening underground. And this has been leading to  
3 community members having out of control chronic bloody  
4 noses, headaches, nausea, tremors, heart palpitations,  
5 miscarriages, cancer clusters, and more. And we know that  
6 the true scope of the harm has been confirmed by recent  
7 CASPER Health Study, which revealed data far more alarming  
8 than what residents had reported just that we've heard  
9 anecdotally.

10 Cancer rates in surrounding neighborhoods have  
11 been eight times higher than the three-year county  
12 average. And miscarriages are occurring at 57 times the  
13 normal rate of LA County. One mother I met had five  
14 miscarriages just herself. These are not abstract  
15 numbers. These are moms, and children, and grandparents,  
16 entire families living under these conditions that would  
17 be unthinkable in other settings. So this catastrophe  
18 that continues to harm our community did not arise out of  
19 nowhere. And I believe with the right data, the right  
20 transparency, coordination and the right authority for  
21 corrective action, it could have been avoided. And that's  
22 I think what is ultimately so frustrating about this  
23 situation.

24 We've now also learned that the federal EPA has  
25 given waivers to 11 other landfills or 10 other landfills,

1 so 11 total, including Chiquita, to operate at these  
2 higher temperatures. So it's clear that Chiquita Canyon  
3 is really a canary in the coal mine. And it should be a  
4 clear signal that we do not have the regulatory structure  
5 in place to effectively prevent disasters like this in the  
6 future. And we have to do more and the Methane Regulation  
7 is really a critical piece of protecting our community  
8 health and our environment.

9           So I'm here today to join with my community  
10 members who I know some are there or will be virtually,  
11 who are suffering the impacts of these landfills that have  
12 spiraled out of control to urge the Board to not only  
13 stand firm on this methane proposal, but to also make sure  
14 that the regulations have the teeth necessary for CARB to  
15 take action against the landfills that are not fixing the  
16 problem, because, as I said before, we know that if they  
17 take quick and immediate action, all of these issues can  
18 be prevented.

19           So, you know, we -- more than that, I think CARB  
20 really must ensure that landfills are required to use  
21 modern technology to track temperatures and look at  
22 methane and other gas leaks. Satellite systems can  
23 quickly detect plumes, but drones can look even more  
24 locally and targeted. And it's essential that we're using  
25 up-to-date technology, because our community's safety

1 truly depends on it.

2 As technology can shine a lot on issues at  
3 landfills, we have to create a rule that allows CARB to be  
4 nimble and take advantage of new technology that can make  
5 a huge difference in the speed of information and the  
6 accuracy of that information. We also need to make sure  
7 that CARB, and the local resource boards, and other  
8 oversight agencies have data and tracking and stringent  
9 record keeping requirements on gases that given  
10 indications -- that give indications if subsurface  
11 reactions are trending in bad directions, and the ability  
12 to provide corrective guidance, and really, you know,  
13 force action to happen.

14 One of the things that we have seen through this  
15 process is there's an extreme ability for landfill  
16 operators to delay. And so, you know, the rule comes down  
17 what they have to do or the directive. They'll come up  
18 with a plan. That takes a while. Then the plan doesn't  
19 meet the standard, so it goes back and forth forever. And  
20 it's like we continue to just wait, and wait, and wait for  
21 action to actually happen. And that has to stop. There  
22 has to be real timelines and real accountability built  
23 into this, so that action needs to happen as quickly as  
24 possible, because we know time is our enemy, when we are  
25 talking about the creations that can create a SET event.



1           We also need to make sure that CARB can allow air  
2 districts to go above and beyond regulatory requirements  
3 and make tailor-made plans for their districts. We know  
4 that not every landfill is the same and there's unique  
5 situations and unique solutions for each one. And so, you  
6 know, different areas may need different rules.

7           And finally, we need transparency that include  
8 proactive work to notify surrounding communities if high  
9 temperature waivers are granted to the nearby landfills,  
10 as well as ongoing public posting of temperature and gas  
11 data that is both public -- both public and watchdog  
12 organizations can see and is available to them.

13           We know -- you know, one of the reasons we found  
14 out about Chiquita Canyon is because neighbors started  
15 raising alarm bells about the smell that they -- and  
16 symptoms that they were experiencing. We need, you know,  
17 extra eyes on the ground when unfortunately the eyes that  
18 should be watching fall down on the job.

19           And so, this is really critical. And also, you  
20 know, once problems exist, we've been having tons of  
21 delays in the ability to get information about what's  
22 happening at Chiquita Canyon. And so when we know there's  
23 a problem, we should definitely be able to access this  
24 information, including the public and other community  
25 organizations supporting it.

1           So, you know, there's -- there was no  
2 transparency about the 11 landfills that the EPA granted  
3 waivers to. Those are 11 landfills that are able to  
4 operate above safe temperatures without public  
5 transparency needed. And we know that 15 years is too  
6 long to go without a review and evaluation or update to  
7 these regulations. But I'm really, really happy to see  
8 that CARB has prioritized this, has moved with urgency,  
9 and especially, you know, as we've learned more about how  
10 landfills behave, and -- as they age, and use more -- and  
11 are used for methane extraction and how it can go from bad  
12 to terrible if we are not paying attention and we are not  
13 taking quick action.

14           So we know that CARB's Methane Rule is part of a  
15 larger multi-agency update that's needed to address these  
16 daunting challenges and future trash. And communities  
17 like mine need these regulations to be enforced  
18 consistently, strongly, and in coordination with  
19 operations from other agencies. The Board really -- you  
20 know, I implore you to take advantage of this opportunity  
21 and take it seriously. We cannot afford the kind of  
22 suffering that people are experiencing in our community.  
23 And, you know, I know there was mention of the cost of  
24 these new regulations, but I will tell you it is costing  
25 millions and millions of dollars a week to export this

1 leachate, to, you know, install each of these additional  
2 wells that are needed at Chiquita Canyon. It is  
3 incredibly costly not to take action, and not only for the  
4 regular -- not only for the operators, but also for the  
5 regulators. This massive response of State agencies that  
6 has been week by week, and daily, involved in Chiquita  
7 Canyon is not something we can multiply by 11 times, let  
8 alone more than that that we may not know of.

9           So, this is -- you know, this is not only  
10 preventing public health disaster and environmental  
11 disaster, but it's preventing economic disaster for the  
12 State. So thank you so much for your time and attention,  
13 for coming to our community and talking with community  
14 members and hearing these stories firsthand, because I  
15 think once you hear it, you can't turn away from it  
16 anymore. And I'm so grateful to my community for having  
17 such a strong voice, and being incredible advocates, and  
18 look forward to this regulation being put in place and  
19 really making a difference for communities like ours.

20           Thank you so much.

21           CHAIR SANCHEZ: Thank you, Assemblymember, for  
22 taking the time to join us today and also for your laser  
23 focus on protecting your community. Really appreciate it.

24           I will now turn to the Board Clerk and ask them  
25 to begin calling on public commenters. Thank you.

1 BOARD CLERK MOORE: Thank you, Chair Sanchez.

2 Public sign-up closure for this item will be at  
3 10:55 a.m. We currently have 27 people with their --  
4 with -- who have turned in a request-to-speak card and  
5 wish to speak at this time. I apologize in advance if I  
6 mispronounce your name. I would like to remind all  
7 commenters to speak slowly, closely, and clearly into the  
8 microphone for our interpreters and court reporter.

9 We will be showing a list of the next several  
10 commenters on the screen, so you can be prepared to come  
11 to the podium.

12 Our first commenter is Erica Parker.

13 ERICA PARKER: I'll just crouch a little bit.

14 Good morning, Chair and members. My name is  
15 Erica Parker. I'm with Californians Against Waste -- oh,  
16 keep going -- an environmental org focused on reducing the  
17 impacts of waste disposal. I want to start by thanking  
18 the staff for the years of very hard work and stakeholder  
19 engagement on this regulation. It's clear that a lot of  
20 careful consideration has gone into developing a balanced  
21 proposal that protects communities, but also drives us  
22 towards our climate goals.

23 I have three main points to highlight today.  
24 First is that we're grateful to see advanced monitoring  
25 technologies like drones and other remote sensing tools

1 prioritized in the Board resolution. These tools are  
2 essential for improving surface emissions monitoring,  
3 efficiency, and coverage. To support accountability and  
4 timeline progress, we ask the Board to include a  
5 commitment to assess these available technologies within  
6 18 months of adoption of these amendments. A clear  
7 timeline would help ensure that monitoring improves as  
8 quickly as the technology does, strengthening emissions  
9 protections and preventing dangerous leaks.

10           Second, we strongly support CARB's temperature  
11 monitoring framework. However, the amendments allow wells  
12 to exceed 131 degrees Fahrenheit for 60 days before  
13 downwell monitoring begins. And with only monthly  
14 readings, this could mean nearly three months of elevated  
15 temperatures before subsurface conditions are observed.

16           This is particularly concerning, since  
17 temperature differentials down the well can be extreme.  
18 To reduce the risk of runaway heating events, we urge CARB  
19 to shorten this timeline to 30 days and increase  
20 monitoring frequency to weekly, ensuring earlier detection  
21 and intervention.

22           Finally, we sincerely thank CARB for prioritizing  
23 data transparency in the Board resolution. Making data  
24 publicly available is a huge step towards public trust,  
25 accountability and community safety, values I know that

1 many people in this room uphold in their daily work.  
2 We're excited to see this rule advance and look forward to  
3 continuing this work to make sure the LMR reaches its full  
4 potential.

5 In a time of federal backsliding on climate  
6 policy, it's heartening to see California lead on  
7 meaningful methane regulations.

8 BOARD CLERK MOORE: Thank you.

9 Jane Williams.

10 JANE WILLIAMS: Good morning. Welcome, Chair  
11 Sanchez. Nice to see you in your new position. Thank you  
12 to the Board members for working with the staff for this  
13 very long time on this amazing regulation. I'm Jane  
14 Williams. I am the Executive Director of California  
15 Communities Against Toxics and I have worked on many,  
16 many, many issues in California. But one of the first  
17 ones I worked on in the early 90s was the expansion of  
18 landfills across the state.

19 And I stand before you today supporting the rule,  
20 and supporting the resolution, but to issue a bit of a  
21 warning. Our landfills are burning to the ground and we  
22 need to do something about it. This rule needs to be the  
23 first step, not the last step, in what CARB does and the  
24 CalEPA, other boards and directors do, to get a unified  
25 response to this crisis. I was recently talking to one of

1 the enforcement folks at Region 9 in Cal -- in U.S. EPA  
2 and was surprised to hear them say that there are two  
3 major catastrophes happening in California. One is that  
4 people are still drinking contaminated water, which I know  
5 is not CARB's problem, and two, is that our landfills are  
6 burning to the ground.

7 So, this rule is a great first step and I want to  
8 thank the staff for working so diligently on it, but it  
9 needs to be just the first step. We need CalEPA to  
10 develop a coordinated response to prevent landfill fires  
11 and to do a much better job enforcing the vast array of  
12 landfill regulations that we have and do a better job of  
13 integrating the response.

14 We sit here in the CalEPA building. I was here  
15 for its unveiling. We have these beautiful sculptures.  
16 We made the building so people would talk to each another.  
17 We need to talk to each other more. Thank you for the  
18 opportunity to speak today.

19 BOARD CLERK MOORE: Thank you. Michael Mulligan.

20 DR. MICHAEL MULLIGAN: Good morning, Madam Chair  
21 and Board members. Michael Mulligan. I'm a retired  
22 family physician and former health Officer of Placer  
23 County in the early 2000s, also the grandfather of seven  
24 little boys.

25 In my work as an MD and in public health, I'm

1 well aware of the negative health risks to environmental  
2 exposures, whether that be living near a freeway, a  
3 refinery, or a landfill. Epidemiologic evidence shows  
4 increased risks of asthma, other respiratory illnesses,  
5 and cancers. We know these negative health outcomes also  
6 are more often in -- with people of color, who live in  
7 sites located closer to their communities, who site --  
8 where the sites are closer to their communities.

9           So I want to thank CARB for embracing the  
10 technology of satellites and drones, allowing industry and  
11 regulators to see these leaks faster. I want to thank  
12 CARB for embracing transparency in reporting, so that  
13 these communities and citizens can have information on  
14 what they're being exposed to, and agency in advocating  
15 for their own health.

16           Less methane will be less ozone, and less asthma,  
17 and less respiratory illnesses. I'd also like to ask CARB  
18 to continue these good efforts by considering fenceline  
19 monitoring systems to allow for even faster and better  
20 data on methane and other air toxins. You may hear about  
21 cost and there certainly may be some. But let's relate  
22 this to health care for just a moment. The cost, for  
23 instance, of a measles epidemic, if we go down that road  
24 again, to both individuals and society are going to be  
25 far, far higher than the cost of vaccinating our children.



1           Similarly, the cost of treating advanced colon or  
2 breast cancer far outweighs the cost of screening and  
3 early detection. There is a theme here for sure and that  
4 is that detection, prevention, and mitigation are much  
5 less expensive than dealing with downstream consequences.

6           Lastly, I'd like to end by telling you about a  
7 concept from a book called *The Good Ancestor*, which  
8 describes how indigenous populations look seven  
9 generations down in their planning. With climate change,  
10 it's imperative that we include our grandchildren and yet  
11 unborn people as we plan for how we're living today.

12           I hope -- our legacies are being determined right  
13 now in this room. And I thank you for that consideration.

14           BOARD CLERK MOORE: Thank you.

15           Chris Shimoda.

16           CHRIS SHIMODA: Good morning, Chair Sanchez and  
17 Board member. Chris Shimoda on behalf of WM. Thank you  
18 for the opportunity to provide comments.

19           WM provides best-in-class waste and recycling  
20 collection, processing, and disposal services, supported  
21 by a network of regional landfills, many of which WM owns  
22 and operates. WM is committed to minimizing our  
23 environmental impact, while continuing to provide  
24 cost-effective and affordable collection services to both  
25 residential and commercial ratepayers. We'd like to thank

1 staff for the work on the draft LMR and look forward to  
2 working with them on additional 15-day changes in the  
3 following areas:

4 First, ensuring that LMR plays a productive role  
5 in managing site-specific conditions associated with  
6 elevated temperature landfills; second, consistent with  
7 air district comments, harmonizing overlapping federal,  
8 State, and local regulations applicable to landfills to  
9 the extent feasible and identifying which of the  
10 additional proposed data collection and reporting  
11 parameters are necessary and useful to diagnose conditions  
12 at the landfill; third, ensuring worker safety and core  
13 landfill functions are not compromised; finally,  
14 consistent with the proposed Board Resolution, providing a  
15 framework for certification of emerging alternative  
16 monitoring technologies.

17 WM is committed to working with CARB to  
18 accomplish its goal of modernizing the LMR, delivering a  
19 workable rule for operators, and further reducing methane  
20 emissions in the most cost-effective manner possible.  
21 We're also committed to working with CARB, its sister  
22 agencies, the Legislature, and other stakeholders to  
23 ensure that elevated temperature events are diagnosed and  
24 properly managed.

25 Thanks again for the opportunity to comment. We

1 look forward to continuing to work with CARB to update  
2 this important regulation.

3 Thank you.

4 BOARD CLERK MOORE: Thank you. Mike Caprio.

5 MIKE CAPRIO: Good morning, Chair Sanchez,  
6 members of the Board, and staff. Mike Caprio with  
7 Republic Services. Appreciate the opportunity to comment  
8 today.

9 First off, I want to thank staff and all of you  
10 for your hard work on the LMR update, a very complicated  
11 topic and has involved many stakeholders. We believe that  
12 updating the LMR at this time is appropriate to  
13 incorporate current technologies and finding of remote  
14 imagery, gather more predictive and meaningful data,  
15 incorporate more immediacy into the response to changes in  
16 key metrics, and provide host communities with greater  
17 transparency.

18 However, these goals need to be achieved with the  
19 following in mind. The facilities need to be operated in  
20 a safe and efficient manner. There needs to be focus on  
21 efficient collection of meaningful and significant data.  
22 The corrective action measures need to be targeted along  
23 with the mitigation measures. And we need to avoid  
24 unintended consequences of unidimensional mitigation  
25 measures. There certainly needs to be attention to cost

1 of implementation and impacts on race. And finally, allow  
2 the AQMDs to provide clear oversight of a substantial  
3 change in the rule.

4           The primary areas that we see requiring further  
5 attention include timelines and methods of gas collection  
6 at the working area of the landfill, having the annual  
7 hours of total gas system downtime be addressed with the  
8 thought of uncontrollable circumstances not being included  
9 in that time. Pleased to see that may be part of a 15-day  
10 change. We believe there needs to be more flexibility in  
11 the use of remote sensing equipment for unsafe to walk  
12 areas, and the extent of monitoring relative to frequency  
13 parameters need to be streamlined.

14           We close by asking for the comments received from  
15 industry and local government to be fully vetted and  
16 continue a process that is iterative enough to allow for  
17 dialogue on all the items that I've mentioned and  
18 appreciate the time to comment today and all the work  
19 that's been put into this far.

20           BOARD CLERK MOORE: Thank you.

21           Evan Edgar.

22           EVAN EDGAR: Chair and Board Members. My name is  
23 Evan Edgar of Edgar Associates. I was a county engineer  
24 for 10 years in Yolo and Kern and got to know all about  
25 landfills. Today, I'm not opposed or supporting the

1 Regulation. Today, I'm carbon neutral talking about the  
2 future of biomethane.

3 As you know, biomethane leaks from landfills over  
4 30 years, but I can produce biomethane for RNG in 30 days.  
5 So SB 1383 has a purpose to divert organics from the  
6 landfills to make biomethane. So this LMR will generate  
7 more biomethane. If you reduce methane with controls, we  
8 have more biomethane to use. And there's no reason to  
9 destroy biomethane in a flare. We've got to harness that  
10 biomethane in order to make fuels for the refuse trucks.

11 Landfill operators have a tough time to permit  
12 internal combustion engines, so a lot of people just flare  
13 it. Flare, flare, flare. There's no reason to do that  
14 when we can actually make bio-CNG at the landfill and put  
15 it back in the same trucks that go to the landfill.  
16 Landfills are remote. They don't have a PUC pipeline  
17 nearby at a remote landfill. CARB staff wants us to take  
18 biomethane and take it to hard-to-decarbonize industries.  
19 We are decarbonizing our own industry. We don't need to  
20 pipeline it to other people where there's no pipeline  
21 exists. So what will happen is that CARB has been talking  
22 about having a biomethane workshop for the last three and  
23 a half years. And every month I'm up here asking for that  
24 workshop and what happens to the future of biomethane.

25 Today, didn't even address it. Do we flare it or

1 put it back into the trucks? The Advanced Clean Fleet  
2 Rule on the public agencies are requiring ZEVs. There's  
3 no reason to put a ZEV in place when the public fleet can  
4 use biomethane from the public landfills as cost effective  
5 today.

6 So I look upon staff here is let's hold that  
7 hearing. For three and a half years I stand in front of  
8 you, talk about the future of biomethane, and it's  
9 deafened on this Board. Let's have that hearing soon and  
10 harness biomethane.

11 Thank you.

12 BOARD CLERK MOORE: Thank you.

13 Gracyna Mohabir.

14 GRACYNA MOHABIR: Hi. Good morning, Chair and  
15 Board members. Gracyna Mohabir, California Environmental  
16 Voters. Thank you for the opportunity to comment today.

17 The need to amend these regulations has become  
18 more apparent over the years, as California drills down on  
19 our greenhouse gas reduction strategies, as better  
20 technology becomes available to aid in these goals, and as  
21 we have a greater understanding of how communities will be  
22 harmed if these issues are not addressed proactively and  
23 quickly.

24 I want to first acknowledge CARB staff's  
25 tremendous work to develop and improve upon these proposed

1 amendments. We appreciate the commitment to proactive  
2 emissions management and greater transparency.

3 EnviroVoters is strongly supportive of the path  
4 for required use of alternative surface emissions  
5 monitoring tech, which would improve upon the current  
6 limited scope of how landfill areas are monitored. To  
7 harness the full potential of these advanced technologies,  
8 we ask that staff consider a midterm review so this is  
9 pursued within a reasonable timeline.

10 We are also glad to see the progress with the  
11 temperature monitoring framework. However, we ask that  
12 earlier downwell monitoring triggers be incorporated as  
13 the current timeline remains a little too long and raises  
14 flags about not properly preventing landfill fires. As  
15 both the Chair and staff shared earlier, addressing  
16 methane in California is one of the most critical pathways  
17 to addressing climate change in an immediate manner,  
18 especially when we're facing an unprecedentedly  
19 challenging federal environment.

20 The proposed amendments have undeniable benefits  
21 to community members who will experience cleaner air due  
22 to reduced co-pollutants and to the state as a whole, as  
23 we cut down on one of the most potent greenhouse gases.  
24 And this will be achieved in a cost-effective manner. We  
25 urge consideration of these changes and support for these

1 amendments. Thank you for your leadership on this issue.

2 BOARD CLERK MOORE: Thank you.

3 Kevin Ruano.

4 KEVIN RUANO: Good morning, Madam Chair and Board  
5 members. I work, live, and grow -- and grown up in  
6 Richmond, a community in the Bay Area where it's being  
7 faced many sorts of different emission sources, such as  
8 the Chevron refinery, the Republic Service landfill, and  
9 other toxic contaminated sites. We know what slow  
10 information there are for families who deal with bad air  
11 quality already. I support this rule, but I want to  
12 highlight two points that matter for the betterment for  
13 frontline marginalized communities of color.

14 We need continuous fenceline monitoring with real  
15 time public data. People who -- people should not file  
16 record requests to find out what their breathing. They  
17 deserve clear information the moment emissions arise.

18 We also need faster action on high-temperature  
19 wells. Delays increase the risk of underground fires and  
20 impact nearby communities. Stronger temperature  
21 thresholds and quicker checks protect people before things  
22 get worse. I am asking CARB to require continuous  
23 fenceline monitoring with public access and to strengthen  
24 the temperature response timeline. These steps protect  
25 communities like mine that live closest to the farm.



1           Thank you.

2           BOARD CLERK MOORE:   John Kennedy.

3           JOHN KENNEDY:   Good morning.   John Kennedy with  
4   the Rural County Representatives of California.   We  
5   represent 40 of the state's 58 counties.   As local  
6   governments, we own and operate landfills both active and  
7   closed landfills covered and uncovered landfills.  
8   Two-thirds of the landfills regulated under this  
9   regulation are owned and operated by public entities.

10           We're pleased to see ARB update the Landfill  
11   Methane Regulation.   We like trying to integrate newer  
12   technologies.   We're strongly supportive of efforts to  
13   reduce emissions and reduce emissions faster and  
14   especially trying to detect problems earlier in the  
15   process to prevent what happened at Chiquita Canyon.

16           As local governments and operators, we want to  
17   ensure that the LMR is implementable for our communities,  
18   not unnecessarily burdensome, while also protecting the  
19   communities that are host to those landfills.   We really  
20   appreciate the staff's extensive outreach and  
21   conversations with all stakeholders.   So while we support  
22   the overarching goals of the LMR, we remain deeply  
23   concerned with some of the specific measures included in  
24   the regulation.   We appreciate your direction to staff to  
25   continue working on these measures to make it more

1 implementable for local governments.

2           Some of the unique challenges that we face will  
3 be State-imposed contracting and procurement requirements  
4 that delay our project delivery time frames, operational  
5 challenges associated with facilities that are in atypical  
6 locations, challenges bringing people out to the site when  
7 we have facilities in remote locations, and especially  
8 when it comes to a systemwide shutdown, we have a lot of  
9 energy reliability challenges in many of our communities.  
10 PSPS events are one thing, but we've also had 2,400 fast  
11 trip outages annually in our member counties over the last  
12 few years.

13           So, appreciate the opportunity to be here today  
14 to continue working with the staff and hope to continue to  
15 refine these issues that we've observed and other local  
16 governments have observed going forward. Thank you.

17           BOARD CLERK MOORE: Oshea Orchid.

18           OSHEA ORCHID: Good morning. Thank you, Madam  
19 Chair and members of the Board for being here today and  
20 for hearing from public about these important amendments.  
21 I'm here in support of the amendments as a member of the  
22 community of Val Verde.

23           Val Verde is an amazing community. You're going  
24 to hear from a number of residents today to talk about  
25 what we're really losing, because their wasn't enough

1 prevention in our community, and how much data  
2 transparency is important. And so with the Chiquita  
3 situation, we can really see what happens when we don't  
4 take preventative measures. Our community was calling  
5 AQMD and getting severely sick before regulators knew what  
6 was happening and knew there was toxic hazardous chemicals  
7 in our environment.

8           And when we talk about the cost, you know, we're  
9 looking at this like is it a cost to the operators, it is  
10 a cost to the public? This is a cost to our community  
11 that we need to decide. Are we going to put the cost up  
12 front and figure out getting what we need to make sure  
13 that our environment is safe or are we going to put the  
14 cost on the back end. And for the operators, the cost  
15 what's happening at Chiquita is extremely significant.  
16 And I think if they were to go back in time and decide to  
17 do more monitoring, and catch this earlier, and handle it,  
18 they would have.

19           And so, I know for other operators who don't have  
20 an elevated landfill temperature event right now, they  
21 might be saying this is too much cost. But the truth is,  
22 even for the operators, spending more money up front to  
23 make sure this doesn't happen again is extremely  
24 important. And then, of course, for our community, I  
25 think all of us who are just wanting to put our trash in

1 the trash bin wouldn't mind a few more cents to make sure  
2 that we can buy a house without having the concern of  
3 being poisoned in our own homes. Thank you so much.

4 BOARD CLERK MOORE: Thank you. Jennifer Elkins.

5 JENNIFER ELKINS: Good morning, Chair Sanchez,  
6 Board members, and staff. My name is Jennifer Elkins.  
7 I'm a resident of Val Verde, President of the Val Verde  
8 Civic Association, and an advocate for environmental  
9 justice. I stood before you back in March and begged for  
10 you to take action, so that no other communities would  
11 have to suffer like mine has. I'm here today to tell you  
12 we are still being harmed by the Chiquita Canyon landfill.  
13 We are still suffering every single day.

14 I have transferred my children to different  
15 schools further away. I spend three hours a day driving  
16 my kids too and from school now. The commute has been a  
17 sacrifice, but it's been well worth it, because I know my  
18 children and breathing cleaner air, and I've seen their  
19 health improve.

20 The bloody noses, skin irritation, and breathing  
21 issues are less than before, because they're spending less  
22 time in the area. I signed them up for sports and extra  
23 curricular activities across town. And we spend as little  
24 time as possible at home. And when we are home, we stay  
25 inside, windows and doors shut tight. We are prisoners in

1 our own home.

2 We thank CARB for embracing data transparency  
3 that is easily accessible and express the need for  
4 fenceline monitoring to alert of potential threats sooner  
5 and real time public notification. These things are  
6 essential to protecting the people who live, work, or go  
7 to school near a landfill. The disaster at Chiquita  
8 Canyon Landfill was preventable.

9 Updating the regulations will better protect  
10 communities and prevent disasters like Chiquita from  
11 happening at other landfills. California is supposed to  
12 be the leader in environmental protection, but we're  
13 failing. How can we be leaders when our own people are  
14 being poisoned in their homes, while multi-billion dollar  
15 companies continue to profit.

16 These grocery bags here cost about \$0.30 and we  
17 all use these bags for our groceries and we're willing to  
18 pay for them out of convenience, even though they'll  
19 likely end up in the very landfills that are harming us.  
20 We should be willing to pay the same price for higher  
21 standards that protect communities. \$0.31, that's all it  
22 will cost us. The cost of prevention is far less  
23 expensive than the cost of inaction. And it doesn't end  
24 with regulation. Implementation is imperative.

25 Lastly, this is a systemic issue and we really

1 need to address, you know, the communities that this is  
2 affecting. And it's my hope that this Board will pass the  
3 strongest Landfill Regulation possible today to protect  
4 California communities and the climate.

5 Thank you.

6 BOARD CLERK MOORE: Thank you.

7 Raul Engle.

8 RAUL ENGLE: Good morning. My name is Raul.  
9 Thank you, Chair, Board for having me.

10 Good morning. I stand here before you, not just  
11 as a resident in this community, but also as a parent, a  
12 neighbor, and special education teacher, who knows what  
13 it -- what it means to fight for the access to fundamental  
14 quality of life.

15 I'm here to state unequivocally that we must pass  
16 and enforce a methane regulation. And thank you for  
17 leading on that. For far too long, the air we breathe has  
18 been a hidden burden that my family, especially when in  
19 different areas of Val Verde, suffers from frequent  
20 headaches. But let me be clear, this is not  
21 psychosomatic. These conditions are mere -- are not mere  
22 inconveniences. They increase our health risks and lead  
23 to significant unbudgeted costs, primarily medical  
24 expenses.

25 The toll extends beyond my home. I have

1 neighbors who have battled cancer, my next door neighbor  
2 actually. Just recently, a neighbor died of cancer and I  
3 cannot describe the fear this instills. Our environment  
4 should not carry the risk of a terminal diagnosis. This  
5 is why I fully support the measures and the, cost like  
6 Jennifer noted -- mentioned to regulate this issue  
7 properly. We must be willing to pay more to secure the  
8 health and safety of our children. The consequences of  
9 delaying the information and actions are already  
10 disrupting our lives. This uncertainty has resulted in  
11 constant change, focusing on rescheduling activities like  
12 community events, and even change family plans including  
13 Thanksgiving upcoming.

14 We cannot organize our lives when the safety of  
15 our air quality is constantly in question. That brings me  
16 to a core issue to access to understanding. So thank you  
17 for updating the advanced monitoring, first of all. And  
18 this critical step helps provide the technical data on  
19 methane and just must now be made accessible to everyone.  
20 The general population needs visual charts, clear charts,  
21 maps and straightforward explanations. So, having these  
22 visual aids is critically important.

23 So as my job as a special education teacher, my  
24 primary responsibility is to modify curriculum --

25 BOARD CLERK MOORE: Thank you.

1 RAUL ENGLE: -- to remove barriers, but my  
2 students -- but we also need to have access --  
3 accessibility to everybody in the public. So thank you.

4 BOARD CLERK MOORE: Thank you.  
5 Kerry Frohling.

6 KERRY FROHLING: Good morning. My name is Kerry  
7 Frohling. And thank you, Board, for allowing us to speak  
8 to you. I've been a -- I've been a resident of Castaic,  
9 which is near Chiquita Canyon Landfill, for 20 years. And  
10 in the last five years, I've had cancer twice. And going  
11 through the chemotherapy and the radiation, I would not  
12 wish that upon anybody. And while I was recovering from  
13 one of my surgeries, I -- one of my neighbors posted a  
14 picture of the carbon mapping. And it showed a plume from  
15 the landfill going all the way up into my community, which  
16 is about 2.3 miles away, and it covered Val Verde. And I  
17 live in the Hillcrest community of Castaic.

18 This -- I started researching and trying to find  
19 the data, so I really appreciate the clear data that  
20 you're going to make it for the public, because it is  
21 difficult to compare the different gases and understand  
22 them. But the thing that really got me is that the  
23 landfill near us, they do not maintain properly their  
24 equipment. There is no definition. The flares are always  
25 going down and there's no punishment for them when their



1 equipment breaks down. When we don't have the data,  
2 there's nothing. So properly maintained equipment needs  
3 to have teeth. You need to enforce the rules. The  
4 landfill is completely mismanaged and ignored the EPA and  
5 CARB's orders. And this needs to stop immediately.

6 When landfills can scrub data, that is wrong.  
7 Well managed needs to be defined.

8 BOARD CLERK MOORE: Thank you.

9 KERRY FROHLING: And as a parting note, I had to  
10 leave my community that I loved so much and so that my  
11 family would be safe. And it's really hard on us  
12 financially and we need --

13 BOARD CLERK MOORE: Thank you for your comment.  
14 That concludes your time.

15 KERRY FROHLING: Thank you.

16 BOARD CLERK MOORE: Thank you.

17 Bianca Lopez.

18 BIANCA LOPEZ: Good morning. My name is Bianca  
19 Lopez. I'm co-founder of Valley Improvement Projects.  
20 We're based in Stanislaus County in an area that has one  
21 of the worst air basins in the country.

22 Our nonprofit has also successfully shut down the  
23 last two incinerators in the state of California, and we  
24 are very proud of that. Now our county is working to  
25 reduce the -- everything that we are going to be putting

1 in the landfill. Thirteen thousand households in our  
2 rural communities are exempt from SB 1383, and all of  
3 their green waste goes to the landfill and will continue  
4 to go to the landfill.

5 As we continue to educate community members and  
6 work with our jurisdictions to keep those green waste out  
7 of the landfill, we are here also advocating and in  
8 support of the updates for the LMR. We need to be very  
9 strict with protections for our communities. We can't  
10 wait. Our community is not going to wait to become a  
11 Chiquita -- or La Chiquita. We're not going to experience  
12 that before we come to you. We're looking to you to make  
13 sure that you increase protections to our communities and  
14 that you do not delay. A 10-year update is too long to  
15 wait.

16 I'd like to just highlight that the transparency  
17 piece in the regulation is very important to us, not just  
18 transparency and access to immediate information, so that  
19 we don't have to request public records is very important,  
20 especially for language -- language -- English language  
21 proficiency -- or people who lack English language  
22 proficiency.

23 Today, we saw some challenges with the  
24 interpretation. Your presentation is only in English.  
25 The documents and attachments on your website for this LMR

1 update is only in English. This is not accessible and we  
2 must do better. In California, Spanish must be included  
3 in your access to information.

4 BOARD CLERK MOORE: Thank you.

5 I want to remind the commenters that the public  
6 sign-up closure has -- the public comment sign-ups have  
7 now closed.

8 Our next commenter is John Mataka.

9 JOHN MATAKA: Yes. My name is John X. Mataka and  
10 I am from Grayson, California and I'm the President of the  
11 Grayson Neighborhood Council.

12 I recently learned about the threats that methane  
13 poses to our environment and our health. And I'm here to  
14 urge CARB to make some much needed changes to the Landfill  
15 Methane Regulation.

16 The method of walking the surface with a  
17 hand-held dictator -- detector, excuse me, leaves huge  
18 areas of the landfill unchecked due to steep terrain and  
19 dangerous conditions. And if the detector is held just a  
20 little too far from the surface, it can miss leaks.  
21 Instead, landfill operators and regulators should be  
22 required to use the latest technologies to detect methane  
23 leaks, including drones and satellites.

24 Second, I'm greatly concerned about the potential  
25 for underground fires due to excessive subsurface

1 temperatures, as was seen by the Chiquita Canyon Landfill  
2 in Southern California. The proposed temperature  
3 threshold of 131 degrees is far too high to keep this from  
4 happening and must be lowered as the temperatures deeper  
5 underground could be even higher.

6 Last, CARB needs to ensure that communities have  
7 full access to real-time data on methane leaks and  
8 temperature exceedances, so that they can make informed  
9 decisions about how to protect themselves and their  
10 families. I want to say that my community has suffered  
11 through the Westly Tire Fire, the only tire incinerator in  
12 California. We've suffered through 35 years of burning  
13 800 tons of garbage. We have the only landfill in our  
14 county. The other one is shut down due to methane issues.  
15 It was in Turlock.

16 And so, now as Bianca has said, that green waste  
17 that I'm one of those 13,000 residents that doesn't have a  
18 way to dispose of my green waste, because our census tract  
19 is too small. Give me a break. So anyway -- so that's  
20 all going to go to the landfill. So I totally support  
21 this, but it has to have teeth. Thank you.

22 BOARD CLERK MOORE: Bill Murphy.

23 BILL MURPHY: Good morning. I'm a grandfather  
24 who knows that all children deserve healthy and safe  
25 homes. And I echo the comments of so many of the public

1 commenters here today. I volunteer Elders Climate Action  
2 and Climate Action California to reduce emissions Of super  
3 pollutant methane and refrigerants. These gases are among  
4 the few fast-acting solutions to the emerging climate  
5 crisis. Landfill methane is thus pivotal to humanity's  
6 future success.

7           This regulation gives me hope. Humanity has new  
8 super powers, methane satellite and drone detection super  
9 powers that will give even better results in the coming  
10 years, for example by folding in predictive AI. I ask  
11 that this version of LMR not be the last word and instead  
12 that CARB be vigorous at bringing further technological  
13 tools into actual practice quickly, as they achieve proof  
14 of concept, for example, applying predictive AI to  
15 automated wellhead tuning or to anticipating imminent  
16 leaks.

17           Further, we already have technology for real time  
18 fenceline monitoring alerts and transparent public facing  
19 websites, or scorecards. I was a cost accountant for 34  
20 years and got deeply into five or six different  
21 industries. Moore's Law has shown that humanity -- has  
22 shown humanity over and over again that we get lower, not  
23 higher, costs as these very technological super powers  
24 mature. Prevention is always a whole hell of a lot  
25 cheaper than cure. Everybody knows that. As a finance

1 lifer I can tell you that preventing a hotter, drier,  
2 sicker future for the American west is dramatically  
3 afford -- more affordable than having -- for family  
4 wallets than having to suffer the harms.

5 I feel good about this regulation. My  
6 organizations thank the LMR staff for your savvy and the  
7 Board for its leadership. I really want to see this body  
8 of knowledge scaled to other states and other nations. I  
9 close by reminding Board members of a different but  
10 related topic, and that is that I ask CARB to urgently  
11 address our state's much larger anthropogenic source of  
12 methane, livestock. Please order effective action in that  
13 arena.

14 Thank you very much.

15 BOARD CLERK MOORE: Brandi Howse.

16 BRANDI HOWSE: Good morning and thank you, Chair  
17 Sanchez and members of CARB for hearing me speak today.  
18 My name is Brandi Howse and I have traveled here from Val  
19 Verde, California, where I live a thousand feet from the  
20 Chiquita Canyon Landfill. We've lived there for 27 years,  
21 where they're experiencing the elevated temperature  
22 landfill event.

23 I don't know if you've ever had an encounter with  
24 a cloud of methane and other landfill gases, but I do on a  
25 daily basis. You become dizzy, disorientated, nauseous.

1 You get headaches, burning sinuses, and bloody noses.  
2 These are just a few of the short-term effects me and my  
3 neighbors experience.

4 We are left to be concerned with over -- of our  
5 long-term effects. As of now, I know that myself and my  
6 neighbors to my left and my right have all had cancer, and  
7 that's been this last year. So, our community is asking  
8 to take action to protect other communities from our same  
9 fate by requesting three essential provisions in the  
10 updated regulations.

11 First, the data transparency that is easily  
12 accessible. Our communities have the right to know what's  
13 happening at our -- at the landfills near us. Often, the  
14 data that is currently provided is hard to read and hard  
15 to access, so we would just Need more accessibility.

16 Second, fenceline monitoring to alert of  
17 potential threats sooner. So, the technology exists, and  
18 we must require it. We need to know when we're in  
19 trouble.

20 Third, real-time public notifications when danger  
21 and emission levels are detected. Communities must be  
22 alerted immediately again, so we can get ourselves to  
23 safety. Other things, such as wildfires and floods have  
24 detection. We think that, you know, we deserve the same.

25 Overall, we don't think that these are radical

1 requests. They're just basic environmental principles  
2 that we need.

3 Thank you.

4 BOARD CLERK MOORE: Thank you.

5 Alicia Acevedo.

6 ALICIA ACEVEDO (THROUGH INTERPRETER): Good  
7 morning. My name is Alicia Acevedo. I apologize. It's  
8 my first time here. I'm a little nervous. I hope I can  
9 provide a good comment.

10 For me, it's very important to maintain our  
11 environment very clean to prevent fires. I'm here in  
12 favor of the proposal of the regulation to -- about -- I'm  
13 coming here from Stanislaus from the organization that is  
14 Valley Improvement Projects, known as VIP. That's it.

15 BOARD CLERK MOORE: Maria Ramos.

16 MARIA RAMOS (THROUGH INTERPRETER): Good morning.  
17 My name is Maria Ramos. I'm here from Stanislaus County.  
18 I recently learned about how dangerous is the methane.  
19 I'm here to ask CARB to do some changes and they are very  
20 necessary. I'm asking for you to have more oversight in  
21 the communities and ask if you can stop those leakings  
22 that are bad for our health. If it's possible for CARB to  
23 inform to the communities with timing advance, when you  
24 have methane leaks, at least to be able to protect  
25 ourselves, our families, and our communities.



1 Thank you.

2 BOARD CLERK MOORE: Thank you.

3 Darcy Stinson.

4 DARCY STINSON: I'm Darcy Stinson. I'm a Castaic  
5 resident, formerly Val Verde resident.

6 I want to thank you guys for looking into this.  
7 I know I've -- a lot of you probably -- I recognize quite  
8 a few of you. I've been asking for your guys's help for a  
9 decade. So I think it's taken way too long to get here,  
10 but we're here, so I want to say thank you. And for the  
11 future, I would like to see if maybe you guys can look at  
12 topics like this much more frequently, especially with the  
13 way that advancements, how quickly they are coming now via  
14 before.

15 So fenceline monitoring, I think it would have  
16 helped a lot of our community, so we could leave. We've  
17 been told lies, after lies, after lies. One thing I'd  
18 like to point out sitting here listening. There's two  
19 gentlemen. I think they're both from different landfills.  
20 I could be wrong, but from listening to them, it seemed  
21 like they were almost in support of this. I could be  
22 wrong, but I find it hard that, you know, the landfill  
23 that's poisoned us -- like I've had -- gone through cancer  
24 twice. I don't hear them coming here trying to say, hey,  
25 this is a good thing, or that this should be done, or

1 thanking you guys for doing this. So I think that's great  
2 that -- if I heard them correctly, I think it's great for  
3 them for doing that.

4 But the last thing I'd say is my house in Val  
5 Verde, I had to move. I have an empty house. I have two  
6 homes now. I can't afford two homes. Most people can't.  
7 Please look into this a lot more. I support this. Thank  
8 you so much.

9 BOARD CLERK MOORE: Thank you.

10 Kevan Smalley or Kevan Smalley perhaps.

11 All right. We'll go to the next one, Steven  
12 Howse.

13 STEVEN HOWSE: Hello. I moved to Val Verde in  
14 1998 and bought my first house. I fell in love with the  
15 quiet area, rich history, and close community. When we  
16 moved there, we were told, hey, don't worry. The landfill  
17 is closing. Well, two expansions later, in 2022 Chiquita  
18 Canyon Landfill has a growing underground elevated  
19 temperature event causing numerous health issues in my  
20 community.

21 In 2024, my wife was diagnosed with Stage 3  
22 breast cancer. And oddly, 10 of my close neighbors either  
23 have or had cancer as well. My family of six are all  
24 dealing with health issues related to the toxins coming  
25 from the landfill reaction. My home of 27 years is for

1 sale and so far I have not been able to sell it, even  
2 after dropping the price \$75,000 below market.

3 I spend my vacation days speaking at meetings  
4 like this, volunteering at local councils and advisory  
5 committees, instead of spending time with my family and  
6 having fun. Please don't cater to the billion dollar  
7 landfill corporations. The reason we are currently  
8 suffering is because the government agencies failed to  
9 properly protect us with the proper regulations like you  
10 have proposed today. The real cost to landfill operators  
11 of these amendments is pennies compared to the costs when  
12 things go wrong.

13 If these rules were already updated, maybe my  
14 family wouldn't be sick, my house wouldn't be for sale, my  
15 close friend and neighbor would still live next door to  
16 me, I wouldn't be pleading with you right now to make  
17 these amendments and implement them right now. You all  
18 have the power to change this. I ask you to act now.  
19 Don't delay. We can't have anymore time delayed on this.  
20 Protect the communities that are dealing with what we're  
21 dealing with as well. Thank you so much.

22 BOARD CLERK MOORE: Gavin Bruce.

23 GAVIN BRUCE: Hi. Good morning. My name is  
24 Gavin Bruce. I work with Valley Improvement Projects, an  
25 organization that works in Stanislaus County in the

1 Northern San Joaquin Valley. We are -- we know what it  
2 means in the northern valley to have to deal with poor air  
3 quality and having to fight for air quality living in a  
4 basin, as was mentioned earlier.

5 I want to mention that when I first started  
6 hearing about how landfills are currently regulated in  
7 California, I was incredibly surprised the fact that in  
8 the 21st century we're still walking the face of a  
9 landfill and using a detector to try to find plumes, when  
10 we have now satellites and drone technology that can --  
11 that can monitor those things.

12 And while this regulation is not perfect in its  
13 current form, there are certain issues that I have with  
14 the temperature threshold that was set. I want to urge  
15 the Board to pass the regulation. And while there are  
16 concerns about, you know, the costs of implementing  
17 regulations, as has been mentioned by a number of people  
18 from the fenceline communities, there is a cost -- a  
19 tremendous cost in not acting and it's being borne, not by  
20 the operators, but disproportionately by the fenceline  
21 communities in the form of declining property values, in  
22 the form of medical bills and in the form of emotional and  
23 psychological stress that's being put on these  
24 communities.

25 So I want to urge the Board to pass. Chair

1 Sanchez, I know you were just in Brazil for COP30 with the  
2 Governor. And the Governor's office has put out  
3 statements about the urgency to deal with methane as a  
4 climate pollutant to combat climate change. And so, I  
5 want to just reiterate that and say that this is an  
6 opportunity to protect our communities here in California  
7 and show the rest of the country and the rest of the world  
8 that we're serious about doing what's needed to address  
9 climate change and reduce methane.

10 Thank you.

11 BOARD CLERK MOORE: Bill Magavern.

12 BILL MAGAVERN: Thanks. Bill Magavern with the  
13 Coalition for Clean Air.

14 Board members, the vote that you're taking on  
15 this will actually be the most important action that the  
16 Board is taking this year. And we thank the Board members  
17 and staff who have taken the time to meet with our  
18 coalition. Approving this rule will have both global and  
19 local impact. Globally, the Chair spoke eloquently about  
20 the importance of reducing methane. We know it's a  
21 short-lived climate pollutant, an important lever that we  
22 have to get a handle on this runaway climate change that  
23 we're experiencing.

24 And California can't claim to continue to be a  
25 leader on reducing methane emissions, unless we update

1 this rule. And also, you're hearing from so many folks  
2 who are affected by landfills in their communities. And  
3 we know CARB can't fix all of the problems that they're  
4 facing from these landfills, but what you can do is to  
5 make sure that leaks are caught sooner and fixed sooner.  
6 And that is going to not only reduce the methane, but a  
7 lot of these other toxins that are affecting people's  
8 health.

9 We do recommend a couple minor changes that we  
10 think will make this more effective. One is to put a  
11 timeline on the technology assessment by the Executive  
12 Officer. We suggest 18 months. And secondly, to change  
13 the wellhead temperature period to 30 days, so that again  
14 we're catching that problem sooner.

15 These -- taken as a whole, these are common sense  
16 improvements and updates in this rule. The benefits  
17 outweigh the costs by almost 3 to 1. That's using  
18 conservative methodology. And, you know, I was here in  
19 2010 with Dr. Balmes and others when the original rule was  
20 approved. We knew then that it would need to be  
21 strengthened and updated. Now is the time to do that.  
22 Thank you.

23 BOARD CLERK MOORE: Thank you.

24 Cher Arobalo.

25 CHER AROBALO: My name is Cher Arobalo. I'm from

1 the Castaic community. And this may not be the most  
2 conventional way to present, but I wrote this -- sorry.  
3 Can you hear me now?

4 All right. I wrote this to express the  
5 community's experience.

6 (Singing to Can You Feel the Love Tonight.)

7 CHER AROBALO: I can see what's happening, and  
8 they don't have a clue. The County's blind. Here's the  
9 bottom line, it's up to me and you. The sick sweet smell  
10 of benzene. There's methane everywhere. And with all  
11 this poison in the atmosphere, disaster is in the air.

12 Can you smell the dump tonight? It's in the  
13 evening breeze. It's killing us, and they just tell us,  
14 call AQMD. Here's what I'm trying to tell you, but how to  
15 make you see, they're poisoning our kids. Impossible.  
16 That's just pure villainy. They're holding back. They're  
17 hiding. But why I can't decide. Is it corporate greed or  
18 just plain politics that pushes us aside.

19 Can you smell the dump tonight? It's in the  
20 evening breeze. It creeps inside our hearts and lungs,  
21 and makes our noses bleed. Can you smell the dump  
22 tonight? You needn't try too hard. It seeps inside our  
23 schools and houses. It's not just in our yards. But if  
24 you smell the dump tonight, it can be assumed, your  
25 healthy days on earth are over, ensure Val Verde's doom.

1 (End of singing.)

2 CHER AROBALO: Thank you for all that you'RE  
3 doing.

4 BOARD CLERK MOORE: Kevan Smalley, have -- you  
5 did you return? Kevan Smalley.

6 If not, we'll go to Teresa Bui. Teresa.

7 TERESA BUI: How do I follow that? That was  
8 great.

9 Good morning. My name is Teresa Bui. I'm the  
10 Senior Climate Campaign Director at Pacific Environment.

11 First off, I would like to welcome Chair Sanchez  
12 to CARB. We're so excited to work with you in your new  
13 capacity.

14 Yeah. So as you are already -- while you often  
15 hear from me talking about shipping, Pacific Environment,  
16 our focus is on combating climate change. And as you  
17 probably know, methane is a climate super villain hiding  
18 in plain sight. It is responsible for 30 percent of  
19 global warming. And you've heard from community members  
20 today on the impacts of their health and their family's  
21 health.

22 So I just want to thank you to all -- the staff  
23 for all your hard work and the stakeholder engagement.  
24 The proposed amendments have made significant progress in  
25 improving data rigor, temperature response, and trend



1 monitoring of landfill data. I want to align our  
2 recommendations in the coalition letters and the advocates  
3 before me, including Coalition for Clean Air and CAW and  
4 ask that the Board create a robust, publicly accessible  
5 system for community data that has bilingual translation  
6 and a commitment to access all available technologies  
7 within 18 months of adopting these amendments, so that the  
8 monitoring improves as quickly as the technology does and  
9 strengthening emission projections and previewing  
10 dangerous leaks.

11 Thank you again for your leadership and we urge  
12 your support for the recommendation and ask that you do  
13 everything in your power to help protect the community's  
14 health.

15 Thank you so much.

16 BOARD CLERK MOORE: Thank you. I'm sorry if I  
17 mispronounce this. Laila Sharpe.

18 LAILA SHARPE: Good morning, Chair, members of  
19 the Board. My name is Laila Sharpe. I'm at UC Davis  
20 political science public service major. And I will be  
21 speaking on behalf of Environment California as a clean  
22 air and water intern.

23 California landfills met -- California landfills  
24 are the largest source of methane emissions in the State,  
25 accounting for 41 percent of the total. Methane is one of

1 the most powerful greenhouse gases and is a major  
2 contributor to accelerating climate change. And when it's  
3 released from landfills, it carries harmful pollutants and  
4 degrades air quality and the California environment.

5 Environment California supports the proposed  
6 amendment to support methane monitoring, shortening repair  
7 timelines, and requiring use of better leak detection,  
8 such as drones and laser scanners. These updates will  
9 move California towards cleaner air, stronger enforcement,  
10 and more transparency. We especially support the  
11 improvements that reduce emissions during gas system  
12 downtime and require earlier action when new waste is  
13 placed. These steps are essential to prevent avoidable  
14 methane leaks, protect surrounding ecosystems, and reduce  
15 greenhouse gas emissions.

16 We urge CARB to make landfill emissions data  
17 publicly available in real time. Transparency monitoring  
18 will help ensure that these leaks are detectible quickly,  
19 so action can be taken before emissions spread and cause  
20 environmental harm. My generation, our next generation,  
21 deserves clean air, healthy land, and climate policies  
22 that actually reduce emissions.

23 At this time, climate change is accelerating, and  
24 California must continue to lead. Stronger landfill  
25 methane standards are innovative, science-based,

1 approachable in reducing greenhouse gases and protecting  
2 public health, and helping the State achieve its climate  
3 goals. We urge CARB to adopt these amendments and ensure  
4 local air districts have the resources to enforce them.

5 Thank you for your leadership and this  
6 opportunity to provide my comment.

7 BOARD CLERK MOORE: Thank you. Veronica Aguirre.

8 VERONICA AGUIRRE: Good morning, Chair Sanchez  
9 and Board members. My name is Veronica Loya Aguirre. I'm  
10 a policy advocate with Greenaction for Health and  
11 Environmental Justice. I am also a resident of Avenal,  
12 home of the Avenal Landfill.

13 I'm here today not only for myself and my  
14 neighbors, but for every community across California  
15 living near a landfill, communities that carry the same  
16 daily burdens we do. It's been 15 years since there's  
17 been real change to the Landfill Methane Regulation. And  
18 in those 15 years, my community has seen landfill  
19 expansion, more tonnage, stronger order -- odors, more  
20 diesel traffic, and now subsurface fires. Fifteen years  
21 of waiting has meant 15 years of worsening conditions for  
22 real people and real families.

23 You've heard from scientist experts who shared  
24 the data, the methane emissions, the climate impacts, and  
25 the urgent need to act. I want to share what that looks

1 like for those of us who live right next to it, front-line  
2 communities. While industry talks about financial burden  
3 of stronger methane rules, we're living the human burden  
4 every single day. We have expenses like doctor visits,  
5 prescriptions, air filters, rodent control just to make  
6 our homes livable. And we carry the constant worry about  
7 our kids and what they're breathing.

8 We talk about the cost, and let's be honest, our  
9 health has a price too. The communities like mine have  
10 been paying for far too long. This isn't about just  
11 methane. It's about justice, about protection, and about  
12 putting people over -- people before profits.

13 And with the few -- a few seconds, I just want to  
14 send a message directly to industry. Enough with the  
15 fearmongering about raising rates and the guilt tactics to  
16 make poor people feel bad for caring about their health  
17 and families. As you worry about lost profits --

18 BOARD CLERK MOORE: Thank you.

19 VERONICA AGUIRRE: -- add lost of life to the  
20 equation, because that's what we're worried about, real  
21 life, real burdens. And I ask you to look at the --

22 BOARD CLERK MOORE: That concludes your --

23 VERONICA AGUIRRE: -- community members in the  
24 room and see us as lives not numbers. Thank you.

25 BOARD CLERK MOORE: Thank you.

1 CHAIR SANCHEZ: Thank you.

2 BOARD CLERK MOORE: Leticia Luna.

3 LETICIA LUNA(THROUGH INTERPRETER): Hello. My  
4 name is Leticia Luna. I'm from the community of Avenal in  
5 Kings County. I arrive in that community in 2001. The  
6 community for me looked very pretty and calm. That was 15  
7 year ago and now we cannot go out on the streets. The  
8 smell is really bad. People is leaving our community  
9 because their homes are not safe. And when they leave,  
10 they are difficult to sell. We live very close to the  
11 landfill. We are asking for you to provide us with  
12 stronger laws, that you send people to monitor what is  
13 going on. We don't want everything to be just on paper.  
14 Please go to our landfill. You can see how close it is to  
15 our homes. We have illnesses as cancer, Valley Fever  
16 among others. Please take care of our sons, our  
17 daughters, our future generations. Please send people to  
18 investigate. Don't just move your heads listening to us.  
19 Take action. Thank you.

20 BOARD CLERK MOORE: Thank you.

21 Maribel Villegas.

22 Thank you very much, your comment has to be  
23 interpreted, so time is up.

24 MARIBEL VILLEGAS(THROUGH INTERPRETER): Hi. My  
25 name is Maribel Villegas. I'm from the community of

1 Avenal. We have a landfill inside of our community and  
2 it's actually across a street of my home. We have been  
3 affected with cancer, tumors, and other illnesses.  
4 Myself, I have been diagnosed with cysts. The same for my  
5 two daughters.

6 We ask you for a strict regulation, not only on  
7 paper. Please don't just say yes and act like you are  
8 going to do something and everything go to be --  
9 everything go only to files. We also have a lot of  
10 problems with pests, mosquitos, mice, among others. We  
11 also have the gases that affect our health. We have the  
12 fever valley, cysts, gases, tumors.

13 I would like you for -- I would like for you to  
14 do something. The administrators of the landfill have  
15 been lying to us for too long. We don't have where to go,  
16 only you. You can regulate or disappear the landfill from  
17 our community. We also have a lot of accidents with the  
18 trucks. We have so many trucks in our communities who go  
19 to dispose the garbage. Besides that, they have a lot of  
20 contamination in the water. Please help Avenal community.

21 Thank you.

22 BOARD CLERK MOORE: Thank you.

23 Thomas Helme.

24 THOMAS HELME: Hello, Board. Tom Helme. I'm the  
25 co-founder of Valley Improvement Projects, an

1 environmental justice group in Stanislaus County and also  
2 one of the founding organizations of the California  
3 Environmental Justice Coalition, which has almost a  
4 hundred members throughout the state from many front-line  
5 communities and involved in that movement. We're very  
6 familiar with the history of waste, especially in  
7 California and these environmental justice communities and  
8 where things like landfills and incinerators were placed.

9           The last trash incinerator in California was in  
10 Stanislaus County and we are here to support communities  
11 in the San Joaquin Valley like in West Stanislaus, Crows  
12 Landing, the other communities that were near that  
13 incinerator and continue to be near the landfill.

14           Other communities like in the Manteca Landfill,  
15 which is actually very close to South Stockton, and in  
16 Avenal, which you heard community members speak about  
17 today, and also the others from Richmond, and Val Verde,  
18 and the other communities you heard from.

19           I know in the San Joaquin Valley many of these  
20 communities, they aren't just near a landfill, but they're  
21 near the 5 freeway, the 99, they're near, you know, old  
22 biomass incinerators or trash incinerators. They're near  
23 communities that are sprayed with pesticides and in the  
24 Southern Valley near oil and gas operations. And these  
25 landfills just add on to that with more particulate

1 matter, and VOCs, and NOx, and benzene.

2           So these landfill regulations are obviously  
3 overdue and I'm here in support with the other community  
4 members that are in favor of strong regulations on  
5 landfill methane. The temperature framework can be  
6 stronger. We need quicker action, more monitoring, the  
7 use of more technology and actually requiring it. We know  
8 we have the technology, drones and satellites. We need to  
9 invest in getting that data to communities --

10           BOARD CLERK MOORE: Thank you.

11           THOMAS HELME: -- and the communities that are on  
12 the ground doing that work, getting that information to  
13 the community members. Thank you.

14           BOARD CLERK MOORE: Thank you very much.

15           Socorro Revolledo.

16           SOCORRO REVOLLEDO (THROUGH INTERPRETER): Hello.  
17 My name is Socorro Revolledo and I'm from Avenal in Kings  
18 County. I want to thank you first for your time to listen  
19 to us. We are a minority and sometimes we don't have  
20 people to listen to us. Only you can listen. You need to  
21 move the landfill out of our community. We are here not  
22 only in a personal basis. We also the voice of those who  
23 cannot be here, sick people, dying people, people that are  
24 still in hospitals with oxygen or dealing with other  
25 issues.



1           Also, we are here representing our kids and  
2 future generations. Move your landfill. There are  
3 mountains. There are deserts. There are places where no  
4 human beings are present. We are a minority and we need  
5 to be taken care of. We have the signs here, not only  
6 because we were trained to do signs, we wanted to be  
7 heard. We want you to see us. Please help us. Thank you  
8 for your time

9           BOARD CLERK MOORE: Thank you. Matt Holmes.

10          MATT HOLMES: Hi, friends, countrymen, Romans,  
11 Board members, friends and old. Matt Homes, California  
12 Environmental Justice Coalition. Happy to address you on  
13 this issue today.

14          You know, I think -- I want to thank all the  
15 people from traveling all across the state to bring us  
16 their meaningful experiences with this landfill-related  
17 pollution. I think, you know, everybody gets it in the  
18 room. There's a few people that don't. We heard some  
19 really bizarre stuff about procurement from the rural  
20 counties. We heard Waste Management pull out its pockets  
21 about cost when they count their money by billions. I  
22 think it was 22 last year. And then we also heard  
23 something interesting from Republic Services about their  
24 desire to work with the regional air districts.

25          As someone who submitted a records request --

1 somebody mentioned earlier that no family should have to  
2 submit a records request to find out what they've been  
3 exposed to. As someone who has submitted those to my  
4 regional air district, I was surprised to -- well, I  
5 pretended to be surprised, when they told me that they had  
6 no records on temperature or criteria pollutants, because  
7 that's not what they call them, right?

8           So my regional air district, San Joaquin Valley  
9 air Pollution Control District, likes to play dumb about  
10 the pollution that they monitor at their landfills. So I  
11 really -- I want to -- I want to bring those up. There's  
12 all reasons for this Board to keep this authority here in  
13 this room and to pass the most stringent rule possible,  
14 and to really consider that we have the technology for  
15 fence-line monitoring and early alert systems.

16           I can show you how to do it. I actually learned  
17 how to do it by partnering with CARB. CARB and I have  
18 developed multiple ground level monitoring systems, and we  
19 can warn people, and we can provide behavioral  
20 interventions, so that people can protect themselves and  
21 they don't have to go do forensic pathology on what they  
22 were exposed to. And if we do that, maybe we don't ever  
23 have to hear anybody harmonize with nose bleed again.

24           So thank you for your time and let's get the most  
25 stringent rule and keep the authority in this room.

1 BOARD CLERK MOORE: Thanks. Maria Torres.

2 MARIA TORRES (THROUGH INTERPRETER): Good morning.  
3 My name is Maria Torres. I'm here for Avenal. And I'm  
4 here really sad, because I'm looking at so many people.  
5 You are so many and you don't do anything for our  
6 community for our people. You don't have to wake up every  
7 morning with the bad smell, with the pest, with the  
8 problems that we have. You don't see our way, our kids,  
9 or future generations. I'm old. We are -- at least a lot  
10 of people that they are old, but still we need to do  
11 something. We need to -- your help to make a change.

12 Sometimes we call and report the bad smells in  
13 our community and somebody goes to check on it two days  
14 after. You think those smells are going to be there two  
15 days after. Please take action. Work for us. You are  
16 our voice. You are the only voice that we can have. Help  
17 our kids, the old people like me. We cannot defend  
18 ourselves sometimes. We are in beds, as my peers said.

19 We are waiting for somebody to go there to check,  
20 to do rules that really work. Please do everything you  
21 can for our community. Thank you.

22 BOARD CLERK MOORE: Digna Pacheco.

23 Okay. We'll move to Lee Helfend.

24 LEE HELFEND: You've already heard  
25 heart-wrenching stories about health and community

1 welfare. I want to focus on the second part of CARB's  
2 mission statement, considering effects on the economy.  
3 Just as they did 15 years ago when they LMR was first  
4 being considered, waste companies and landfill operators  
5 are touting increased costs. The sky did not fall then  
6 and there's Absolutely no evidence that it will happen  
7 now.

8 Adjusted for inflation, average statewide tipping  
9 fees have only increased a single percentage point since  
10 2011. Riverside County warns in 2009 that the methane  
11 rule would force them to double staff, but in reality  
12 their tipping fee increased by about \$0.12 per year, from  
13 2010 to 2023, \$0.12. And Remember tipping fees are driven  
14 by lots of factors like fuel labor, equipment, and  
15 contracts. The cost of inaction is exponentially higher.

16 The disaster at the Chiquita Canyon Landfill is a  
17 stark example. In 2024, the underground fire at Chiquita  
18 cost the operator to \$224 million to manage. After  
19 throwing nearly a quarter billion dollars at the problem,  
20 it's still not solved. The community continues to suffer  
21 profound health impacts and costs continue to mount. The  
22 methane that spews from our state's landfills is  
23 supercharging climate change, one of the biggest financial  
24 burdens we collectively face.

25 California's Natural Resources Agency

1 conservatively estimates that climate change will cost our  
2 State \$113 billion a year by 2050, around 3,000 per person  
3 paid in the form of higher taxes, rising costs of  
4 necessities like health care and groceries. By contrast,  
5 CARB's proposal would cost about \$0.31 per person per  
6 year. This isn't complicated math. A strong LMR is the  
7 smart fiscal choice. This rulemaking represents an  
8 opportunity for CARB to put its mission statement into  
9 real tangible action, and I urge you to take it.

10 Thank you.

11 BOARD CLERK MOORE: Thank you.

12 Gabriela Facio.

13 GABRIELA FACIO: Good morning, almost afternoon  
14 here, all. Chair Sanchez, welcome, Board members and  
15 staff. Thank you for the opportunity to speak. My name  
16 is Gabriela Facio. I'm with Sierra Club California. We  
17 are the legislative and regulatory advocacy arm for Sierra  
18 Club chapters across California. I'll try to not be too  
19 repetitive, as I'm the last one.

20 But on behalf of our half a million members and  
21 supporters statewide, I did want to align our  
22 recommendations with those that have been made before me  
23 by Assemblymember Schiavo, our partner organizations at  
24 CAW, VIP, Pacific Environment, and many others here today,  
25 along with the community members that made the long trip

1 to be here and make their voices and experiences heard to  
2 support a strong LMR, for a firm review schedule to  
3 accelerate adoption of methane leak detection  
4 technologies, and to reject bogus industry cost arguments.

5 We have already heard enough and seen how  
6 detrimental the impacts are on front-line communities.  
7 These impacts have and will continue to be preventable.  
8 Climate damages are already costing our state billions  
9 annually. These unreported long-term public health and  
10 quality of life costs we oft -- very often don't account  
11 for, individuals will continue to pay for. We have enough  
12 of an affordability crisis to be punting yet another  
13 preventable cost onto Californians. We need to aim higher  
14 than the national standard. I urge CARB to adopt a  
15 stronger LMR.

16 Thank you.

17 BOARD CLERK MOORE: Thank you. We'll try Digna  
18 Pacheco on more time. Digna

19 Okay. That concludes our in-person commenters.  
20 We'll turn to the Zoom commenters.

21 BOARD CLERK FRENCH: We currently have 13 Zoom  
22 commenters with their hands raised in Zoom. I apologize  
23 in advance, if I mispronounce your name. I would like to  
24 again remind all commenters to please speak slowly and  
25 clearly for our interpreters and court reporter.

1           The first Zoom commenter is Lim Cheung. I have  
2 unmuted your microphone. Please begin.

3           LIM CHEUNG: Hi. Hello, everybody. So Lim  
4 Cheung and I'm a DCAP participant. So I apply to the DCAP  
5 Program, because I wanted to make a change. So not just  
6 for myself but for the environment. And my old car was a  
7 really inefficiency and not very eco-friendly, so it  
8 burned through gas and add to the pollution in my area. I  
9 have always believed in doing my part to reduce emissions,  
10 but the cost of switching to an -- to an EV was expensive,  
11 until I found DCAP. So thanks to the program, I was able  
12 to replace my old car with a much cleaner, more efficient  
13 one. The biggest change for me has been piece of mind. I  
14 know I'm driving something that's better for the planet.  
15 And that matters to me. I'm also saving money on gas and  
16 maintenance.

17           But beyond the savings, I just feel good to be  
18 part of the solution, to know that I'm contributing to  
19 cleaner air and a healthier future for my community. I'm  
20 really grateful for the support DCAP provided. It made a  
21 big difference in my life and I hope more people get the  
22 chance to benefit from it too. Thank you.

23           BOARD CLERK FRENCH: Thank you.

24           The next Zoom commenter is Brian Kolodji. I have  
25 unmuted your microphone. Please begin.

1           BRIAN KOLODJI: Hi. My name is Brian Kolodji.  
2 And I'm with the Kolodji Corporation.

3           And I have a comment here about landfill  
4 regulations. The -- there's a U.S. -- there's a recent  
5 patent as of just last week actually, November 11th, that  
6 is the most economically to convert methane emissions from  
7 landfills into a high heating fuel by way of membrane  
8 oxygen enrichment. This is a mature 60 plus year science  
9 and commercial practice -- commercially practiced  
10 technology that has been used by refineries and  
11 self-recovery in steel production for decades, and can  
12 also be used to dilute -- for dilute methane as produced  
13 from landfills. This proven science and technology has  
14 been around for 50 years.

15           As summarized and promoted by the U.S. Department  
16 of Energy in their oxygen enrichment combustion tip sheet  
17 from September 2005. The practice of separating and  
18 producing concentrated nitrogen from 79 to 90 percent, and  
19 also producing concentrated oxygen directly from air  
20 raising it from 21 to 60 percent O2, has been most  
21 economically produced and commercially practiced gas  
22 separation with membranes for over 50 years. So -- and we  
23 have some of the largest membrane manufacturers in the  
24 world here in California. This is a circa hundred million  
25 dollar industry. And we can -- I strongly encourage CARB



1 to consider regulations that allow this most economic  
2 methane emission conversion to fuel innovation that  
3 enables a profit to be made with methane emission  
4 reductions from landfill and also convert the methane  
5 emission to valuable fuel.

6 Thank you, CARB. Keep up the good work.

7 BOARD CLERK FRENCH: Thank you. Next is Emily  
8 Thompson. I have activated your microphone. Please  
9 unmute yourself and you can begin.

10 EMILY THOMPSON: Hi. Thank you so much. Thank  
11 you for the opportunity to speak today. My name is Emily  
12 Thompson. I am the manager of nationwide policy for Clean  
13 Outdoor Air at the American Lung Association. And I'm  
14 here in support of the proposed amendments to the landfill  
15 methane regulation and believe that additional attention  
16 to data access for communities would further support  
17 health.

18 Methane emissions from landfills are the third  
19 largest source of human related methane in the United  
20 States. Reducing methane emissions has become a global  
21 priority. The United Nations Environment Program has made  
22 it clear, we cannot meet our climate goals without drastic  
23 reductions in methane. Climate change is already  
24 impacting the health of people across California and the  
25 country. This year alone, we've seen deadly wildfires,

1 dangerous flooding and extreme heat waves, disasters made  
2 worse by climate change, which is being accelerated by  
3 methane.

4 California's Landfill Methane Rule, first adopted  
5 in 2010, was a critical step forward, but 15 years later,  
6 we know more and we can do better. The proposed  
7 amendments are a step forward reflecting years of  
8 research, technological improvements, and lessons learned  
9 from landfill fires, including the underground smoldering  
10 events that have exposed communities to harmful pollution  
11 in California. During a landfill fire, air pollutants  
12 such, as volatile organic compounds, and carcinogens like  
13 benzene are released alongside methane causing severe  
14 health risks for communities.

15 Strengthening these methane protections means  
16 strengthening public health and safety and we encourage  
17 the Board to consider further strengthening opportunities  
18 to identify leaks and make community data more accessible.  
19 Communities living near landfills deserve to know what  
20 they are breathing.

21 I urge CARB to also ensure that these amendments  
22 include requirements for real-time fenceline monitoring  
23 with publicly available data, quarterly and annual reports  
24 published online and a public data dashboard displaying  
25 emissions and operational information as soon as

1 practicable.

2           These measures will not only reduce methane  
3 emissions, but they will also build trust, accountability  
4 and healthier communities. Thank you for your leadership.

5           BOARD CLERK FRENCH: Thank you. Next is Julia  
6 Levin. I have unmuted your microphone. Please begin.

7           JULIA LEVIN: Thank you. Julia Levin with the  
8 Bioenergy Association of California.

9           I really want to thank the Chair and the staff  
10 for your very strong comments about the urgency of  
11 reducing methane and other short-lived climate pollutants.  
12 And I hope that this is a moment where the State will go  
13 back to prioritizing the reduction of short-lived climate  
14 pollutants, because it really appears from this Board, the  
15 Public Utilities Commission, and other State agencies that  
16 California has lost focus on that urgent climate priority  
17 over the last several years and we need to refocus on it.

18           Landfill gas capture is an important first step,  
19 but it is only part of the equation. We also have to  
20 focus much more on what to do with all of the biomethane  
21 that will be captured. Right now, the Public Utilities  
22 Commission is rapidly shutting down the markets for  
23 biomethane. This Board has recognized in the past in  
24 Resolution 23-13 that the Board needs to identify and help  
25 to develop new markets for biomethane, long-term reliable

1 and multiple markets. And the Board has not yet moved  
2 forward on that.

3 We are years behind in meeting the requirements  
4 of SB 1383, methane reduction in general, but landfill  
5 diversion in particular. And so we really need the Board  
6 not just to adopt these regulations, but to help identify  
7 and develop new markets that we can put biomethane to  
8 beneficial use. Right now, the amount of landfill gas  
9 that is leaking and the amount of landfill gas that is  
10 captured and flared is equivalent to a billion gallons a  
11 year of gasoline or diesel. If we put all that landfill  
12 gas to beneficial use, we could displace a billion gallons  
13 of petroleum products that are used in California every  
14 year.

15 So, in addition to adopting these regulations, we  
16 urge the Air Board to implement Resolution 23-13 and help  
17 identify and build new markets for biomethane utilization.

18 Thank you.

19 BOARD CLERK FRENCH: Next is Kimberly Burr. I  
20 have unmuted your microphone. Please begin.

21 KIMBERLY BURR: Yes. Hi. Thank you. I just  
22 wanted to also thank you for going to COP, Chair Sanchez  
23 and Governor Newsom. I'm very proud that California was  
24 so well represented. I know my Supervisor, Member  
25 Hopkins, has been. And it seems like very important that

1 California be represented there. So I just wanted to send  
2 my gratitude to you guys for doing that.

3 Also, I wanted to just -- I don't think I'm going  
4 to be back here for the public comment period. But with  
5 regard to your important emissions inventory, I think  
6 that's just a groundbreaking effort. And I think that  
7 California, for better or worse, has a great  
8 responsibility to get our emissions inventory, you know,  
9 very tight. And my study of it so far, I'm just looking  
10 for, you know, is it capturing all the emissions. If it's  
11 not, which I know there are some exempt activities, you  
12 know, can we capture that portion of emissions that is  
13 basically exempt, so we have a picture of the total  
14 emissions the State is trying to address and what  
15 activities are being addressed, and which ones still need  
16 to be addressed.

17 So I think that would be a great addition to your  
18 program, and I look forward to seeing that and helping if  
19 there's any way I can help, but also to, you know,  
20 encourage maybe there to be a staff presentation on the  
21 emissions that we are trying to address and those that  
22 are -- that have escaped kind of the regulatory framework  
23 so far. So thank you guys again for all your important  
24 work. I support the Methane Rule and reducing the time  
25 frames to -- for which these things need to be

1 accomplished. Thank you again and I'll stop there.

2 BOARD CLERK FRENCH: Thank you.

3 Next we have Abigail DeSesa. I have unmuted your  
4 microphone. Please begin.

5 ABIGAIL DeSESA: Hi. My name is Abigail DeSesa  
6 and I'm a 26-year resident of Val Verde Canyon in the town  
7 of Castaic and a victim of Chiquita Canyon Landfill.

8 Sadly, ETLF and SET events are not rare these  
9 days and the citizens of California are not falling for  
10 that excuse any more, and neither should CARB. Elevated  
11 methane is often an indicator something may be going wrong  
12 in a landfill. The proverb, "An ounce of prevention is  
13 worth a pound of cure," comes to mind and it is what we  
14 are asking for now.

15 If only Chiquita Canyon Landfill had followed  
16 this proverb none of this would have happened to my town  
17 and many other landfills that are following quickly in  
18 their footsteps. The long-term site savings far outweighs  
19 the short-term initial investment. This goes the same for  
20 government. Invest in the preventative legislation and  
21 action, because paying for all the sick people that end up  
22 as a result of these broken landfills creates lots of  
23 medical bills and unemployed people. Due to long-term  
24 exposure, many of these symptoms do permanent damage and  
25 don't go away. Eventually, the government will end up

1 footing the bill.

2           Currently, in my town, we are paying very high  
3 utility bills, experiencing property value loss, more  
4 medical bills and serious loss of quality of life. I am  
5 petrified to go to the doctor for fear what I may find  
6 from living near this landfill.

7           Thank you for considering my request for an ounce  
8 of prevention. I am only one of so many living in this  
9 hell that has stolen years from my life and all of this  
10 could have been prevented. Thank you.

11           BOARD CLERK FRENCH: Thank you. The next  
12 commenter we have is Ileana Navarro. I have unmuted your  
13 microphone and you may begin.

14           ILEANNA NAVARRO: Thank you. Hello, everyone.  
15 My name is Ileana and I work for the Central California  
16 Environmental Justice Network. First, I would like to  
17 thank CARB staff for the work that they put into this  
18 regulation that is being proposed.

19           Second, I want to advocate for fenceline  
20 monitoring for problematic landfills to be added to this  
21 regulation today. Fenceline monitoring at refineries in  
22 Kern County have given nearby residents actual data about  
23 what they're actually breathing instead of relying on  
24 industry infrequent inspections. When monitors at  
25 refineries detect elevated levels of pollution, a

1 notification on a live website it triggered that helps  
2 notify community members.

3           This is especially valuable during H2S releases  
4 that might have otherwise gone unnoticed until people  
5 start experiencing symptoms. If CARB is unwilling to add  
6 fenceline monitoring at landfills at this time, I would  
7 ask that CARB make a research commitment to establish a  
8 non-regulatory fenceline monitoring system at a  
9 problematic landfill. This would help CARB staff get the  
10 data themselves on frequency and concentration of methane  
11 releases across a landfill boundary and be able to start  
12 getting data on if methane releases across the landfill  
13 boundary are connected to community order and/or health  
14 complaints.

15           This is not something that the waste industry is  
16 going to voluntarily do, so it is up to CARB. Communities  
17 living near landfills have the right to clean air and the  
18 right to know who and what landfill is putting into the  
19 air they breathe. Thank you so much again for the  
20 opportunity to provide comments.

21           BOARD CLERK FRENCH: Thank you. The next Zoom  
22 commenter is Katy Webb. I have activated your microphone.  
23 Please unmute yourself and you can begin.

24           KATY WEBB: Good morning, Chair, members. Katy  
25 Webb with The Climate Center.



1 I'm here to speak in strong support of the  
2 proposed Landfill Methane Regulations and thank the staff  
3 that has been working diligently on delivering impactful  
4 regulations. California has committed to leading the  
5 world on climate action, but we cannot meet our climate  
6 targets or protect our communities without confronting one  
7 of the largest and most preventable sources of methane  
8 emissions in the state, our landfills.

9 The great news is the solution is already in our  
10 hands. Because methane is a potent yet short-lived  
11 climate pollutant, every ton of this greenhouse gas we can  
12 prevent from escaping into the atmosphere delivers  
13 near-term climate benefits. The kind of near-term action  
14 Californians need in the face of worsening heat waves,  
15 floods, fire and beyond.

16 The proposed regulations are practical,  
17 science-based, and achievable. We specifically support  
18 amendments such as the enhanced wellhead monitoring and  
19 response protocols, strengthen gas collection and control  
20 systems requirements, the establishment of a Super Emitter  
21 Response Program, and the improved data collection and  
22 reporting requirements. We also support additional  
23 measures to further improve surface emissions monitoring,  
24 including more frequent monitoring, the notification for  
25 local communities of super emitter response events and

1 shifting financial responsibility for third-party remote  
2 sensing data collection to landfill operators with CARB  
3 approved vendors providing data directly to CARB operators  
4 in local air districts.

5 California has never shied away from ambitious  
6 environmental leadership. By adopting strong landfill  
7 methane rules, CARB can deliver one of the fastest, most  
8 cost effective climate wins available, while also  
9 protecting public health and advancing environmental  
10 justice. I strongly urge you to adopt the strongest  
11 possible version of these regulations. Methane reductions  
12 at landfills are not a burden. They are an opportunity  
13 and California cannot afford to leave that opportunity on  
14 the table.

15 Thank you.

16 BOARD CLERK FRENCH: Thank you.

17 Next is Christian Bisher. I have activated your  
18 microphone. Please unmute and you may begin.

19 CHRISTIAN BISHER: Good morning. My name is  
20 Christian Bisher and I work for the Central California  
21 Environmental Justice Network. And I've engaged with the  
22 Avenal Landfill. I support the proposed regulation and  
23 would like to thank CARB LMR staff for adding surface and  
24 downwell temperature monitoring to this updated LMR.  
25 Ensuring operators are not melting and collapsing methane

1 control equipment pipes is a great step forward in  
2 reaching methane emission reduction goals and protecting  
3 the nearby public.

4 Existing regulation allows temperature increases  
5 and temperature monitoring to occur in the dark. Thank  
6 you for hopefully bringing it into the light. I would add  
7 at 131 degrees Fahrenheit at the surface, you are still  
8 going to be identifying problem landfills, instead of  
9 preventing landfills from becoming a problem.

10 Second, I support the resolution saying reported  
11 information will be shared on a website. However, this is  
12 a very general statement and communities would be more  
13 protected if specifics were included in the resolution or  
14 regulation. A PDF submitted by the landfill operator with  
15 no explanation does not help an ordinary community member,  
16 but would comply with the proposed resolution, but it  
17 would very helpful if CARB staff provided easily  
18 understandable supporting background information and  
19 visually showed graphs of landfill wellhead temperatures  
20 and indicated where operator mitigations actions were  
21 occurring.

22 This would help visually show communities what is  
23 occurring at their landfill and if the mitigation actions  
24 being done are working at reducing temperatures. Updating  
25 the regulation to make submitted information be in this

1 form already, or easily created from, would remove this  
2 burden from CARB staff.

3           Lastly, I would like to encourage everyone to  
4 stop using like the legal side-stepping language such as  
5 SET events, and instead call what's happening what it is,  
6 subsurface fires. I believe that disrespects the people  
7 living near these landfills.

8           Thank you.

9           BOARD CLERK FRENCH: Thank you.

10           Next is Olivia Alves. I have unmuted your  
11 microphone and you may begin.

12           OLIVIA ALVES: My name is Olivia Alves and I'm  
13 representing RMI, an independent, nonpartisan nonprofit  
14 working to secure a clean energy future for all.

15           Thank you to CARB staff for the thoughtful and  
16 rigorous work that went into the proposed amendments.  
17 CARB's own analysis shows that the benefits of  
18 strengthening landfill methane regulations are more than  
19 triple the estimated costs. With the proposed -- while  
20 the proposed amendments impose no direct compliance costs  
21 for individuals, if they were passed on to Californians,  
22 it would amount to just \$0.31 per person per year. For  
23 that modest investment, the State secures cleaner and  
24 safer air for frontline communities. Remote sensing, air  
25 and satellite surveys have repeatedly detected super

1 emitting plumes at California landfills, many of which are  
2 large, undetected, and untreated.

3 Bloomberg News this summer also reported on  
4 Chiquita Canyon's Landfill fire. CARB's proposal takes a  
5 major step forward by embracing proven best practices and  
6 readily available technologies. We urge the Board to  
7 maintain the following: the requirement to inspect and  
8 repair remotely detected plumes, enhance monitoring and  
9 reporting, earlier GCCS installation including the use of  
10 horizontal wells which are widely used across the industry  
11 today, limits on well field downtime, and more robust  
12 cover assessments.

13 We urge the Board to also adopt several  
14 enhancements. This includes: To require cost effective  
15 advanced monitoring technologies such as drones, once  
16 multiple systems are approved; increase monitoring  
17 frequency to biweekly; to require fenceline monitoring  
18 near communities; requiring automated wellhead tuning; and  
19 to publish monitoring and compliance data for the public.

20 We urge the Board to adopt the strongest possible  
21 version of this rule and move swiftly towards  
22 implementation. Thank you for the time and the  
23 opportunity to testify today.

24 BOARD CLERK FRENCH: Thank you.

25 Next, we have Brian Loma. I have activated your

1 microphone. Please unmute yourself and you may begin.

2 BRIAN LOMA: Good afternoon, everybody. My name  
3 is Brian Loma. I am the hazardous materials and waste  
4 diversion advocate for Green Latinos here in Colorado,  
5 where we have spent nearly a year and a half working on  
6 our landfill methane emission regulations, which are still  
7 yet to be approved. And a final version negotiated  
8 between the industry, and haulers, and municipalities was  
9 just approved for the record to be submitted today.

10 In our work over the last 18 months, we have  
11 found that open destruction or match stick flares are  
12 ineffective and Don't effectively destroy the methane and  
13 hazardous air pollutants coming out of landfills, that  
14 organic material and the methane created from it draws  
15 many different toxic chemicals out of the landfill and  
16 into the communities who breathe the air. And we have  
17 learned to regulate our GCCS systems to avoid landfill  
18 fires, the occurrence of them.

19 And so, I'm on -- here today, because many of  
20 your community have asked for strong stringent  
21 regulations, to acknowledge the reality of fires that are  
22 happening. We know that just from batteries alone, there  
23 is a fire every day in the United States from improperly  
24 disposed lithium batteries. Strong regulations help enact  
25 strong change in our communities, to protect not only the

1 air and the water quality, but the health of the  
2 communities that live in and near the locations where the  
3 landfills occur, as well as the overall climate for all  
4 humans on this planet.

5 Thank you for the support of these strong  
6 regulations. Have a wonderful day.

7 BOARD CLERK FRENCH: Thank you.

8 Next we have LaDonna Williams. I have unmuted  
9 your microphone and you may begin.

10 LaDONNA WILLIAMS: Yes. Good afternoon, Board  
11 and those in attendance. I first want to say this two  
12 minutes for public comment is really disrespectful of  
13 these very serious issues that families are coming in here  
14 pleading, having to deal with cancer and the fallout from  
15 the lack of real leadership that CARB should be providing.

16 Although I do support your updates and  
17 amendments, but your actions and your leadership roles is  
18 horrific. First of all, you need to increase the amount  
19 of time for the public to come and discuss these issues  
20 with you, so that there is a sincere feeling that you are  
21 listening and addressing these issues, which currently you  
22 are not.

23 Secondly, you need an overhaul of your civil  
24 rights department. Our Black communities, in  
25 particular -- others are probably going through it too,

1 but I'm speaking on Black communities and our CBOs that  
2 have been working on this E-Bike Program diligently trying  
3 to get it to people who would not have this opportunity  
4 otherwise. We have become a target of your former  
5 administrator. Thank God someone got rid of that  
6 administrator. But the E-Bike Program should have  
7 remained in place, because there were those that did  
8 administer them successfully through the Small Pilot  
9 Program. So you had boots on the ground willing to do it,  
10 yet you chose a racist. Pedal Ahead Ed Clancy, with the  
11 support of CARB, that went after our families personally  
12 and attacking the whistleblower. Mr. Rodriguez that came  
13 forward that you settled a lawsuit with and paid him.  
14 Yet, you leave our communities in limbo.

15 Shame on you, CARB. You've got to do better.  
16 Board, you need to hold your leadership within CARB  
17 accountable and contact those of us that actually have the  
18 facts and the emails to show what I'm talking about.

19 Thank you.

20 BOARD CLERK FRENCH: Thank you. Our last  
21 in-person commenter -- or apologies, Zoom commenter is  
22 Chrissy Thomas Brewer. I have activated your microphone.  
23 Please unmute and you may begin.

24 CHRISSY THOMAS BREWER: Okay. Thank you. I  
25 wanted to comment on the Driving Clean Assistant Program.



1 And I have wanted a green car for years and affordability  
2 was a barrier. I also live in the Sierras. So when I saw  
3 that DCAP was offering the grant in my area, I was really  
4 excited and even more happy to have received that grant.  
5 The staff are super helpful, because it was difficult to  
6 be able to see cars, since I live so far away. So I've  
7 been driving like gas guzzling family car for a long time.  
8 And I did find the right car for me and that's really  
9 given me freedom to be able to go places, because it's 30  
10 miles round trip just to go to town.

11 Anyway, so I wanted to say thank you and that's  
12 it.

13 BOARD CLERK FRENCH: Thank you. I'll pass the  
14 microphone back to Chair Sanchez.

15 CHAIR SANCHEZ: Wonderful. Thank you.

16 Staff, were there any issues raised in the  
17 comments that you would like to address?

18 EXECUTIVE OFFICER CLIFF: No, Chair. Thank you.

19 CHAIR SANCHEZ: Wonderful. I will now move to  
20 close the record. I want to thank everyone who took the  
21 time to share your comments with us today, especially the  
22 community members. Thank you.

23 We will move to a short break -- a short lunch  
24 break and then come back for Board discussion and action.  
25 So if I can ask the Board to return at 12:45 we will begin

1 promptly then.

2 Thank you, all. See you soon.

3 (Off record: 12:12 p.m.)

4 (Thereupon a lunch break was taken.)

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1                                    AFTERNOON SESSION

2                    (On record: 12:50 p.m.)

3                    CHAIR SANCHEZ: All right. Hello. Hello.  
4 Hello. Hello. Welcome back, everyone. Welcome back. We  
5 will reconvene now. I have been advised by my legal  
6 counsel I have to read a few things that I forgot before  
7 our lunch break. I will do that now.

8                    I will now close the record on this agenda item.  
9 However, if it is determined that additional conforming  
10 modifications are appropriate, the record will be reopened  
11 and a 15-day Notice of Public Availability will be issued.  
12 If the record is reopened for a 15-day comment period, the  
13 public may submit written comments on the proposed  
14 changes, which will be considered and responded to in the  
15 Final Statement of Reasons for the regulation.

16                    Written or oral comments received after this  
17 hearing date but before a 15-day notice is issued will not  
18 be accepted as part of the official record on this agenda  
19 item. The Executive Officer may present the regulation to  
20 the Board for further consideration, if warranted, and if  
21 not, the Executive Officer shall take final action to  
22 adopt the regulation after addressing all appropriate  
23 conforming modifications.

24                    I got a thumbs up. I think that means the record  
25 is closed.

1           Wonderful. Well, I will now shift us over into  
2 Board discussion. I'm aware of a few Board members with  
3 timing issues that we will navigate. So Board Member --  
4 Mayor Gloria, I will turn to you first. The floor is  
5 yours.

6           BOARD MEMBER GLORIA: Thank you very much. I  
7 appreciate you accommodating my schedule. I'll just dive  
8 right in, but starting with appreciation to all the public  
9 commenters, and particularly the residents over at Val  
10 Verde. I appreciate you making the time to inform the  
11 Board of the importance of this action today.

12           Starting there, I would ask staff if they would  
13 comment or educate me, perhaps my colleagues as well, was  
14 the Chiquita Canyon Landfill following or in compliance  
15 with the existing landfill regulations, the ones that  
16 we're updating today?

17           EXECUTIVE OFFICER CLIFF: Yeah. We'll -- excuse  
18 me, Mayor. We'll address that. So the question was, was  
19 Chiquita Canyon in compliance with the current landfill  
20 methane regulation?

21           BOARD MEMBER GLORIA: Right.

22           SENIOR ATTORNEY FIERRO: Good afternoon. I'm  
23 Jessi Fierro. I'm an attorney here at CARB supporting the  
24 landfill team here today and also some of the enforcement  
25 work on landfills. So Chiquita Canyon has been issued

1 hundreds of violations by the South Coast Air Quality  
2 Management District. And most of those -- the vast, vast  
3 majority of those were for odor nuisance violations with a  
4 few permit violations, but no LMR violations have been  
5 identified yet under the current regulation.

6 We also have periodic flyovers with our Carbon  
7 Mapper. And so far -- that's all for now.

8 BOARD MEMBER GLORIA: Got it. I appreciate that  
9 information. As the representative for the San Diego  
10 County Air Pollution Control District, is staff in receipt  
11 of our Executive Director's November 10th letter?

12 EXECUTIVE OFFICER CLIFF: Yes, we have.

13 BOARD MEMBER GLORIA: Would you care to respond  
14 to the comments in terms about local government input as  
15 well as the feasibility of implementation of the proposed  
16 regulations.

17 EXECUTIVE OFFICER CLIFF: Yes, Mayor. So, we  
18 really appreciate the ongoing work with our partners and  
19 collaboration with our partners at the local air  
20 districts. We, in particular, have had a number of  
21 conversations with them recently and regrettably wish we  
22 had had more conversations prior to the 45-day notice  
23 going out. Nevertheless, we have ongoing work with them  
24 and then opportunity to continue to address the concerns  
25 that they've identified in their letter. And, in

1 particular, I'll just note in the resolution, we did call  
2 out the direction to the Executive Officer and staff to  
3 continue that collaboration and work including  
4 understanding the need for resources for implementing the  
5 regulation.

6 BOARD MEMBER GLORIA: Thank you, sir. And I  
7 would move to the concerns of the City of San Diego. I  
8 checked in. We run a landfill and have two closed ones.  
9 And so understanding that practicality and how we could  
10 implement, there are significant concerns about the cost,  
11 as you know, I'm sure you've -- as obviously has been  
12 heard. And when looking at the staff presentation, the  
13 representation that a publicly-owned or government-owned  
14 landfill that this action would represent \$57,000 per year  
15 in additional cost, I struggle to understand how that  
16 figure -- where that figure came from. I know that  
17 there's the Appendix B, but the radically less amount of  
18 money compared to the private sector, coupled with, you  
19 know, the technology, the staffing so on and so forth, I  
20 struggle to see how that number was realistic and was  
21 hoping you could give me some more confidence in the  
22 \$57,000 figure.

23 EXECUTIVE OFFICER CLIFF: I'll ask staff to  
24 address that.

25 ISD STAFF AIR POLLUTION SPECIALIST LANGFITT:

1           Yeah. Sure. So Quinn Langfitt here. The --  
2 those are average costs that were assessed per landfill.  
3 So it includes all of the closed landfills and the active  
4 landfills. It's the average of that. So an active, a  
5 larger landfill would tend to have higher costs than that  
6 estimate. The closed landfills especially a well managed  
7 close landfill, where there are cost-saving measures in  
8 place, those landfills would tend to have lower costs. So  
9 that represents an average.

10           And then speaking to the difference between the  
11 private sector and the government sector estimate. The  
12 reason for that is that the government landfills tend to  
13 be smaller, more of them tend to be closed. And so the  
14 actual cost per landfill is different, because of those  
15 different characteristics of the landfills, not because  
16 there are different requirements put upon government-owned  
17 or private landfills.

18           BOARD MEMBER GLORIA: I saw the comment -- that  
19 comment on page 128 of the report. And I get that part of  
20 this, although I think, in my case, that's not necessarily  
21 accurate. But when thinking about the technology  
22 procurement, the staffing that's necessary, the  
23 administrative overhead, I'm concerned that we're not  
24 being transparent or at least the averaging may lead  
25 this -- may lead to criticism later, if the actual numbers

1 are so far from where we might have anticipated them to  
2 be, at least as of today.

3 I think particularly when considering even the  
4 processes that are involved for a procurement of this  
5 technol -- of things. It just -- it feels like it would  
6 be more than that. And I understand the direction in the  
7 resolution for staff to continue to work with local air  
8 boards, as well as I'm sure local governments that are  
9 impacted on implementation.

10 I'm sure that that's sincere -- a sincere  
11 direction and that staff will follow through with that. I  
12 just make that plea, because I think we all recognize this  
13 needs doing. Obviously, the importance of methane control  
14 is obvious. I particularly am impressed and appreciate  
15 the ROI, you know, in terms of having something that we  
16 can readily address and get marked improvements in our  
17 community.

18 But kind of going back to the Chiquita Canyon  
19 example, if folks aren't actually implementing on the  
20 local level, obviously these will not be the kind of  
21 commitments that the people who are commenting today can  
22 rely upon. And so I hope on -- while the regulations I  
23 think are understandable, the implementation is key, and I  
24 already heard from staff and saw on the report, the  
25 commitment to continue to work with locals.



1 I would just ask that be done and probably  
2 perhaps for the Board to be informed in the future of  
3 where we see the actuals for the costs of this endeavor  
4 ending up.

5 And lastly, I'll just say, Chair, thank you for  
6 the time. I know there's a lot more of my colleagues need  
7 to speak. I would hope that CARB could work with other  
8 partners and certainly our partners in the Capitol to try  
9 and find the resources to properly allow folks like my  
10 local air control board who I think are fantastic to give  
11 them the resources to be able to do this effectively. And  
12 then wearing my other hat for someone who operates a large  
13 landfill making sure that we can be successful in  
14 responding to what CARB is trying to do. I think we're  
15 all in agreement this is necessary. I think we just want  
16 to actually make it so. And the rules are a good start,  
17 but the funding actually make it possible is probably the  
18 most important here. So thank you, Madam Chair for  
19 those -- allowing me to provide those comments and ask  
20 those questions.

21 CHAIR SANCHEZ: Thank you, Mayor, for those  
22 remarks, and questions, and reflections. And I'll just  
23 point out this administration has worked closely with our  
24 legislative partners over the years to dedicate resources  
25 to addressing methane. So look forward to those ongoing

1 conversations. Thank you. I will stay remote for now and  
2 ask Dr. Pacheco-Werner, the floor is yours.

3 BOARD MEMBER PACHECO-WERNER: Thank you so much,  
4 Chair. I want to start by thanking staff for this ongoing  
5 work and especially the community engagement process that  
6 you did speak to so many people and speak to them in  
7 person, as you were developing this, I feel like is a  
8 really important and great practice that should be  
9 highlighted and modeled really across our State agencies.  
10 So thank you for that.

11 And I also want to thank the commenters today  
12 that came in person and that spoke on Zoom. I think that  
13 on our end in terms of what we can do as one piece of the  
14 puzzle, as you saw, it is very important to hear from you,  
15 and I know that you all some of you have I've seen your  
16 testimony in other spaces. So I really thank you for your  
17 voice and lending us your expertise in this matter.

18 And to that I know that it took so many people to  
19 get us to where the reg is now is terms of the engagement  
20 from both industry and community. And I do think that  
21 this reflects something that is very feasible at the  
22 moment to do, that would actually employ some of our tools  
23 that we have now and technology that is available now. So  
24 I do think that this regulation stands to be a success in  
25 the implementation.

1           Having said that, I do recognize, as our previous  
2 Board member spoke to, the air districts and their  
3 concerns around implementation, I really see this as a  
4 start of the conversation on this. And I hope that the  
5 air districts can continue to engage with us as we see  
6 what resourcing the implementation of this regulation  
7 looks like, that we stay engaged not only as Board  
8 members, but as CARB, in general, so that we can ensure  
9 that as the air districts are getting the resources that  
10 they need to implement this fully, because any regulation  
11 without implementation is really, as someone in the  
12 comments alluded you to, you know, just paper. So we have  
13 no intention of letting it just be paper.

14           And as a -- as a Board member from the San  
15 Joaquin Valley, I want to really continue to invite the  
16 engagement of the local community as well as the air  
17 district in ensuring that this implementation happens.

18           To that, staff, I do have one question in terms  
19 of some of this. Do you have any plans as of right now to  
20 more formally or use existing spaces to engage with the  
21 air districts. I want to get a little bit of more of a  
22 concrete sense as to what the next steps are to ensure  
23 that, one, there is a plan for implementation and also the  
24 feedback loop around resourcing this correctly.

25           Thank you.

1 EXECUTIVE OFFICER CLIFF: Thank you, Dr.  
2 Pacheco-Werner. So yes, we have committed to a process  
3 with the air districts to continue that engagement. Our  
4 plan, you know, assuming that the Board approves today,  
5 would be by the end of the year, so before the end of this  
6 year, to have one more sort of formal engagement with air  
7 districts, and then continuing on as necessary before any  
8 formal comment period -- 15-day comment period that we  
9 would have had multiple engagements with air districts.

10 Regarding the question around resources, we're  
11 looking for some more information, so we'll be gathering  
12 that information from the air districts to better  
13 understand what potential resource needs there are, and,  
14 you know, are very much open to working with them to  
15 strategize how to -- how to obtain those additional  
16 resources to make sure that this regulation can be  
17 implemented appropriately.

18 BOARD MEMBER PACHECO-WERNER: Thank you. And as  
19 a Board member, just know that I am fully committed to  
20 helping in whatever I can in my capacity to make that  
21 happen. So thank you. Thank you, Chair.

22 CHAIR SANCHEZ: Thank you, Dr. Pacheco-Werner and  
23 thank you, Dr. Cliff, for outlining those kind of next  
24 formal steps on engagement with our air district partners  
25 and colleagues.

1 Dr. Shaheen, the floor is yours.

2 BOARD MEMBER SHAHEEN: Thank you, Chair. And I'd  
3 like to echo some of the comments that Dr. Pacheco-Werner  
4 made in terms of her thanks for all of the hard work that  
5 has gone into the development of this resolution that we  
6 have before us. I was so struck by the March 2025 Board  
7 meeting when we heard from Chiquita Canyon and Val Verde  
8 residents, and it's haunted me. And hearing additional  
9 comments today, it just makes me think it's so important  
10 that we have regulation, and that we include transparency,  
11 and transparency in data.

12 And so I was delighted to hear about digitization  
13 and dashboards that will be coming, because I think this  
14 is going to be very important. I also wanted to talk  
15 about just the importance of vigilance in a very complex  
16 environment, as I understand it from these briefings, is  
17 that these landfills are living dynamic environments. And  
18 so it's complicated and very challenging to stay on top of  
19 this, but at the same time, we must.

20 It's too costly not for us to take action. The  
21 other major point that I wanted to revisit is the one of  
22 enforcement and how all of these agencies really do need  
23 to work together. So I greatly appreciate the  
24 multi-agency collaboration and we heard that at the  
25 beginning of the meeting. I think ultimately I come back

1 to comments regarding how do we balance modernizing the  
2 LMR with public safety and costs, right? And so anything  
3 I can do to be helpful on this, I think this is an  
4 exceptionally important regulation and I'm so glad that  
5 we're revisiting it.

6 That said, I have a couple more technical  
7 questions that have arisen in my mind for the team at CARB  
8 from a letter submitted from the solid waste industry in  
9 local governments on November 10th. And one came up in a  
10 briefing meeting I had with Republic Services about the  
11 horizontal collectors and caissons for wells. And I  
12 wanted to inquire, because this is an important component  
13 of the regulations, the working face gas collection, what  
14 evidence supports requiring only those horizontal  
15 collectors? I had the impression from Republic Services  
16 that vertical monitoring is also important.

17 ISD SHORT-LIVED CLIMATE POLLUTANT POLICY SECTION  
18 MANAGER ALEXIADES: Thank you, Dr. Shaheen. And I  
19 appreciate the recognition and the reminder of why this  
20 provision is so important. You know, what we've learned  
21 from a lot of research about, you know, what a common  
22 source of large emissions the working face can be. And it  
23 is a challenging area. That's where, you know, operators  
24 are adding and compacting new waste every day. And  
25 controlling those emissions is really critical to

1 improving overall gas collection efficiency.

2           So I do want to clarify that the -- this piece of  
3 the proposal would only apply to the largest landfills,  
4 those that dispose of over 200,000 tons of waste per year.  
5 And the infrastructure, that types of components that they  
6 can use, are not limited solely to horizontal collectors.  
7 That has been one of the most common innovations that, you  
8 know, some operators have adopted to address emissions at  
9 that area. We do allow another type of collector and we  
10 are certainly open to recognizing the use of additional  
11 types of infrastructure to resolve that issue. So that's  
12 something we're happy to continue working with operators  
13 to make sure we're making available all of the options  
14 that would be effective.

15           BOARD MEMBER SHAHEEN: Wonderful to hear that and  
16 thank you for the clarification on this only applying to  
17 the largest landfill operators. That's very important and  
18 willingness to consider other technologies.

19           My final question is related to the gas  
20 collection and control system. This came up also when I  
21 was speaking with Republic services just some concerns  
22 about the six-month timeline potentially being infeasible  
23 due to permitting delays. So I just wanted to hear your  
24 thoughts on how to align the requirements with real world  
25 permitting timelines.

1           ISD CHIEF BOTILL: Thanks, Dr. Shaheen. Matt  
2 Botill, Division Chief of ISD. I think this is, you know,  
3 one of those areas where we're certainly interested in  
4 looking at how we can make sure any modifications, as part  
5 of a 15-day, reflect real-world situations that may happen  
6 for these operators. We want to make sure that these  
7 provisions that we're putting in place are meeting the  
8 objectives of the regulation, of the proposed amendments,  
9 which include early installation of gas collection system  
10 components on landfills that are emitting, and the working  
11 face is a big source of emissions, but are also practical,  
12 given kind of the situations that the operators face, both  
13 in terms of permitting and other, you know, very real  
14 stake on the ground situations. So we're going to be  
15 talking to them about this as part of looking at  
16 additional changes.

17           BOARD MEMBER SHAHEEN: Wonderful, so that would  
18 be part of the 15-day process, the changes. Wonderful.  
19 Thank you, Matt and thank you, Chair for the time.

20           CHAIR SANCHEZ: Thank you, Dr. Shaheen. Really  
21 appreciate those questions.

22           We will move into the room. I see Mayor Lock  
23 Dawson with your tent card up.

24           BOARD MEMBER LOCK DAWSON: All right. Thank you.  
25 Thank you and thank staff for a great report and thank you



1 to all the members of the public who showed up on both  
2 sides.

3 So I am the -- a member of the South Coast Air  
4 Quality Management District, so I wear both those hats.  
5 So I'm coming in from that aspect and I have some  
6 questions and clarifications that I would like. And just  
7 to express some -- I have a couple comments and one  
8 question.

9 So let's go ahead and start with the question.  
10 And the reason this is such a big deal is because South  
11 Coast -- South Coast AQMD has 80 landfills, some closed,  
12 some still operating, and we get Chiquita. So we have  
13 that one. So, yeah, I know people -- it's not very funny.  
14 So, one of the questions I had that was brought up to me  
15 by staff when they briefed me was that -- so the Initial  
16 Statement of Reasons staff report they allege that it's  
17 incorrect, because it assumes air districts have delegated  
18 authority for provisions in federal regulations related to  
19 wellhead higher operating values, is that correct? They  
20 feel that the local air districts do not have that  
21 authority.

22

23 SENIOR ATTORNEY FIERRO: Under the -- well, go  
24 ahead, Anthy, you can take it.

25 ISD SHORT-LIVED CLIMATE POLLUTANT POLICY SECTION

1 MANAGER ALEXIADES: No, the U.S. EPA has not given  
2 delegated authority to any air district in California to  
3 approve higher operating values for temperature.

4 BOARD MEMBER LOCK DAWSON: So I think that was a  
5 concern, because I think they felt that they would be  
6 tasked with implementing some of that and that they didn't  
7 have the authority to do so. So I think that was a  
8 concern, which I think will be worked out with staff as we  
9 move forward.

10 Let's see. I shared this same concern that Dr.  
11 Shaheen had regarding the regulatory deadlines and how  
12 they would be difficult to meet. Just because of the  
13 incongruence with permitting timelines, so I think that  
14 was the answer. I appreciate that.

15 There -- they feel that -- staff has told me that  
16 there's an inadequate cost analysis for the air district  
17 resources impacts, and investments, and implementation,  
18 and enforcement. So they didn't feel that it's really  
19 realistic. I think I'm sharing Mayor Gloria's concerns  
20 there. So I'm not sure who wants to answer that or  
21 address that.

22 EXECUTIVE OFFICER CLIFF: Yeah. Thank you,  
23 Mayor. So we have heard these concerns. That's in the  
24 letters -- (clears throat). Excuse me -- from the air  
25 districts. And again, that will be part of the work that

1 we can do with them.

2           You know, whenever we do any regulation, we do  
3 our best to estimate the cost, you know, given the  
4 provisions that we have in the regulation. And in this  
5 case, you know, what we're hearing is that there have been  
6 some additional costs that have been incurred as a result  
7 of implementing the current reg that perhaps we didn't  
8 have full information about. Again, you know, had we had  
9 a chance to coordinate a little more ahead of time,  
10 perhaps we would have had that. Nevertheless, it's an  
11 opportunity for us to then go back, understand exactly  
12 what those costs are, and then, you know, work with them  
13 on how to offset those costs.

14           CARB does not have the resources to give to air  
15 districts, so this is a conversation that we'll have to  
16 have, and it will be, you know, an ongoing one that we'll  
17 continue (inaudible) on that implementation.

18           BOARD MEMBER LOCK DAWSON: All right. And two  
19 other comments I know that they expressed to me was they  
20 felt that the LMR has a very unclear regulatory structure  
21 that needs to be clarified and outlined a bit better, that  
22 it -- there was some confusion there, and that some of the  
23 definitions and references come from the old LMR, and are  
24 obsolete, and not being use anymore, and need to be taken  
25 out, and it needs to be trued up with the current state of

1 things. So, that's all in the letter that was submitted,  
2 which I know you know.

3 And lastly, and I said this to Dr. Cliff already,  
4 that I think staff did a fantastic job reaching out to  
5 both industry, as well as community groups. I think we  
6 were -- we could do a little better I think working with  
7 the air districts, because I think they felt a little  
8 surprised by some of this, so -- and I know Dr. Cliff is  
9 aware of that and how we can do better next time. So,  
10 thank you.

11 CHAIR SANCHEZ: Thank you, Mayor, for those  
12 comments. It's a good reminder. In the month I've been  
13 Chair, I visited two of our air districts, but need to  
14 make it to the rest of them. So, thank you for the  
15 reminder on how critical our engagement with our partners  
16 at the local level is.

17 Board Member Rechtschaffen, I saw your microphone  
18 up for the floor.

19 BOARD MEMBER RECHTSCHAFFEN: Thank you. I want  
20 to start by thanking the members of the Val Verde  
21 community and others for coming up here, spending the day,  
22 and sharing your heartfelt and indeed, in some cases, many  
23 cases, heart-wrenching stories. It's very important to  
24 hear from you. Thank you for doing that. I also want to  
25 thank staff for their excellent work.

1 I want to take a step back and just put this in  
2 the larger context of what we're doing here, the top line  
3 takeaway. This is a very, very important rule. This is  
4 national and international significance. You've heard  
5 methane is a super polluter. It has an out-sized impact  
6 on our climate. We have long been a leader in controlling  
7 methane, both nationally and internationally, and it's a  
8 reputation that's well deserved.

9 Chair Sanchez talked about our efforts at the  
10 climate conference in Brazil where California is leading  
11 the Subnational Methane Action Coalition. There are now  
12 almost 200 jurisdictions around the world. I'm sorry,  
13 there are almost 30 jurisdictions representing over 200  
14 million people part of that effort. We were the first  
15 state to pioneer the use of satellite technology, which is  
16 now making its way into our regs, all very, very  
17 important.

18 And what we're doing here is just one piece of  
19 the State's overall strategy to deal with methane. CARB  
20 has adopted rules directed at the oil and gas sector. At  
21 the California Public Utilities Commission working with  
22 CARB, we adopted rules dealing with gas infrastructure.  
23 And just this week, the agencies released a joint report  
24 showing that methane reductions from the gas utility  
25 infrastructure are down over 40 percent, well ahead of our

1 2030 schedule.

2 We're dealing with -- we're also going to deal  
3 with methane in the agricultural sector. So we are doing  
4 a lot. And it's more necessary than ever, given the  
5 federal retrenchment on these issues. The federal  
6 government's backed away from any pretense of  
7 strengthening existing landfill rules, and, in fact, they  
8 are cutting back existing methane rules. They've  
9 rescinded our methane fee, they propose to overturn limits  
10 on oil and gas facilities, to delay leaked detection and  
11 repair requirements. And that's just what they've done so  
12 far. And we've heard loud and clear from members of the  
13 California congressional delegation how important it is  
14 that we take action given this retreat.

15 So, the context is very, very important. As  
16 you've heard throughout the discussion, landfills are the  
17 second biggest source of methane in the State, also a very  
18 important source of odor, volatile organic compounds, air  
19 toxic contaminants. So this rule will have great climate  
20 benefits, as well as very important health benefits for  
21 communities near landfills.

22 I want to just talk about two or three things  
23 that I think are very significant. I think it's really  
24 exciting that we're requiring use of satellite technology,  
25 drones, other remote technologies to monitor for leaks and

1 inspect areas of the landfills unsafe to inspect or to --  
2 through walking. And it's very significant that the rule  
3 requires operators to take action and remediate the leaks  
4 when notified by CARB of plumes that are remotely  
5 detected.

6           Also, very importantly, and this was talked about  
7 already, we're committing to make reported information  
8 publicly available on a website and to update that as new  
9 information becomes available. I strongly support this  
10 transparency. And my understanding from my meetings with  
11 staff is what we're trying to accomplish is really  
12 threefold here. One is just getting data in a better form  
13 to process and analyze, just getting the data more  
14 standardized; two, making it publicly available; but  
15 perhaps -- and three most importantly perhaps, is making  
16 it accessible and digestible to the public, releasing the  
17 data in a format that people can use that supports  
18 independent analysis.

19           I think this type of public information, this  
20 dashboard is really important for regulators in the  
21 community alike. Ideally, I think it would be great if  
22 down the road, we could have data reported to -- from all  
23 the State boards and departments in one integrated  
24 dashboard. It's too bad Deputy Secretary Izant left. I  
25 was going to tell her that's a great task for CalEPA, but

1 she scooted out after lunch.

2 I hear the concerns by Mayor Lock Dawson, Mayor  
3 Gloria and others about implementation costs. I want to  
4 say two things here. One, as the commenter from Full  
5 Circle Future pointed out, costs of regulation when rules  
6 are adopted are often overstated by industry. There's a  
7 long history of that. And in practice, industry could be  
8 more innovative and efficient than they claim at the  
9 start. So I think we have to take -- keep that in mind as  
10 we're analyzing those claims.

11 At the same time, I'm very glad to hear that  
12 we're going to continue work -- continue to work with  
13 industry stakeholders, and importantly the air districts,  
14 to find ways to make implementation more flexible, where  
15 possible, and to streamline requirements, so especially we  
16 don't put undue burdens and require undue resource  
17 expenditures on our air district.

18 And then finally, I'm very pleased that the  
19 resolution commits us to examine and for the Executive  
20 Director to bring back to the Board alternative procedures  
21 for surface emission monitoring for the entire surface of  
22 the landfill. As we develop newer, more comprehensive,  
23 and more efficient means of compliance, it's important  
24 that the Board allow for the use of these alternative  
25 approaches. We want to future proof this regulation.



1           And I do have one question for you, Dr. Cliff.  
2 We heard suggestions from some of the commentators about  
3 whether or not it's possible to have a report back at some  
4 point, maybe 18 months or 24 hours, about where staff is  
5 in evaluating these procedures. Is it possible for staff  
6 to come back to us in 18 months and give us just an update  
7 on where you are in evaluating those alternative  
8 procedures.

9           EXECUTIVE OFFICER CLIFF: Thank you, Board  
10 member. So I take that suggestion to be 18 months from  
11 when the regulation would be implemented. So we're --

12           BOARD MEMBER RECHTSCHAFFEN: Yes.

13           EXECUTIVE OFFICER CLIFF: -- you know looking at  
14 something in the 2028 time frame. And absolutely, we  
15 could do that.

16           BOARD MEMBER RECHTSCHAFFEN: Thank you. That  
17 would be great. That's all. I'm strongly supportive,  
18 Chair.

19           CHAIR SANCHEZ: Thank you, Board Member  
20 Rechtschaffen. Appreciated those comments and all of your  
21 work on this issue, which predates your time on this  
22 Board. So thank you. Over to you, Dr. Balmes.

23           BOARD MEMBER BALMES: Thank you, Chair Sanchez.  
24 So, first off, I want to thank all the presenters,  
25 especially the community members that took the time to

1 come up here. And as Dr. -- sorry, excuse me, as Mr.  
2 Rechtschaffen said --

3 BOARD MEMBER RECHTSCHAFFEN: I'll get promoted.

4 BOARD MEMBER BALMES: Yeah, I promoted you -- it  
5 was really heartfelt and it was good for us to hear.

6 I was also -- I also appreciate folks from  
7 industry and from -- and representing the smaller public  
8 landfills. And I really think that stakeholders on all  
9 sides of this issue have been able to engage with staff,  
10 maybe not as -- maybe the engagement has been as great  
11 with the air districts as we'd like, but otherwise, I want  
12 to commend staff for their outreach and communication.

13 And I think also, I want to thank staff for a  
14 balancing act here. I think that we've heard a lot of  
15 heartfelt community concerns, concerns from environmental  
16 groups, and from industry and public agency landfills.

17 And I think, you know, I hear rational comments  
18 from both sides, and I think staff has done a pretty good  
19 job of threading the needle between these. I have some  
20 comments, somewhat along the lines of what Mr.  
21 Rechtschaffen said later.

22 But I want to go back to Dr. Mulligan's testimony  
23 early in the morning, a physician who talked about the  
24 health complaints that fenceline community members have  
25 related to landfills. And as an occupational

1 environmental health physician for a long time, I have  
2 helped at least three different communities over the  
3 course of my career with serious health complaints related  
4 to commercial landfills. It's a -- this is a real issue.  
5 It's not just Chiquita Canyon. That's the, you know,  
6 biggest one in front of us now, but it's going back  
7 decades.

8 And, you know, so that's why I support overall  
9 the amendments to the LMR proposed by staff. But I  
10 mentioned I was an occupational health physician as well  
11 as environmental health physician. And so one question I  
12 have for staff is about worker safety at the working face.  
13 I've heard that this is an issue when people are walking  
14 around on the -- trying to monitor on the working face.  
15 So I -- I'd like staff to address that.

16 EXECUTIVE OFFICER CLIFF: Maybe I'll start and  
17 staff should add anything. You know, first and foremost,  
18 we aren't going to do anything in our regulation that  
19 would impede safety. That is going to be a primary  
20 concern. We put out our proposal and I think that  
21 industry has some suggestions for how to get at what we're  
22 concerned about, which is the emissions from the working  
23 face, which is where most of the emissions come from, and  
24 while all the while addressing safety. So we're going to  
25 look forward to working with industry to get whatever

1 information and data they can -- they can provide to us to  
2 help support amendments that we would then notice for  
3 15-day comments.

4 BOARD MEMBER BALMES: Thank you, Dr. Cliff.

5 So I voted for the original LMR in 2010. And I  
6 just want to say it's been too long for fenceline  
7 communities to wait, you know, 15 years to -- for a  
8 strengthening of the regulation. Like I said, I think  
9 staff has done a good job, but I would have liked this to  
10 have happened earlier.

11 But I have several additional comments relating  
12 to strengthen the LMR. I would like to see, and I think  
13 we meet -- I think staff wants this, but I'd like to see a  
14 real commitment towards a pathway towards mandatory remote  
15 sensing. I think that's the way to go, including dealing  
16 with the worker safety issue I brought up. I like that  
17 the proposed resolution has a technology review at 24  
18 months, but that's after feasibility has been determined  
19 by staff. So, I really support what Mr. Rechtschaffen  
20 said about a report back about what we've learned after --  
21 in the 2028 time frame. I guess that's 18 months after  
22 adoption of the resolution -- of the amendments.

23 And in that technology review, I'd like to also  
24 include fenceline monitoring. I know fenceline monitoring  
25 is costly, relative to remote monitoring of these

1 facilities. But, you know, as Matt Holmes had testified  
2 to, and I know this from Richmond, where the Chevron  
3 refinery has fenceline monitoring, you know, I think it's  
4 feasible, whether it's cost effective is a -- well, cost  
5 effective is the wrong thing -- whether it's -- whether  
6 the cost-benefit ratio is appropriate, it's something we  
7 should consider. But I think that would really address  
8 the fenceline community's concern, if they were having  
9 regular monitoring at the fenceline, like what's done  
10 outside of the Chevron refinery.

11 I also want to echo what Mr. Rechtschaffen said  
12 about the public availability of monitoring data. You  
13 know, that goes hand in hand with what I've expressed  
14 concern about in terms of a future where there might be  
15 fenceline monitoring. I think, yeah, people are having to  
16 wait too long to find out what they're being exposed to.

17 You know, I realize that creating a dashboard  
18 isn't necessarily an easy thing for staff to do, but I do  
19 think we should be working. There should be a plan to get  
20 to publicly available data that's easily accessed by, you  
21 know, people who don't need a PhD to understand it. The  
22 last thing, I'd like to mention is the temperature  
23 framework for additional monitoring.

24 Totally fine with the 131 initial threshold.  
25 That doesn't mean that changes have to be made. It just

1 means additional monitoring has to be made. I think 145  
2 is where there has to be kind of immediate action.

3 But it's -- right now, it's -- there's a 60-day  
4 time period. And I know I was lobbied by industry folks  
5 for a longer period, 90 days. But to me, that seems not  
6 very consistent with trying to protect the fenceline  
7 communities, in terms of their concerns. So I would  
8 rather see 30 days. That's -- and so I guess I just would  
9 end by -- I would end by saying that I'm proud of staff.  
10 I think they've done a good job, like I said, threading  
11 the needle. And we'll see what my fellow Board members  
12 think.

13 Thank you.

14 CHAIR SANCHEZ: Thank you, Dr. Balme -- Balme  
15 for those comments.

16 Supervisor Hopkins.

17 BOARD MEMBER HOPKINS: I, too, want to commend  
18 staff for their excellent work and also the engagement  
19 with the stakeholders. Although, with the slight asterisk  
20 that early engagement with the air districts I think will  
21 be critical in the future. And I just want to express my  
22 gratitude for the fact that you have brought forward a  
23 proposal that is cost effective and also critical to  
24 public health and greenhouse gas mitigation.

25 I think it's a really good place that we find

1 ourselves in right now. I also wanted to thank the public  
2 for their willingness to come here, and dedicate their  
3 time, and volunteering their time to speak truth to power,  
4 and for sharing their stories, and also for a very  
5 inspired and impressive song, turing tragedy into music  
6 with a bit of humor. And you've got an amazing voice by  
7 the way. That was -- that was phenomenal.

8 I have a couple of just quick questions, you  
9 know, kind of some from the community side, and then some  
10 from the operator side. And it actually kind of pulls up  
11 on Dr. Balmes comments about dashboards. I think that one  
12 of the challenges, right, is we sort of have, you know,  
13 data that is available to subject matter experts and then  
14 the kind of data that is more easily accessible and  
15 understanding to members of the public. And just thinking  
16 about how, right, when it was wildfire season in  
17 California, my kids knew to go to PurpleAir, right, to  
18 just check the -- you know, what is roughly the air  
19 quality outside? Can I go outside or not.

20 And so, you know, they wouldn't be able to  
21 understand kind of the sort of data that you all would,  
22 but they can at least do that and find out, hey, can I go  
23 outside or can't I? And so, just kind of a curiosity,  
24 like when CARB detects a methane plume, will the public be  
25 able to see both the detection and then also the

1 resolution to that, and kind of what strategies were  
2 implemented how that was addressed, and what's the likely  
3 time frame for that being kind of publicly accessible in a  
4 way that's easy for folks to understand?

5 DEPUTY EXECUTIVE OFFICER SAHOTA: Thank you for  
6 that questions, Board Member Hopkins, Supervisor. The  
7 plume data is made available to the public within three  
8 days of detection by the remote sensing technology. And  
9 after it's made public, we automatically notify the  
10 operator as well, and we notify the local agency and the  
11 appropriate division at CARB if we also regulate that  
12 source at CARB. So that would be the staff sitting behind  
13 us and the local air district where that landfill is  
14 located.

15 Once the operators take action on it, the time it  
16 took them to take action and any minor details about what  
17 the cause was are reflected in that dashboard, so the  
18 public can go back all the way to the beginning of when we  
19 started getting that data and isolate time periods to  
20 understand what's happening in terms of detection,  
21 resolution, including times between detection and  
22 resolution.

23 BOARD MEMBER HOPKINS: Great. And so then  
24 essentially by tracking those over time, we'll actually  
25 get more information about how this rule is being



1 implemented and if -- and for instance, we need to shorten  
2 time frames in the future or have those conversations,  
3 we'll start to see trends in the data, is that accurate?

4 DEPUTY EXECUTIVE OFFICER SAHOTA: That's  
5 accurate. The remote sensing data is in addition to this  
6 regulation. So this regulation actually covers more  
7 aspects of the landfill than just the plumes that may be  
8 detected by the satellite. And so, the first part is that  
9 plume detection, which will be readily available on that  
10 dashboard. The goal is to make sure that we have a  
11 uniform way for landfills to report this data under the  
12 new updated regulation once, you know, all the 15-day  
13 changes and the approvals are done, and then make sure  
14 that that is digested into a central kind of database, so  
15 that then the public can go to one place to look at all  
16 landfills in the state and have an understanding of over  
17 time what's been going on at a landfill for the specific  
18 metrics that are being monitored.

19 It's not a full IT project. It won't be the --  
20 you know, the shiny thing like Google Maps, but we want to  
21 make sure we try and get something up sooner than later  
22 that is better than just the flat PDF that sometimes  
23 aren't even made available at this time.

24 BOARD MEMBER HOPKINS: Great. Thank you so much.  
25 And then I also appreciate my colleague bringing up

1 fenceline monitoring. Do we have any opportunities for  
2 pilot projects or potential funding sources for, you know,  
3 just trying this out and seeing how it works? Any ideas?

4 DEPUTY EXECUTIVE OFFICER SAHOTA: So we have had  
5 some research projects and we do have the data coming from  
6 the fenceline monitoring at the Chiquita Canyon Landfill.  
7 At this time, the fenceline monitoring shows if an -- if a  
8 landfill is operating as intended and it's working and in  
9 compliance, you don't really pick up anything at the  
10 fenceline monitoring, but the fenceline monitoring that's  
11 happening at Chiquita Canyon is part of their mitigation  
12 plan. And so that is very specific to when something has  
13 gone wrong and to understand if there are other issues  
14 that are causing of concern to community members nearby.

15 So we are going to continue to look at the data  
16 sets and understand what can we pick up with fenceline  
17 monitoring, because in existing data that we have right  
18 now, if the landfill and the gas collection system is  
19 working as required, you don't really pick up anything  
20 with fence -- with fenceline monitoring.

21 So if we have the remote sensing data and you see  
22 a plume, that can tell you that something is happening.  
23 Under an amended regulation, we can have a better  
24 understanding of temperature increases. If those go  
25 unchecked, and those are not resolved, then you can use

1 fenceline monitoring to have a better indication of what  
2 is making it -- out -- its way out of that geographic  
3 region and maybe impacting the community. So we're going  
4 to continue to look at this, but right now the limited  
5 data we have shows that it -- you know, when you have an  
6 issue, you have the potential for fenceline monitoring to  
7 actually be impactful and helpful to the nearby community.

8 If it's -- if there is no issue that's happening  
9 at the landfill and it's in compliance, you don't really  
10 pick up a lot with fenceline monitoring, but we're  
11 committed to looking at those and continuing to do  
12 research projects around this.

13 BOARD MEMBER HOPKINS: Great. Thank you so much.  
14 Last question. It's just -- there were questions and  
15 concerns brought up about the downtime, and sort of  
16 circumstance that might be beyond operator's control. So  
17 I just wanted to check in about, you know, how staff is  
18 going to approach that if something were to happen, say a  
19 prolonged power outage or, you know, kind of a force  
20 majeure type of a situation.

21 EXECUTIVE OFFICER CLIFF: Yes. Thank you. I  
22 think again that's going to be part of the work that we  
23 want to -- back and forth that we want to have with  
24 operators, as we develop the amendments. So, to the  
25 extent, that they actually -- they have actual information

1 and data to help us understand where those impacts might  
2 occur, then we can address that in regulatory amendments.

3           You know, with regard to the sort of emergency  
4 events that have been identified, such as earthquakes, or  
5 when there's fires, or when there's, you know, no power to  
6 the landfill, you know, of course, we're open to looking  
7 at those issues as well.

8           BOARD MEMBER HOPKINS: Great. Thank you so much.  
9 And again just thanks for all of the wonderful work. I  
10 also want to acknowledge that a member of the public did  
11 briefly bring up enteric methane, which I know is not the  
12 subject of today's hearing, but something that I'm very  
13 passionate about. So I would love to follow up, you know,  
14 with any members of the public and CARB staff to talk a  
15 little bit about that. I have a lot of conversations with  
16 dairies and ranchers up in Sonoma County who are  
17 interested strategies to address that.

18           CHAIR SANCHEZ: Thank you, Supervisor. And great  
19 teaser for worked -- work ahead and really appreciate the  
20 comments around downtime and flexibilities needed there.  
21 I know that's near and dear to a number of residents, and  
22 your constituents. So thank you very much.

23           Over to the Councilman.

24           BOARD MEMBER GUERRA: Thank you very much, Chair.  
25 I appreciate the opportunity here. And first, let me --

1 let me thank all of the community members from Val  
2 Verde -- from Val Verde community that came here. (Spoke  
3 in Spanish.)

4 I think, you know, today very much we need to  
5 move this forward and address the impacts of methane. I  
6 think, you know, Board Member Rechtschaffen articulated it  
7 very well about the -- not only the local challenge, but  
8 the global change that we do have, and the need to prevent  
9 the horrific experiences by the communities near  
10 landfills. You know, my own family, my own sister and  
11 mother live near our closest landfills, in the area with  
12 the closest landfills. So I, too, am very aware of that.

13 And as one of the commenters mentioned here, you  
14 know -- (Spoke in Spanish) -- you know, in fact go and  
15 make sure that you're doing it. And the -- to that point,  
16 you know, (Spoke in Spanish), and don't do something  
17 that's going to be archived and forgotten about.

18 And finally, thank you to -- (Spoke in Spanish)  
19 Maria Torres for (Spoke in Spanish). So I want to give  
20 her a specific thanks.

21 You know, and to that point, on making sure that  
22 we don't archive this and forget about it, I'll start off  
23 with the fact that it's taken 15 years for this review to  
24 come back. And, you know, this is my third year here on  
25 the Board. So, I'd like to make sure that not only the

1 review of this regulation as is comes back sooner, I know  
2 that there were comments by Californians Against Waste to  
3 look at 18 months. You know, that -- and I know that that  
4 seems like a challenge for staff, but I do think that it's  
5 important that time is of the essence here in our work on  
6 the regulatory side, and then also on the re-review, you  
7 know, in how this regulation is implemented. Maybe three  
8 years is necessary to look at that first year operation  
9 and say is it meeting all our standards, because I think  
10 checking often is a -- is more important than not here.

11 But I also want to, you know, talk about how this  
12 rule gets enforced, because as one of the -- as mentioned  
13 earlier, one of the commenters said, you know, make sure  
14 you go there. Well, it isn't going to be the CARB  
15 Enforcement staff that goes out there, unless a district  
16 does not have an MOU or they pull out of an MOU. And I  
17 think that is the clear piece. If we want this regulation  
18 to be enforced and to be successful, then we must be  
19 successful in working with the air districts to achieve  
20 it.

21 In fact, you know, I was looking through the MOU  
22 signed by Mary Nichols at the time with the Sac Metro Air  
23 District, and in one of the sections any one of the  
24 parties can exit the MOU. And so it would be -- the  
25 issues that were brought up by Mayor Gloria, I think are

1 important, because if a -- if an air district looks at the  
2 cost of this regulation and they say, look, we can't  
3 realistically, you know, take on this regulation, while  
4 they're also enforcing other emissions, whether it's the  
5 ports or other toxic areas that they're -- our air  
6 districts are currently doing - it's not like they're not  
7 doing anything else - then they will relieve that MOU and  
8 leave it up to the State. And if the State is the one  
9 that's -- ends up being the enforcement entity, I think it  
10 will be a failure of a regulation, in my opinion, because  
11 we're stronger at the local level when we have our local  
12 experts and their own attorneys as well, you know, going  
13 after landfills and operators, and making sure that they  
14 make that happen.

15 And so to that point, I think, you know, there  
16 are challenges. And I'll speak, you know, just for a  
17 city -- the city of Sacramento that has -- that's 175-year  
18 old city. You know, it already has closed landfills. And  
19 so there is no revenue -- new revenue for those closed  
20 landfills, but we must manage that methane.

21 So, I'll first off by saying and reiterating the  
22 point that we have not looked at Resolution 20-23, I think  
23 it was 13, on biomethane. And so for that aspect, while  
24 it's not part of this regulation, I'm going to highlight  
25 that again, that we look at the markets for biomethane,

1 because if not, there is no cost recovery or a way for a  
2 jurisdiction, a local jurisdiction to be able to cover the  
3 cost of addressing any of that mitigation.

4 I do agree that the cost analysis was inadequate.  
5 And so the work with the air districts is essential. If  
6 we're going to make this regulation count and work, it's  
7 got to work with the air districts. And so to that point,  
8 I want to -- I'd like to suggest some clear direction, you  
9 know, Madam Chair, and that is that Executive Officer work  
10 with the Air -- the Board members of this Board that  
11 represent the air districts to convene with the AQMDs. I  
12 think it's not enough just to say we'll have a formal  
13 meeting. I do think that it's important that the Board  
14 members here be engaged in that discussion to discuss how  
15 we -- when balance the costs make sure that we're making  
16 the most move on the risks of landfills, and also the  
17 communication to the public, because our air districts  
18 have the relationships with the local community members,  
19 through multiple of our programs that we're using.

20 And we want to make sure that information that  
21 we're releasing in that three time -- three-day time frame  
22 is also in coordination with the local air district  
23 information and there isn't a confusion of messages,  
24 because as soon as you have the confusion of messages,  
25 then people -- then that's where you create mistrust, you



1 know, you create insecurities. And so the information  
2 must be coordinated with the air districts and with  
3 essential context.

4 So I think that that is the biggest piece that if  
5 we're going to be successful, we're only going to be  
6 successful if we're working together because we are  
7 stronger together, with community, with the air districts,  
8 and the expertise of our staff.

9 A couple other things that were brought up here.  
10 You know, since some municipalities do manage landfills, I  
11 think the question on horizontal collectors is one that  
12 does need to be explored, even if it's only for large  
13 landfills, because you do have -- you know, in a matter of  
14 a day, you know, you could have a large amount of solid  
15 waste that comes in.

16 And I think the goal here is to be as effective  
17 as possible. So we have some old -- I know, in this  
18 region, old landfills that were designed differently than  
19 all the standards that we have with now modern day  
20 landfills. And so we want to make sure that we're using  
21 the best tools to get as much of that methane and extract  
22 it as much as possible.

23 So I think looking at -- in this next step  
24 process, I'm going to ask the Executive Officer that  
25 the -- I'm going to ask that the Executive Officer work

1 with both, you know, the private, more importantly also  
2 our municipal landfills on the effective cost of managing  
3 and the extraction of that methane.

4 And then finally, if -- on the question of  
5 fenceline monitoring, if there's going to be a cost, let's  
6 make it count. Let's make sure that it makes a  
7 difference, because I will just, you know, discuss from  
8 personal experience, watching and seeing the direct  
9 correlation on the impacts of tipping fees. And this is  
10 the important piece, the trickle down effect that happens.

11 Number one, we have to address public health and  
12 safety. And so as one -- as a -- as a person that  
13 represents a community that's surrounded by landfills,  
14 methane, the odors, all of those issues are important.  
15 Then it's the second piece of what happens if we impose  
16 something on the business. That's fine the business is --  
17 they were supportive here, but what they'll do is they'll  
18 increase the tipping fees. And what we've seen,  
19 particularly in South Sacramento here and in other areas  
20 in the unincorporated county, is when tipping fees  
21 increase, you also see an increase of illegal dumping.  
22 And they generally happen in some of our lowest income  
23 communities. And then you have all of the issues that  
24 come with that aspect as well.

25 So I want to make sure that we're working again

1 here collectively to figure out let's -- let's ensure the  
2 right technology, the right way, the method to do it, and  
3 the time in how we do it, because if we have -- if we work  
4 hastily and it causes the districts to, one, either pull  
5 out of an MOU, that would be tragic, because then we're  
6 relying on the state, or if they stay in and they increase  
7 the fees and the fees get so dramatic that it does result  
8 in the externality of illegal dumping that we've seen,  
9 then that's a problem. I think that's a big issue.

10 And for municipal facilities, that means for  
11 everyone, you know, higher rates. And it's not just the  
12 one rate that we talk about. Last time, we talked about,  
13 you know, electricity rates. We talked about water rates,  
14 sewer rates. Once you start adding all of these up, we  
15 know that that issue is -- and I don't want to negate it.  
16 I don't want to negate that issue, because it is a factor.

17 Now, we can prevent the tragedy that's happened  
18 here, and even other issues that we've had in our regions  
19 here by making sure that we do a lot of this early  
20 monitoring and we use technology to get ahead of the  
21 problem.

22 I think it's -- I want to thank the staff for the  
23 work that they've done to try to move this with some  
24 urgency when the families came here to talk to us. And  
25 with that, Chair, I think those are some of those things

1 that we can do a lot more if we're working together with  
2 our local partners who have the enforcement tools.

3 CHAIR SANCHEZ: Well, said, Councilman. Thank  
4 you so much for those comments. As they say, localism is  
5 determinative. We can have the agency -- the vision here  
6 at the State, but the rubber really hits the road, as they  
7 say, at the local level.

8 Just want to pick up on a few of your comments  
9 and maybe ask staff to weigh in as well. First off -- oh,  
10 no, I'm not closing. I'm just responding. I see you and  
11 I see the Supervisor down there as well.

12 But I loved, Councilman, how you opened with we  
13 can't wait 15 years to update a regulation like this. I  
14 think I'm hearing that reflected in so many of the  
15 comments on the Board. And I take your point in  
16 re-raising biomethane as an issue. I know you've raised  
17 that in the past, so that is on the radar.

18 Staff, I know that the resolution directs the  
19 Executive Officer to work with air districts around the  
20 implementation of this regulation. I heard the Councilman  
21 ask for a more formal role for those Board members who  
22 actually represent our air districts. Could you speak to  
23 a little bit of some options there for the Board members  
24 that want to be particularly engaged?

25 EXECUTIVE OFFICER CLIFF: Yes, Chair. Thank you.

1 I think what I would suggest here is for the  
2 representatives of the Board who are interested in that  
3 engagement to just reach out to me and we can figure out  
4 an appropriate process that would allow us to continue to  
5 have that engagement, and, you know, that obviously we  
6 can, you know, appropriately have our conversations with  
7 the air districts, and, you know, with the Board as we  
8 wrap up the regulation.

9 CHAIR SANCHEZ: Great. Thank you. Let's stay  
10 local. Supervisor Ortiz-Legg, over to you.

11 BOARD MEMBER ORTIZ-LEGG: Okay. Thank you,  
12 Chair. Appreciate that. Good afternoon, everyone. Dawn  
13 Ortiz-Legg representing small air districts. First, I  
14 want to thank all the various community members that came  
15 out. You took a lot of time to get here. I know what  
16 it's like coming from the Central Coast and central parts.  
17 It's not easy, so I really appreciate the resources you  
18 use to come here and share your stories. Very powerful.  
19 Your songs, very beautiful and powerful. And most  
20 importantly, your pleas for assistance. We can hear that  
21 loudly and clearly.

22 And you know what I think is interesting is that,  
23 you know, the Air Resources Board was actually initially  
24 established to monitor garbage. And back in the day,  
25 people burned their garbage in their backyard. And so

1 much of what comes from the history of CARB came from  
2 those kinds of practices. And now we learn and know so  
3 much more about what's healthy and what isn't healthy.

4           So, I think that we've heard from everybody, the  
5 importance to getting this right. It's imperative. And  
6 again, the time frame is critical, in regards to getting  
7 some things done. And I heard clearly that the operators  
8 understand this completely. And the community has made it  
9 clear that the investment for these regulations is a great  
10 value over the cost of something like a Chiquita Canyon.

11           I also want to acknowledge seven-generation  
12 philosophy, talking about our kids, and our kids' kids,  
13 and our kids' kids' kids of all, and the way that -- you  
14 know, and I feel that all policies should be created based  
15 on that philosophy. So creating effective policies  
16 requires really deep stakeholder engagement. And I want  
17 to thank the staff for working with the operators. I know  
18 you've really been trying to work with them - this is  
19 complex - the landfill operators, the owners, and the  
20 public agencies.

21           So we all understand the important of this, but I  
22 do think that, you know, since two-thirds of the landfills  
23 are owned by public agencies like my own county, we have  
24 to underscore the need for this close communication that  
25 was just referenced a minute ago to ensure the

1 implementation is successful. And I think Councilman  
2 Guerra well stated the concerns of illegal dumping, what  
3 happens when tipping fees go up, all of these pieces.

4 And I also want to thank Supervisor Hopkins for  
5 asking what the requirements are for notification in  
6 monitoring zones. And we talked a lot about, you know, in  
7 three days -- within three days, you can go to this  
8 website and you can find things and all of that. I mean,  
9 I think you know all those tools are great, but these  
10 people are working, they're working hard all the time, and  
11 to be able to just go check websites and know where to go  
12 and things.

13 I'm going to suggest something again for areas  
14 that have population within a close radius, being able to  
15 determine that, that something that we do in land use at  
16 counties or what we ask projects to do, is that you have a  
17 list of notification. So the minute that something is  
18 showing up, if you sign up with your text phone, you can  
19 get a text saying that we've got a reading, something like  
20 that. That would be a cheaper way to help people kind of  
21 know, like okay, so something is going on, without having  
22 to have more monitoring, more this, more that. That just  
23 a simple text message that says, we're on top of it.  
24 We're seeing -- this is where you can find -- they'll  
25 direct you to the information, something of that nature.

1           Now, that's not across the -- I mean, that's for  
2 places where you have neighbors living as close proximity  
3 In my county, people live far away from the landfill, so  
4 it's a little bit different. So again, this goes back to  
5 the one size doesn't fit all, doesn't serve all in some of  
6 our rules, that we have to be -- think about the fact that  
7 we're a state that's so large, and has so many different  
8 types of locations and populations.

9           So some of the other coordination would be the  
10 data streamlining and the reporting requirements to ensure  
11 accuracy and utilization among staff of the users. You  
12 know, they've got a lot of people trying to monitor  
13 things, but we've got to have clear messaging, and I think  
14 that goes back to the time frame in regards to make  
15 sure -- making sure we get this right.

16           I just want to see here. The other piece is  
17 that, you know, the resources again for the small air  
18 districts, smaller areas -- our district, we just raised  
19 rates and we're still below the cost recovery, because  
20 we've had so many large industries shut down. They were  
21 paying a lot of the costs for our staff at the Air  
22 Resources Board. And so, now that we've had those  
23 facilities shut down, the things that they are monitoring  
24 aren't large. They're coffee roasters. They're maybe  
25 automotive paint places, things like that. So you have



1 lots of little places to monitor, but we don't have the  
2 big facilities that would maybe spend, you know, million  
3 dollars for the regulatory prices or a half a million  
4 dollars, something like that.

5           So that now is back on the back of the ratepayers  
6 to be paying for that. So that's -- so we're still trying  
7 to deal with that, so, you know, when we're only -- we're  
8 trying to recover costs, adding these regulations will  
9 possibly require three to four times record keeping, and  
10 adding staff. And I think it was underestimated in the  
11 impact report that was, you know, suggested by the Mayor  
12 and Councilmember and other supervisor. In our air  
13 district, for one staff member, that's 140,000. That  
14 exceeds the -- that exceeds the annual cost that was  
15 projected in the economic report. So we need to take a  
16 look at that, because, you know, we're talking a couple of  
17 more staff members. So that would not be able to be done  
18 easily. And then you have people leaving the District,  
19 leaving the MOU.

20           I think the timeline monitoring and all, I think  
21 that should be dependent on size and overall compliance  
22 history. I think that there's just things that we could  
23 do a little bit more in coordination with our  
24 stakeholders, ensuring workforce protection on the  
25 monitoring systems, and flexibility. Flexibility is key.

1 Downtime to address the external factors, as I was saying,  
2 like a public service shutdown. Flexibility on the  
3 technology tools to be monitored. Not calling out one  
4 type of technology, but there's -- as technology is  
5 going -- is coming forth, these guys and gals that are in  
6 this industry are looking, and watching, and seeing what's  
7 working for their landfill, depending on their  
8 geographical place. Some places are cold. Some places  
9 are hot. All of those things have a -- have an interface,  
10 importance to the kinds of decisions that they're making  
11 on how to best keep their operations safe and operating in  
12 optimum conditions.

13 I want to just -- two more things. I'm going to  
14 just make a quick shout-out on the biomethane utilization.  
15 You know, that's such a critical piece in our waste  
16 management system in San Luis Obispo County. We send the  
17 biomethane to our Arroyo Grande oil field. It's a closed  
18 loop system. It's pumping and all that is going in and  
19 it's not going out into the atmosphere. They never get  
20 readings from our APCD, so these are closed systems that  
21 can really help drive machinery. And then the other part  
22 is used on an onsite engine that sends electricity to the  
23 grid. So all that extra methane can actually go do work  
24 and do things.

25 The other thing is -- the last thing I have is

1 the closed landfills. We have closed landfills. Is there  
2 a way to assess the landfills that have been closed for  
3 many years? We see a potential situation where the rule  
4 may hinder closure long -- make it longer, as the methane  
5 is dropping and thus -- so an update to Section 95467 adds  
6 an unnecessary step of semi-continuous operations, which  
7 creates complexity and increases costs. And again, that  
8 costs are back on the general fund to the taxpayer with  
9 very little benefit to methane reduction. So we really  
10 like the -- a little review on that.

11 We'd prefer to allow -- to be allowed the  
12 shutdown to continue and use surface emissions monitoring  
13 to verify if we're emitting a significant amount of  
14 methane into the atmosphere. So under the proposed  
15 regulation, we're afraid that it -- we'd be operating the  
16 GC -- operating the plant for a long time as -- even as  
17 the declining trend of the methane generation are creeping  
18 downward.

19 So those are some of the points that I have to  
20 share. And I thank you for the time and again thank you,  
21 folks, for coming out.

22 CHAIR SANCHEZ: Thank you much, Supervisor for  
23 those comments. I know a lot of them touched on issues --

24 BOARD MEMBER ORTIZ-LEGG: Yes.

25 CHAIR SANCHEZ: -- that staff are proposing to

1 address in the 15-day changes.

2 BOARD MEMBER ORTIZ-LEGG: Thank you.

3 CHAIR SANCHEZ: So thank you for sharing those  
4 reflections with them.

5 Over to you, Board Member Takvorian.

6 BOARD MEMBER TAKVORIAN: Thank you, Chair.  
7 Appreciate it.

8 The benefit of going later in the discussion is  
9 there's so much to agree with that my brilliant fellow  
10 Board members have made these comments, so -- but I do  
11 want to add my gratitude to staff who I know have worked  
12 incredibly hard on this -- on this regulation. And you  
13 noted that you've work on outreach since 2022, but I think  
14 you've worked on it a lot longer than that. So just the  
15 secret is out that this isn't just a three-year process.  
16 I think that you've been working on it for a really long  
17 team, and I just want to acknowledge that, and thank you  
18 for that. A lot of work went into this update.

19 And sadly, communities who are impacted by  
20 landfill pollution, like many of you who are represented  
21 here today, and those of you who have had to leave today,  
22 and those that are on Zoom, you all have been volunteered  
23 to work on these issues through these horrendous  
24 catastrophes that have happened in your communities.

25 And I want to just express my huge appreciation

1 to all of you for being here. And for being here in  
2 March, I think -- I agree with Dr. Shaheen, it was a very,  
3 very moving meeting. I think we -- none us of will forget  
4 it and I don't think any of us should forget it as we  
5 think about what we're doing today and remember the  
6 suffering that your communities have been through. And we  
7 really need to prevent that from happening in any other  
8 community.

9 So, I think we have this huge opportunity today  
10 to move the needle very significantly. And we clearly  
11 need to move quickly to prevent future catastrophes,  
12 especially as the federal government pulls back. We need  
13 to take that space, as I think the Governor had said so  
14 clearly in Brazil. And as our Chair has shared with us,  
15 California has to fill this space.

16 I want to also acknowledge, and I think Dr.  
17 Balmes said this, is that we're not losing sight of the  
18 fact that in addition to this being a methane emissions  
19 rule, it is a public health rule. This rule will really  
20 save lives. It will save people's respiratory systems.  
21 It's going to help children to actually play outside and  
22 not have to be inside all the time. I've heard many of  
23 you say that you're prisoners in your homes. We have to  
24 stop that from happening. We have to really cut this off  
25 and make sure that people can enjoy their quality of life.

1           So, I support the rule, and I think there's a few  
2 things that some of my colleagues have mentioned that  
3 could be better. So I want to -- I want to drill down on  
4 those a little bit.

5           I heard Supervisor Hopkins talk about the  
6 reporting and the presence of a dashboard, and publicly  
7 available information. And Deputy Director Sahota  
8 responded that the plume data would be available within  
9 three days, which I really appreciate. And I just wanted  
10 to drill down on whether you're saying that data is  
11 available now and -- or are you saying it will be  
12 available as a result of the adoption of these amendments?

13           DEPUTY EXECUTIVE OFFICER SAHOTA: Thank you for  
14 that question. There is a clarification here. So the  
15 plume data is available within three days, because we have  
16 to process the data, and then we notify the operator, and  
17 the local district, and the appropriate regulatory team at  
18 ARB. And that process moves forward. All of that data  
19 and any resolution is public within weeks of that, so that  
20 it's on the dashboard and the public can see what was seen  
21 on the satellite data and how that was resolved or how  
22 long it took to resolve that. So that is -- that is just  
23 that methane plume data.

24           When it comes to -- and that's independent of  
25 this regulation. That is based on the Methane Satellite

1 Data Project that was funded with the, "Our own damn  
2 satellite money," which is what we lovingly call it now.

3 Independent of that, this regulation would have  
4 some uniform reporting. It would have more data points  
5 reported and more frequent testing for those data and  
6 reporting of that data, that we would then have digested  
7 and available on a public website, a public dashboard, so  
8 that people don't have to PRA, publicly record request,  
9 data and flat reports from the districts, and it would be  
10 in one place. And that is another place where we are  
11 committed to working with the air districts to make sure  
12 that the data is coming in in a uniform way that we are  
13 making sure it's timely and that it can be accessible.  
14 And because it's a CARB regulation, we would work to make  
15 sure all of it is available on our website to the public.

16 BOARD MEMBER TAKVORIAN: Okay. Perfect. Thank  
17 you for clarifying. And so, the plume data is available  
18 on the satellite monitoring site now. And what you  
19 described is the website and the dashboard that would  
20 become available as a result of this regulation, so that's  
21 one of the things that we're approving.

22 What is the time frame for that. We'd like --  
23 I'd like to get some specifics about when that dashboard  
24 will be available, because it's not specified in the  
25 resolution and I'd really like it to be. So, can we --

1 when do you anticipate that that would be up?

2 DEPUTY EXECUTIVE OFFICER SAHOTA: So these  
3 amendments, if approved, would go into effect January 1,  
4 2027. So we wouldn't even be collecting new data under  
5 this regulation until 2027. And it would be after that,  
6 that we would have data to actually make available.

7 What we can do in the meantime is figure out how  
8 to take some of the flat PDF reports that we have and see  
9 if we can get those stripped of the data and have that  
10 somehow made available, similar to what our Research  
11 Division did with some of the Water Board data related to  
12 dairies.

13 BOARD MEMBER TAKVORIAN: Okay. So can we add to  
14 the resolution then that it's the -- I think it's the  
15 first be it further resol -- well, no it's not. It's on  
16 page eight and it's, "Be it further resolved that the  
17 Board directs the Executive Officer to make reported  
18 information publicly available on a website with updates  
19 as new information is -- as new information is submitted  
20 by early 2027."

21 DEPUTY EXECUTIVE OFFICER SAHOTA: The 2027 is  
22 when the new reporting requirements would be required at  
23 the -- by the operators. And then that data has to be  
24 collected and reported to CARB before it becomes  
25 available. And --



1 BOARD MEMBER TAKVORIAN: But I appreciated that  
2 you mentioned that the data that we do have could start to  
3 go up on the website and then you'd add the data as it  
4 came forward. So that's what I was trying to explain.

5 DEPUTY EXECUTIVE OFFICER SAHOTA: Okay. Okay.  
6 So there's two pieces there, yes. Thank you for that  
7 clarification.

8 EXECUTIVE OFFICER CLIFF: Can I just suggest  
9 maybe we -- we understand that the idea is to get this  
10 done as quickly as possible, so, you know, perhaps adding  
11 as expeditiously as possible. I don't know the exact  
12 timing, because we want to be able to get information that  
13 we have available now up on a website. And then when we  
14 have new reporting, new information, we'll be adding to  
15 that, and that may evolve over time. But we also don't  
16 have a particular set of resources to commit to, you know,  
17 a project that would allow us to get that information up  
18 right now. So I think it's going to evolve over time.  
19 It's going to probably start with moving PDFs to  
20 spreadsheets, adding things like the ability to use, you  
21 know, advanced types of software to express that  
22 information in graphical form. These are things like  
23 Tableau.

24 And then over time, maybe adding a more  
25 user-friendly database that the public can more easily

1 download. But I think this is going to have to evolve  
2 over time, so I don't know that there's a bright line date  
3 that we would be able to commit to right now,  
4 understanding that, you know, this is going to have to be  
5 something that we continue to work on.

6 BOARD MEMBER TAKVORIAN: I just -- I think that  
7 we need to be accountable. And we've got folks that  
8 really need this information and we've seen how important  
9 it is for community members to have this information, look  
10 how they've acted on it, which has enabled us to really  
11 create more actions. And I think expeditiously is a good  
12 word, but it's not a very accountable word. So, can we  
13 set a goal of starting this dashboard -- I understand that  
14 it's not going to be all put together all at once. That  
15 we start it with -- in the way that Rajinder kind of  
16 described it, with the data that we have available now, in  
17 early 2027, and then we build on it after that to  
18 incorporate all of the data that you will be getting,  
19 because it does seem like you've got that information.  
20 And it won't be as robust as I know -- I think we're  
21 letting the perfect get in the way of what could be useful  
22 information, because we do such good work here. I think  
23 it's important that we start with what we have, so the  
24 public has access to that.

25 So if that would be maybe a compromise to say to

1 set a goal of having this information -- the existing  
2 information available in early 2027, and then we'll  
3 continue to build on it. Would that work? Is that a --

4 EXECUTIVE OFFICER CLIFF: Yeah, I think that's  
5 fine. We -- you know, perhaps starting in 2027 would be  
6 the best way to express that.

7 BOARD MEMBER TAKVORIAN: Okay.

8 EXECUTIVE OFFICER CLIFF: We're going to have to  
9 go back and --

10 BOARD MEMBER TAKVORIAN: There you go.

11 EXECUTIVE OFFICER CLIFF: -- you know, like I say  
12 take -- transitioning from the way the data are reported  
13 today to something that is more accessible is going to  
14 take quite a bit of staff effort.

15 BOARD MEMBER TAKVORIAN: Right. And I -- you  
16 know, I know that you're going to want to do GIS maps and  
17 be able to find where you live and be able to connect with  
18 that, but I think really people are asking for basic  
19 information. So if we can get that up, that would be  
20 awesome.

21 Secondly, I would like to look at how we can  
22 report back. There's a paragraph a couple paragraphs,  
23 under the one we've just been working on, that asks the  
24 Executive Officer to evaluate the state of science and to  
25 come back within 18 months of determining that these

1 technologies can be scaled and cost effective. I think  
2 there have been requests for us to really look at having  
3 the remote sensing mandatory for all areas of the  
4 landfill. And I know you need to do the technology  
5 assessment that would enable that to happen. So is it  
6 possible -- I heard you say I think in response to Mr.  
7 Rechtschaffen, that that could happen in 18 months. Is  
8 that correct?

9 EXECUTIVE OFFICER CLIFF: I think there were two  
10 pieces here. So you're talking about page eight, "Be it  
11 further resolved and then it says --

12 BOARD MEMBER TAKVORIAN: Bottom of the page,  
13 yeah.

14 EXECUTIVE OFFICER CLIFF: Right, within 24  
15 months. Then there was a separate request of coming back  
16 to the Board on implementation of the regulation,  
17 including the monitoring technologies within 18 months.  
18 What I suggested instead was by mid-28, so that we're just  
19 kind of -- we have a hard date --

20 BOARD MEMBER TAKVORIAN: Okay.

21 EXECUTIVE OFFICER CLIFF: -- knowing this  
22 regulation should go into effect starting in 20 -- January  
23 1, 2027, that we would come back in mid-28 with, you know,  
24 a report to the Board on the implementation.

25 BOARD MEMBER TAKVORIAN: And potential -- did I

1 also hear you say potential amendments based on the  
2 technology review that --

3 EXECUTIVE OFFICER CLIFF: We would not have  
4 amendments at that time. That's simply too fast. We  
5 would only have 18 months of implementation. It takes  
6 more time than that to draft new amendments. So we  
7 couldn't come back in that time frame with new amendments,  
8 but we could --

9 BOARD MEMBER TAKVORIAN: So how can --

10 EXECUTIVE OFFICER CLIFF: -- have an update and  
11 then use that information to inform amendments, you know,  
12 based on Board direction at that time.

13 BOARD MEMBER TAKVORIAN: It just seems like from  
14 my staff briefing and from other reading that I've done,  
15 that the technology is moving pretty quickly, so that we  
16 may be able to have that technology available to us to  
17 utilize throughout the landfill sooner than that. Is  
18 that -- do you feel like that's a possibility and is there  
19 a faster way to get on that pathway, because I've heard  
20 that from several Board members as well.

21 EXECUTIVE OFFICER CLIFF: I think to the extent  
22 that there's technology and information that would help  
23 support regulatory amendments, then, you know, we would be  
24 interested in doing that more quickly. Given that this  
25 regulation would only be implemented for about 18 months

1 at that point, we would have to be essentially developing  
2 regulatory amendments before we even started the  
3 implementation of the new regulation.

4 BOARD MEMBER TAKVORIAN: Right. But this is  
5 really about technology and not so much about the  
6 regulation. I keep hearing from folks that we really  
7 think this is going to help us to identify these plumes  
8 and to be able to take enforcement action -- well, to take  
9 mitigation quicker -- mitigation action quicker, and then  
10 to take enforcement action more quickly.

11 So, is there a way that we could amend this, so  
12 that we're asking you, as the Executive Officer, to  
13 authorize that kind of an amendment to come forward more  
14 quickly.

15 EXECUTIVE OFFICER CLIFF: So it would still  
16 require regulatory amendments. The Board could delegate  
17 those amendments to the Executive Officer, but it would  
18 still have to follow the APA process.

19 BOARD MEMBER TAKVORIAN: Right.

20 EXECUTIVE OFFICER CLIFF: So, yes, that would  
21 board something the Board could delegate that authority  
22 to -- for new amendments to the Executive Officer. We  
23 would still have to follow the normal APA process however.

24 BOARD MEMBER TAKVORIAN: Of course. Well, I'd be  
25 open to other suggestions, but I think that to the degree

1 that we're learning a lot about technology and if there's  
2 a way that we can then encourage, perhaps we can add it to  
3 this one, that we can encourage the Executive Officer to  
4 authorize the use of these technologies more rapidly than  
5 the current regulation specifies, that we could add that  
6 to this paragraph.

7 EXECUTIVE OFFICER CLIFF: I'm not exactly sure  
8 how to add that to the paragraph. Sorry.

9 BOARD MEMBER TAKVORIAN: I know, me either.  
10 Well, this says, "Within 24 months of determining that  
11 these technologies can be scaled and cost effective," so  
12 that -- if you haven't figured that out for another year  
13 or two years, then we're talking four years before this  
14 technology becomes required on a landfill. I'm trying to  
15 shorten that. So, I -- could we get a report back in 18  
16 months on the technologies --

17 EXECUTIVE OFFICER CLIFF: Yes.

18 BOARD MEMBER TAKVORIAN: -- alone, and then at  
19 that point, we can launch onto whether or not amendments  
20 are necessary.

21 EXECUTIVE OFFICER CLIFF: Yes, that --

22 BOARD MEMBER TAKVORIAN: Would that work?

23 EXECUTIVE OFFICER CLIFF: Yeah, that works.

24 BOARD MEMBER TAKVORIAN: Okay. Thank you. Thank  
25 you for hanging in there with me.

1 BOARD MEMBER RECHTSCHAFFEN: Can I just --

2 BOARD MEMBER TAKVORIAN: Yes.

3 BOARD MEMBER RECHTSCHAFFEN: Can I just --

4 there's nothing that precludes you under the resolution

5 language from coming back to us earlier, right, Dr. Cliff?

6 It just says -- it's just a requirement within 24 months

7 of determining it, you shall, but you decided to move more

8 quickly because your intermediate review shows more

9 promising technologies are available. You make that

10 determination they can be scaled and cost effectively

11 deployed, you could propose something sooner.

12 EXECUTIVE OFFICER CLIFF: That's right.

13 BOARD MEMBER RECHTSCHAFFEN: Thank you.

14 CHAIR SANCHEZ: Great. Board Member, Takvorian,

15 any other issues you wanted to flag before I give the mic

16 to --

17 BOARD MEMBER TAKVORIAN: No.

18 CHAIR SANCHEZ: No. Great. Wonderful. I think

19 the underlying point to those comments just how quickly

20 the technology is evolving and accelerating in this space

21 is great to capture in the resolution. So thank you

22 staff.

23 Board Member De La Torre, over to you.

24 BOARD MEMBER DE LA TORRE: Thank you. And I

25 apologize. I had to step out to do something for my day



1 job, so I missed a lot of the discussion. So, some this  
2 may be repetitive. I don't know.

3 But, I want to start at a 30,000 foot level,  
4 which is why we're doing this. Yes, there are the human  
5 impacts, in those cases, where people live nearby, but  
6 we're doing it on a bigger scale as well, which is climate  
7 change. In your comments, you highlighted methane. It's  
8 a short-lived climate pollutant. It's one of four  
9 short-lived climate pollutants that we are absolutely  
10 focused on at this agency, methane, hydrofluorocarbons,  
11 black carbon, and tropospheric ozone.

12 So it is one of the four that we have to address,  
13 if we're going to make a prompt dent in the impact for  
14 climate change on this planet. So can't ever lose sight  
15 of that. What -- it's part of our on mandate at this  
16 agency, and so, that is a big part of the reason why we're  
17 here.

18 Second part of the reason is the discussion that  
19 just happened, technology. The reason we haven't  
20 revisited this regulation in 16 years, even before I was  
21 here, but not before John -- Dr. Balmes, is that the  
22 technology advancements have been tremendous. We now have  
23 a satellite or as Jerry said, "Our own damn satellite."  
24 We have the drones. We've got -- you know, we just got  
25 more stuff, more sensitive equipment, et cetera, monitors.

1 So, that's a trigger for today's regulation is the  
2 technology.

3 And so anything that can keep that moving forward  
4 I think is very, very important. (Spoke in Spanish.) I  
5 just said for those that spoke, you know, about this  
6 process in Spanish, that it's not that we're ignoring  
7 things. It's not that we're dragging things out. It's  
8 not that we don't want to do things. It's just that we  
9 have to do things correctly and in accordance with law, if  
10 it's going to stand up, if it's going to be effective, if  
11 we're going to be able to enforce this regulation. And  
12 so, that's what I said in Spanish.

13 I only have two things that I wanted to add. I  
14 think this is a good regulation, again 16 years. It's  
15 been awhile. So we're taking these big steps, driven by  
16 technology, to move forward on an area that absolutely  
17 needs it. So the two things I have. One is piggy-backing  
18 on Board Member Takvorian's comments that the 18-month  
19 window for a technology review, if you want to call it  
20 that. And that the staff will report to the Board on  
21 progress with technologies no later than 18 months or  
22 whatever it was that Board Member Rechtschaffen said  
23 earlier.

24 And, you know, potentially those technologies,  
25 further advancements would be so commonplace that we would

1 want to update this regulation to incorporate those. So  
2 I'm very supportive of that.

3           Second, on wellhead temperatures. Currently,  
4 they have to be at 131 degrees for 60 days to trigger  
5 down-well monitoring. However, monitoring is only once a  
6 month, so potentially that could be 88 days between when  
7 wellhead monitoring is triggered, so -- and I don't know  
8 if this was brought up earlier, but I think I am  
9 supportive of changing it to 30 days at 131 degrees for  
10 down-well monitoring. Just 30 days is a long time, in my  
11 book. I think most people would agree. And then what  
12 we've seen in Chiquita, I think merits that we be -- that  
13 we be more cautious on these moments. And again, I don't  
14 know if anyone else has raised it, but I would be  
15 supportive of making that adjustment.

16           And then the final thing is just, in general,  
17 transparency. And this also goes to Board Member  
18 Takvorian's points. If we've got the data, we share it  
19 and we make it public. We went through something like  
20 this with pesticides a few years ago, some of you that  
21 have been around for a while. It's not our turf.  
22 Although, I did argue that if it's in the air, it is ours.  
23 That they already had the data that they were making  
24 available to farmers -- neighboring farmers, but they  
25 weren't making it available to the public. It makes no

1 sense. If we've got it, share it. We should be about  
2 transparency at this agency. And so, those are my  
3 comments for today. Thank you.

4 CHAIR SANCHEZ: Thank you, Board member.

5 Any additional comments from the dais?

6 Yes, Councilman.

7 BOARD MEMBER GUERRA: Thank you very much, Chair.

8 On the mandated 120-hour rule, it was brought to my  
9 attention that even the most strictest time currently for  
10 on the downtime, I think it might be Bay Area District. I  
11 can't remember, but it was 240 hours. It was Bay Area.  
12 So if that's the current industry strictest downtime issue  
13 and, you know, we're fortunate that we're in SMUD  
14 territory and have -- don't have to deal with PG&E  
15 downtimes, you know. My mother-in-law is in PG&E  
16 territory, so I get a lot of reports on that.

17 But I guess, you know, to the staff here, how did  
18 we get to 120 and is that even realistic on the operation?

19 ISD SHORT-LIVED CLIMATE POLLUTANT POLICY SECTION  
20 MANAGER ALEXIADES: Yeah, thank you. So I think for the  
21 majority of landfills, that is absolutely realistic. Many  
22 landfills have multiple control devices. They have  
23 backup. They have, you know, engines in series or  
24 multiple flares that they can utilize to make sure that  
25 there's always, you know, that control available.

1           So we think it's feasible in most cases. And  
2 that it is, you know, of course, provided that we make a  
3 clarification that those situations outside of their  
4 control, as we heard from many commenters, earthquakes,  
5 wildfires, and power outages. If those aren't considered  
6 as counting towards the limit, then we generally think  
7 that is a feasible standard, but you're correct. It would  
8 be the most stringent among any existing regulations.

9           BOARD MEMBER GUERRA: Well, I think this is --  
10 you know, Madam Chair, I think this is one area during the  
11 15-day rule change that needs to be explored. You  
12 can't -- I don't think it's appropriate to pass a  
13 regulation that in most cases may be reachable. Like we  
14 have to get to the -- to a point that it's -- that it's --  
15 that we're not making exceptions over and over again, or  
16 whatnot. So, I mean, if there's -- if there's a current  
17 industry standard that's pushing all the other air  
18 districts to do better, you know, then why not reach that?  
19 And I think -- I think that would be appropriate. But I  
20 worry about, you know, just -- I'm not going to say it's  
21 arbitrary, but it does come across a little bit arbitrary  
22 at 120.

23           So I'd like staff to explore that -- what that  
24 mandatory hour is, because even as we're seeing in other  
25 regulations we're doing, we have an exception, on

1 exception, on exception, then what does the rule stand on.  
2 So let's -- I'd like to get that number to a better spot.

3 CHAIR SANCHEZ: Great. Thanks, Councilman. And  
4 staff, please do explore that in the 15-day changes in the  
5 ongoing engagement with operators and other stakeholders.  
6 Dr. Shaheen, I see you raising your hand for last comment.  
7 Yes.

8 BOARD MEMBER SHAHEEN: Yes. I've been listening  
9 to the whole conversation and really appreciate it. And  
10 just wanted to share my support for a check-in of the  
11 review of the technology and the status of things in the  
12 2028 time frame, as Dr. Cliff suggested in response to  
13 Board Member Rechtschaffen, and I'm also very supportive  
14 of Board Member Takvorian's request. I think Dr. Cliff  
15 suggested that we do our best to start reporting data in  
16 the 2027 time frame. So I just wanted to share my support  
17 of both of those motions. Thank you.

18 CHAIR SANCHEZ: Thank you, Dr. Shaheen. And I  
19 think there was a little bit of a -- I want to avoid  
20 confusion perhaps around the 18-month, 24-month, what  
21 we're reporting when. Dr. Cliff, I think the teamwork has  
22 on some resolution language. If you could please read  
23 that for the Board and make sure that it's addressing all  
24 of the concerns you've heard today, that would be much  
25 appreciated.

1 EXECUTIVE OFFICER CLIFF: Yes, Chair. So, I  
2 would suggest adding, "Be it further resolved that the  
3 Board directs the Executive Officer to report on Landfill  
4 Methane Regulation implementation by mid-2028. The report  
5 would include evaluation of monitoring technologies, as  
6 well as the feasibility of other alternative technologies  
7 for methane detection.

8 CHAIR SANCHEZ: Great. Does that accurately  
9 capture? I'm seeing nods. And did we also accelerate the  
10 24-month time frame to 18 months? No. Great.

11 Board Member Rechtschaffen, captured -- you're  
12 great. All right. I see the supervisor reviewing  
13 language.

14 BOARD MEMBER RECHTSCHAFFEN: I'm certainly  
15 supportive if the staff were open to proposing rules  
16 within 18 months. That was not in the original  
17 resolution. I think you've heard some support among other  
18 Board members for doing that. So I don't want to put  
19 words in staff's mouth, so they should comment, but that  
20 does -- I think what Dr. Cliff spelled out does reflect  
21 the discussion as of now, but we could -- I would  
22 certainly support 18 months for implementation -- or  
23 proposal for an amendment once the staff has completed its  
24 review of the technologies.

25 CHAIR SANCHEZ: Perhaps we visit that after we've

1 read the review of the implementation -- of the report  
2 mid-2028, right?

3 Nods. Nods.

4 Okay. There were a few other issues that I heard  
5 raised today that I just want to make sure are captured.  
6 I think many of the concerns around implementation were,  
7 in fact, covered in staff's presentation, slide 18, on the  
8 proposed 15-day changes and some of the work, the  
9 conversations you've been having with operators and air  
10 districts and some flexibilities that need to be  
11 addressed, including for PSPS, definitional clarity,  
12 alignment of timelines. So staff, I think, you have a lot  
13 of direction and feedback from the Board now to  
14 contemplate, as you implement those 15-day changes. Look  
15 forward to the review in mid-2028.

16 And then I think I just want to underscore what  
17 every single Board member said here around just the  
18 ongoing partnership with our locals, with our air  
19 districts. Obviously, a question mark around resources  
20 that we will continue to work with them on and our  
21 legislative colleagues, including Assemblymember Schiavo,  
22 who was kind enough to join us today.

23 So, really look forward to the ongoing convenings  
24 and conversations with our air district partners to  
25 implement the regulation and the MOUs.



1 Other comments, thoughts, questions?

2 Yes, Supervisor, please

3 BOARD MEMBER ORTIZ-LEGG: Thank you so much.

4 Yeah, I just really want to highlight again what  
5 Councilmember Guerra just mentioned about operability, in  
6 regards to the 120 days. And again, you said it, you  
7 know, flexibility, understanding that we want the ability  
8 to ensure that these regulations can be executed while  
9 keeping the operations safe. If people are running around  
10 trying to check boxes without really paying attention to  
11 what's -- without the ability to really pay attention,  
12 because they're doing so many check -- box checking, that  
13 can be a problem. And I think that goes back to our  
14 communication with the operators on what works best in  
15 regards to making sure that we don't have unintended  
16 consequences as we pursue this good effort here.

17 CHAIR SANCHEZ: Great. Great. Well, we will  
18 thank staff in advance for the work to come on that issue.

19 And as we move to the vote, I just want to again  
20 thank staff for the years of work going into this  
21 regulation, just to commend you all for the modeling,  
22 analysis, and engagement with stakeholders around the  
23 state and frankly around the world on this. I think of  
24 this regulation as a little bit of special sauce in  
25 California climate and clean air policy continuing to

1 demonstrate our global climate leadership, as you heard,  
2 from all of our Board members while also working to  
3 protect communities who are really at the heart of this  
4 regulation. And I just want to thank you again to all of  
5 the community members for spending your day with us.  
6 Looking forward to continuing the conversation with all of  
7 you and with our sister agencies. I don't want to forget  
8 gratitude to our CalEPA BDOs who also have a critical role  
9 to play here in protecting communities from landfill  
10 pollution.

11 With that, the Board has before them Resolution  
12 number 25-14. Do I have a motion and a second.

13 BOARD MEMBER DE LA TORRE: So moved as amended.

14 BOARD MEMBER BALMES: Second.

15 CHAIR SANCHEZ: A compete for a second. Oh,  
16 yeah. Well, you were quick.

17 Board Clerk would you please call the roll.

18 BOARD CLERK MOORE: Thank you.

19 Dr. Balmes?

20 BOARD MEMBER BALMES: Yes.

21 BOARD CLERK MOORE: Mr. De La Torre?

22 BOARD MEMBER DE LA TORRE: Yes.

23 BOARD CLERK MOORE: Senator Florez?

24 BOARD MEMBER FLOREZ: Florez aye.

25 BOARD CLERK MOORE: Mayor Gloria?

1 Councilman Guerra?

2 BOARD MEMBER GUERRA: Aye.

3 BOARD CLERK MOORE: Supervisor Hopkins?

4 BOARD MEMBER HOPKINS: Yes.

5 BOARD CLERK MOORE: Mayor Lock Dawson?

6 BOARD MEMBER LOCK DAWSON: Aye.

7 BOARD CLERK MOORE: Supervisor Ortiz-Legg?

8 BOARD MEMBER ORTIZ-LEGG: Aye.

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 Sanchez?

18 CHAIR SANCHEZ: Aye.

19 BOARD CLERK MOORE: The motion passes.

20 (Applause).

21 CHAIR SANCHEZ: Thank you.

22 Just kidding, we're not done.

23 In fact, we have a presentation now.

24 I would like to turn it over to Board Member

25 Rechtschaffen and Board Member Takvorian who I understand

1 would like to share a readout of another trip that you  
2 took over the --

3 BOARD MEMBER RECHTSCHAFFEN: Thank you. Thank  
4 you, Chair Sanchez. And as you noted, and you headlined  
5 international climate activities are in the news right  
6 now. My colleagues on the Board may have seen the recent  
7 news about the International Maritime Organization's  
8 unfortunate decision to delay their vote on a net-zero  
9 framework for ocean-going going vessels. And that was the  
10 result of bullying tactics by the Trump administration.

11 But last June, Board Member Takvorian and staff  
12 members Edie Chang and Nicole Light Densberger and I had  
13 the opportunity to visit Denmark, Brussels, and the  
14 Netherlands to learn about the IMO and the European  
15 Union's plans to reduce the use -- to require the use of  
16 lower carbon fuels. And thanks to Pacific Environment,  
17 their hard work and generosity arranged the trip.

18 And we just wanted to give you a few insights  
19 about our experience, most notably the IMO long a  
20 conservative recalcitrant body has done a great deal to  
21 develop a framework for reducing greenhouse gas emissions  
22 from ocean-going vessel and has a lot of teeth, including  
23 targets for the reduction in carbon intensity  
24 of ocean-going vessels and a fee to encourage the use of  
25 cleaner technologies and fuels.

1           And even before the IMO took action and probably  
2     prompting some of the actions, the European Union had  
3     expanded their trading scheme to include the maritime  
4     transport sector and required large ships to pay for their  
5     GHG emissions. And the EU also adopted a specific  
6     maritime fuel regulation to promote the use of low carbon  
7     fuels. And they started implementing that at the  
8     beginning of this year.

9           Strikingly, we found that all -- stakeholders all  
10    across the board, labor, shippers, ports, the EU staff,  
11    the EU member states were all on board with the  
12    requirements. And industry made it clear they wanted  
13    regulatory certainty. They wanted to avoid a patchwork of  
14    regulations. The EU staff told us repeatedly they are  
15    staying the course on climate. And we witnessed a really  
16    impressive amount of investment in sustainable shipping  
17    solutions. We saw how much industry is rolling up their  
18    sleeves to find solutions. We visited a center for zero  
19    shipping carbon that was established by \$150 million  
20    endowment from Maersk, which is the world's largest  
21    shipping company, to show they're really in the game.

22           So needless to say, we were very, very  
23    disappointed by the IMO vote to delay final adoption of  
24    the rule. I know Board Member Takvorian has additional  
25    thoughts, which she can share.

1           BOARD MEMBER TAKVORIAN: Thank you, Board member.  
2 Appreciate you kicking us off. I wanted to also express  
3 my gratitude to Pacific Environment for their work to  
4 organize the trip in a really inclusive way that enabled  
5 us all to meet with industry innovators, research  
6 institutions, labor, the European Commission members, and  
7 port operators as well. And I was impressed with the  
8 investments that they've made and the resulting  
9 advancements that informed the IMO.

10           And like Board Member Rechtschaffen, I'm deeply  
11 discouraged that the current federal administration has  
12 derailed this agreement. I was particularly impressed  
13 with the cross-sector collaboration that was facilitated  
14 by nonprofit organizations like State of Green which, has  
15 a public-private partnership between the Danish government  
16 and key business associations serving to accelerate the  
17 global green transition by fostering international  
18 dialogue and innovative pilot projects.

19           And I was also inspired by our meeting with the  
20 European Transport Workers Federation. This is a  
21 pan-European trade union organization -- trade union  
22 organization that represents over five million transport  
23 workers from more than 38 countries. It's pretty  
24 impressive. And they were in support of the IMO and the  
25 agreements that we had discussed with them.

1           And just like Chair Sanchez described  
2 California's leadership at the COP in Brazil, California's  
3 leadership was clearly in evidence at these meetings that  
4 we attended in Europe as well, with lots of discussion  
5 about CARB programs such as ships at berth.

6           Clearly, the Europeans are very focused on  
7 reducing carbon emissions and not as much on reducing NOx  
8 and particulate matter, which California is obviously very  
9 focused on. Due to our land use proximity between  
10 population centers and ports. But hopefully California  
11 can share our work in this area with them as well.

12           So, Courtney was at the IMO meeting in London and  
13 she is there. And so what are you thoughts.

14           PRINCIPAL DEPUTY EXECUTIVE OFFICER SMITH: Great.  
15 Yes. No. Thank you.

16           Yes, as Board Member Takvorian mentioned, I had  
17 the opportunity to attend the convening of the Marine  
18 Environmental Protection Committee extraordinary session.  
19 This is where they were slated to vote on what would have  
20 been the first requirement covering an entire global  
21 industry. And certainly coming into that session, I think  
22 a lot of folks were very hopeful, because it was the  
23 product of several years of consensus-based deliberation.  
24 And so it was certainly very disappointing when the  
25 outcome was one of not adopting it. And, you know, this

1 has been reported on extensively, and I saw firsthand that  
2 the U.S. delegation made it very clear to other nation  
3 delegates that there would be repercussions if they  
4 supported it, including naming very specific sanctions,  
5 such as increased tariffs.

6           So certainly disappointing. I think in the wake  
7 of this stalled global momentum, it really underscores the  
8 need for regional efforts, including the ones that we've  
9 done here in California. Folks are likely aware, we have  
10 a 20-year history of addressing shipping emissions here in  
11 California. We've adopted clean fuel regulations,  
12 including ones that require the use of cleaner low sulfur  
13 distillate fuels, and, of course, the Ocean-Going Vessel  
14 At Berth Regulation.

15           However, despite these efforts here in  
16 California, ocean-going vessels still remain one of the  
17 largest single sources of emissions in the state. As a  
18 result of that, this Board in December of 2022 actually  
19 directed staff to pursue an in-transit regulation to  
20 tackle those largest remaining sources from ocean-going  
21 vessels. You know, the goal of this effort really is to  
22 reduce NOx and PM emissions within that global maritime  
23 context.

24           We held a workshop last year and I'm excited to  
25 let you know that we're planning to hold another workshop



1 to support this effort early next year. And the ultimate  
2 goal would be to bring something to the Board for  
3 consideration in late '28-'29.

4 So with that, you know, I will just say that  
5 firsthand when I -- when I was at the IMO, so many people  
6 came up to me wanting to know what California was doing,  
7 other countries, consultants. And so I can tell you  
8 firsthand, the rest of the world is watching what we're  
9 doing. So all the more to maintain our commitment to  
10 protecting public health. And also, as staff, we are  
11 committed to having those bilateral conversations with  
12 other jurisdictions who are interested in continuing this  
13 work, so that way we can continue leadership in this space  
14 together.

15 CHAIR SANCHEZ: Thank you. Thank you, Board  
16 members. I want to give a brief moment as well. I know,  
17 in addition to my trip to Brazil, Mayor Lock Dawson  
18 attended the Cop and represented California, as did  
19 Supervisor Hopkins. Mayor Lock Dawson, a ray of hope from  
20 your trip, a takeaway to share.

21 BOARD MEMBER LOCK DAWSON: I am a ray of  
22 sunshine. I will bring you good news from Brazil.

23 No. I just think it -- what was really  
24 interesting to me was that it was clear that, you know,  
25 California was there and that we're leaders. And that was

1 appreciated by every other country on the planet. In  
2 fact, I was in a session with Mayor Khan of London, Sadiq  
3 Khan, and we were there, and somebody said -- you know, he  
4 was saying some things about the United States not being  
5 there. And somebody said, well, how many -- how many  
6 people are here from U.S. and the U.S. delegation, we all  
7 raised our hand. We got a huge ovation from everybody in  
8 the crowd, because the fact that we were there  
9 representing was a big deal.

10 And I don't care if you care about environment,  
11 you know, this is to me also a question of economic  
12 competitiveness, and we will be left behind if we don't  
13 get on this proverbial train, maybe hydrogen powered, I  
14 don't know. But I do think it was very -- it was  
15 encouraging. I left very hopeful. Thank you for the  
16 opportunity to speak.

17 BOARD MEMBER HOPKINS: And I would concur. And I  
18 just also want to say thank you to Governor Newsom, and  
19 Chair Sanchez, and Secretary Crowfoot representing  
20 California so well. It felt like, in a way, California  
21 was sort of the equivalent of a country. I think they  
22 were sort of treating the Governor as though he were a  
23 world leader, which he is at this moment. And I don't --  
24 we were really sort of the largest delegation from the  
25 United States was the delegation from California.

1           And so I think that people -- we were a little  
2 bit -- I was personally a little bit nervous, like are  
3 people going to throw tomatoes, given that we're coming  
4 from the United States to this international conference.  
5 And obviously the federal administration isn't here.  
6 Things are in chaos at the federal level. There is  
7 climate denialism, climate destructionism happening  
8 nationally, but everyone was actually really grateful for  
9 the local leadership. And to be able to make those  
10 connections with other local jurisdictions who are  
11 grappling with the same Challenges we are and who are  
12 actually using the climate crisis to really, you know,  
13 incentivize their economies, and to make that transition a  
14 just transition to create jobs, to drive growth in  
15 positive ways, and use -- you know, using that as an  
16 impetus for decarbonization was a really wonderful  
17 conversation to have.

18           CHAIR SANCHEZ: Well said. And than you both for  
19 your travels and for representing the state and this Board  
20 so well, deeply appreciated. We will now move to open  
21 comment. Board clerk do we have any open commenters  
22 signed up for today?

23           BOARD CLERK MOORE: Thank you. Yes.

24           CHAIR SANCHEZ: We do. Okay.

25           BOARD CLERK MOORE: We have --

1 CHAIR SANCHEZ: Will you please call on them?  
2 Thank you.

3 BOARD CLERK MOORE: Thank you very much. We have  
4 four in-person commenters, who have turned in a request to  
5 speak card and wish to speak at this time.

6 I apologize in advance if I mispronounce your  
7 name. And I would like to re-remind everybody to speak  
8 slowly, closely, and clearly into the microphone.

9 Our first commenter is Evan Edgar.

10 EVAN EDGAR: Hello, CARB members. My name is  
11 Evan Edgar and I represent public sector fleets, public  
12 sector wastewater, and public sector landfills, and  
13 biomethane developers. And I'm here to discuss  
14 affordability.

15 Chair Sanchez, you weren't here two months ago  
16 when the public sector came with hat in hand that were  
17 broke and they had affordability issues when it came to  
18 the Advanced Clean Fleet Rule. They -- we had dog  
19 catchers to electrical municipalities, fleet owners, and  
20 they said we cannot afford the Advanced Clean Fleet Rule  
21 for the public sector. It's going to be expensive. And  
22 they had a compelling case. And I believe CARB staff was  
23 tone-deaf to what they were saying about the cost, the  
24 infrastructure, and the performance in order to convert  
25 the public fleet, the refuse fleet especially to battery

1 electric.

2 Right now the three cart system in LA costs about  
3 36 bucks a household per month for residential, three-cart  
4 system to collect organics to get 1383 started. They just  
5 had a rate increase to go to 70 bucks per household per  
6 month. They're going to double it by 2030 and that's  
7 without the BEV costs, without battery electric.

8 In order to implement battery electric in LA, the  
9 CapEx is going to be another \$300 million. That's going  
10 to double the rate again. So LA is going to hear from you  
11 about affordability where they're paying \$35 bucks a  
12 household per month today, it will be 70 by 2030, and over  
13 100 by 2035. That affordability index was tone-deaf among  
14 CARB staff with an outcry of the public sector coming here  
15 two months ago.

16 So you missed that, but welcome to the Board now.  
17 I just want to catch you up on some of the affordability  
18 crisis in California. What makes it affordable is RNG.  
19 It's affordable now. It's carbon negative now. We can  
20 put RNG back into the public sector fleet with landfill  
21 gas that we're going to be collecting. Wastewater gas is  
22 here and now, very cost effective, very affordable. And  
23 to go battery electric for the public sector will double  
24 the rates, upon doubling the rates, upon doubling the  
25 rates. We can't afford that.

1 Thank you.

2 BOARD CLERK MOORE: Thank you.

3 Our next commenter is Kenneth Holbrook.

4 KENNETH HOLBROOK: Good afternoon, Chairperson  
5 Sanchez and esteemed members of the California Air  
6 Resources Board and assigned staff.

7 Thank you for the opportunity to submit this open  
8 public comment regarding the california climate investment  
9 funded initiative known as the Driving Clean Assistance  
10 Program, or DCAP. My name is Kenneth Holbrook. I serve  
11 as the Associate Director of climate equity for the  
12 California nonprofit Central California Asthma  
13 Collaborative, or CCAC.

14 Our organizations worked as for the past funding  
15 cycle focused on two main objectives within the DCAP  
16 program design, namely to provide outreach and engagement  
17 across a statewide version of the CCI program, bringing  
18 much needed public awareness of this valuable consumer  
19 incentive available to residents across the state's varied  
20 constituencies, a program that encompasses both finance  
21 assistance and Clean Cars 4 All application pathways, as  
22 well as providing technical assistance to California  
23 residents residing outside of the five major air districts  
24 who choose to apply to the program, yet require critically  
25 needed technical support services that allow them to

1 equitably access this important statewide program.

2 I lead the Norcal hub of our hub and spoke  
3 outreach program approach. My team is based in Sacramento  
4 and we serve 28 northern and eastern, mostly rural,  
5 California counties. Our team's area focus has been to  
6 establish awareness and access to rural California  
7 residents and to participating auto sales dealers within  
8 these areas, who wish to access this transformative DCAP  
9 program incentive.

10 We have learned that a majority of those we  
11 encounter in our widespread community event presence,  
12 supported through numerous CBO partner agreements through  
13 dug-in public discussion and applicant follow-up, that a  
14 majority of California residents both support the State's  
15 goals for widespread light-duty EV adoption, and find that  
16 purchase incentive program design is absolutely necessary  
17 to their respective goals of attaining an often costly,  
18 but much valued new or used electric vehicle attainment  
19 for use in their household.

20 Our work in these particular areas of the State,  
21 northern and eastern California counties, is relatively  
22 new. However, it has been clearly shown through our  
23 widespread engagement that an appetite for State-led  
24 efforts to support EV adoption is supported and worthy of  
25 continued funding from the State.

1           Two of the major barriers we've encountered so  
2 far include the need for overcoming the online-oriented  
3 application process --

4           BOARD CLERK MOORE: Thank you. That concludes  
5 your time. Thank you.

6           BOARD CLERK MOORE: Next commenter is Rob  
7 Youngren.

8           ROB YOUNGREN: Thank you. I'm here today to  
9 speak to you about an aspect where CARB has not been  
10 transparent or a leader, the California E-Bike Incentive  
11 Project. Great program that has been poorly implemented  
12 an executed, where oversight was lacking in effective  
13 distribution of those funds.

14           In my two and a half years working for Sacramento  
15 Area Bike Advocates to promote this campaign, do community  
16 outreach, and reduce barriers to accessing these funds,  
17 CARB spent \$13 million to get -- to put about 2,000  
18 people, by my count, on e-bikes, not an effective use of  
19 those dollars. And instead of issuing new Request for  
20 Proposals to find a new program administrator to use the  
21 \$18 million remaining in that fund, they'e allowed  
22 those -- that money to be swept into Clean Cars 4 All.

23           Clean Cars 4 All does not serve the same  
24 population as the E-Bike Incentive Program. A lot of  
25 these people would rely on those vehicles for sustainable



1 transportation. They don't own a car to trade in to get  
2 the incentive through Clean Cars 4 All. I encourage CARB  
3 to reconsider allocating funds to the E-Bike Incentive  
4 Program, taking the lessons learned from the previous  
5 program administrator, and finding a new organization to  
6 run the program.

7 Thank you.

8 BOARD CLERK MOORE: Thank you.

9 Deb Banks.

10 DEB BANKS: That's a long walkway. Good  
11 afternoon. Excuse me. My name is Deborah Banks and I'm  
12 the Executive Director of the Sacramento Area Bicycle  
13 Advocates. As Rob said, for the past two and a half  
14 years, our organization has been working to help  
15 low-income residents move throughout the -- throughout the  
16 Sacramento metro area participate in the E-Bike Incentive  
17 Pro -- Project. We've worked alongside CARB staff to help  
18 shape the program, and with Pedal Ahead to support those  
19 of us in the field working directly with community members  
20 who would be recipients of e-bike vouchers. We've been  
21 involved.

22 To learn that the program was shuttered and the  
23 unspent 17, 18 depending on who you talk to, million would  
24 be redirected to Clean Cars 4 All was gut punch to those  
25 who need reliable and affordable transportation. The

1 E-Bike Incentive Program was designed to provide  
2 California residents affordable and sustainable mobility,  
3 without the ongoing financial burden of car ownership. It  
4 helped people drive less, save money, and move freely.  
5 Clearly, there was demand. Over a hundred thousand people  
6 were turned away.

7 Owning a car that meets the scrap requirement for  
8 Clean Cars 4 All eliminates many low-income households who  
9 are in the greatest need of a mobility subsidy. The  
10 automotive and insurance industries benefit the most from  
11 these funds, move to Clean Cars 4 All, and California  
12 residents in historically disadvantaged communities for  
13 whom the program was intended to serve will pay the  
14 inequitable price.

15 We ask that you reinstate the E-Bike Incentive  
16 Program. Our leaders in the State House and here at CARB  
17 need to revisit how to help our lowest income residents  
18 meet our climate goals. Californians need transportation  
19 choices that are not car-centric. For affordable, clean  
20 transportation, E-bikes are the clear choice.

21 Thank you.

22 BOARD CLERK FRENCH: Thank you. We will now  
23 switch to Zoom commenters for open comment. We currently  
24 have nine Zoom commenters with their hands raised. The  
25 first commenter is Teresa Bui. I have activated your

1 microphone, please unmute and you may begin.

2           TERESA BUI: Thank you so much. Good afternoon.  
3 This is Teresa Bui with Pacific Environment again. Thanks  
4 for the Board update and for CARB's participation on the  
5 EU clean shipping tour, at the IMO, and at COP. The  
6 recent decision at the IMO to delay the adoption of the  
7 world's first sector-wide emission reduction policy was  
8 due to unprecedented bullying tactics by the Trump  
9 administration, but it presents an opportunity for  
10 California to further demonstrate its global leadership as  
11 the -- one as a climate imperative, but two for economic  
12 benefits.

13           This was a rare occasion where global climate  
14 regulation was supported and actively called for by both  
15 shipping industry as well as Environmental NGOs, alongside  
16 major shipping nations, and flag states. And the U.S.  
17 Pressure tactics have put the likelihood of the IMO's  
18 climate policy on shaky ground. This vacuum creates an  
19 opportunity for California to exemplify how its status as  
20 the fourth largest economy in the world can help shape and  
21 refute Trump's argument on his flagship domestic policy.

22           What we're asking is that CARB accelerate its  
23 effort on the In-Transit Rule and use all the tools that  
24 CARB has available to the fullest extent, including the At  
25 Berth Rule, Low Sulfur Fuel Rule, Commercial Harbor Craft

1 Rule, and LCFS. PE, we're working on a bill in  
2 Washington, that, if passed, would require Washington to  
3 adopt California's At Berth Rule and then in New York on  
4 zero-emission ferries.

5 California has helped write the playbook for  
6 climate leadership and we're asking you to lead again.  
7 Let's move faster, aim higher, and protect the communities  
8 and climate.

9 Thank you for your leadership.

10 BOARD CLERK FRENCH: Thank you.

11 Next is Carlos Gutierrez. I have activated your  
12 microphone and you may unmute.

13 CARLOS GUTIERREZ: Good afternoon, Madam Chair,  
14 members of the Board and staff. Carlos Gutierrez here on  
15 behalf of the California Advanced Biofuels Alliance and  
16 Clean Fuels Alliance America. We are a state and national  
17 trade association of RD, BD, and sustainable aviation  
18 fuels. Thank you for the opportunity for brief comments,  
19 even though agenda item wasn't on the agenda today. I  
20 want to thank CARB for the continued transparency in  
21 publishing LCFS data and to highlight the article in  
22 Politico about the GHG reductions.

23 The broader visibility reinforces what we've  
24 known for years that biodiesel and renewable diesel are  
25 essential to the success of the LCFS progress to achieve

1 California's climate goals. CARB's early 2024 data shows  
2 overall GHG reductions continuing in the right direction,  
3 but there's a concerning shift within the diesel pool.  
4 From Q1 to Q2, the quantities of biodiesel are flat and  
5 renewable diesel increases slightly. Yet, fossil diesel  
6 jumps significantly. As a result, biomass-based diesel  
7 shares drops from 79 to 72 percent, meaning petroleum  
8 diesel is backfilling the supply gap. We have mentioned  
9 this before and so has CARB staff.

10 When biodiesel and renewable diesel are  
11 constrained, fossil diesel fills that void and moving the  
12 state in the wrong direction. But this is a fixable  
13 problem. One immediate step CARB can take is to  
14 immediately sunset the ADF Regulation. Ending the ADF  
15 would remove outdated constraints on biodiesel and expand  
16 its availability to provide heavy-duty fleets with more  
17 affordable options. The ADF provides the Executive  
18 Officer to sunset the regulation when certain criteria  
19 have been met. And although that criteria has been met,  
20 the regulation remains in place.

21 California has led by pairing bold climate goals  
22 with practical tools. Biodiesel and renewable diesel are  
23 among those tools. The data is clear, we cannot afford to  
24 let their role decline.

25 Again, thank you for the opportunity to speak.

1 BOARD CLERK FRENCH: Thank you.

2 Next, we have Claudia Huerta. I have activated  
3 your microphone and you may unmute.

4 MOSES HUERTA: Thank you. Good afternoon, Chair  
5 Sanchez and Board members. My name is Claudia Huerta and  
6 I am here on behalf of MAAC, a nonprofit organization,  
7 that has served San Diego working families for nearly 60  
8 years.

9 I want to express our strong support for  
10 continued funding of the Driving Clean Assistance Program.  
11 DCAP is more than an environmental program. It's an  
12 economic mobility program. In communities like Chula  
13 Vista, Vista, and Escondido, areas with high traffic, air  
14 pollution, and long commutes, this program helps families  
15 access clean transportation while saving hundreds of  
16 dollars each month on gas and maintenance. Those savings  
17 go directly toward rent, child care, and building  
18 financial stability.

19 Since 2021, MAAC has helped over 885 families  
20 access clean transportation, including 190 families this  
21 year alone and 16 of those were through DCAP. Behind  
22 every statistic is a human story. Maria, a San Diego  
23 County resident relied on a 1998 Ford F-150, spending over  
24 \$400 a month on gas while struggling to take care of her  
25 family. Everything has changed when she was referred to

1 DCAP with \$7,500 down payment grant. Maria leased a safe,  
2 reliable electric vehicle. Her vehicle costs have dropped  
3 dramatically. Her commute has become less stressful, and  
4 her children now ride in a car that is clean, dependable,  
5 and affordable.

6 For DCAP -- for Maria, DCAP was life changing.  
7 With the expiration of the federal tax credits, DCAP is  
8 now one of the few statewide programs making EV ownership  
9 possible for low-income families. And we cannot overlook  
10 the importance of Clear Cars 4 All as well.

11 Continued funding for DCAP means cleaner air,  
12 healthier kids, an equitable access to the benefits of  
13 electrification. Clean transportation should not be a  
14 luxury. It should be a reality for every Californian.

15 Thank you for your leadership and commitment to  
16 making electric vehicles more accessible for working  
17 families.

18 BOARD CLERK FRENCH: Thank you. As a reminder to  
19 the public, open comment sign-up closures have -- has  
20 closed, but we will of course hear from the remaining  
21 folks on Zoom.

22 Next is Scott Wilson. I have activated your  
23 microphone and you may unmute and begin.

24 SCOTT WILSON: Good afternoon, Chair Sanchez and  
25 members of the Board. My name is Scott Wilson. I am a

1 program manager at the El Dorado County Air Quality  
2 Management District.

3 Thank you for the opportunity to speak out today  
4 in support of the Drive Clean Assistance Program. Our  
5 district feels that DCAP is a vital CARB-funded light-duty  
6 EV incentive program that ensures access for all  
7 Californians living within small and medium-sized air  
8 quality management districts. Since we are a small rural  
9 district with minimal staffing and limited funding, DCAP  
10 provides the financial assistance needed to make EV  
11 ownership attainable for our county's rural working  
12 families that otherwise we wouldn't have the ability to  
13 provide.

14 Additionally, DCAP fills the hole left by the  
15 recent elimination of federal tax credits for EVs by  
16 providing augmented incentives to the residents that need  
17 it the most. As your Board evaluates funding priorities  
18 for the coming years, we urge continued stable support for  
19 DCAP. It is the only CARB, light-duty EV program that  
20 pairs incentives with essential financial counseling and  
21 services, tools that genuinely expand access to clean  
22 transportation for lower income households.

23 Thanks for the opportunity to speak and thank you  
24 for your Board's consideration of an ongoing investment in  
25 this critical high-impact program.



1 BOARD CLERK FRENCH: Thank you.

2 Next, we have Brian Kolodji. I have activated  
3 your microphone and you may begin.

4 BRIAN KOLODJI: Thank you, Chair Sanchez, CARB  
5 Board members, and CARB staff. My name is Brian Kolodji,  
6 President and owner of two California companies, one the  
7 Kolodji Corporation, a carbon management engineering  
8 company, and the other Black Swan, LLC holding  
9 intellectual property with now eight direct air capture  
10 patents.

11 Recently, Kolodji Corp -- oh, during the SB 905  
12 comment period has made an effort to warn CARB that unlike  
13 the Titanic, we have a chance to avoid the iceberg of fake  
14 carbon capture technologies that make more greenhouse gas  
15 than remove it, especially poorly thought out, absorption  
16 based direct air capture that skips technology readiness  
17 levels developed by NASA and the United States Department  
18 of Defense that are normally used by CARB.

19 I'm implore this to prevent -- I implore that we  
20 take more caution. CARB take more -- you know, that we  
21 prevent unnecessarily expedient dangerous scaling up from  
22 literally zero to a million ton per year in facilities  
23 without assessing and being able to find at smaller scales  
24 severely negative environmental and community safety  
25 impacts. This allows for more well thought-out

1 deployability. At this unprecedentable level of  
2 deployability, there's a very real risk of making climate  
3 change worse and compounding the problem by causing food  
4 insecurity issues.

5 I've sent an attachment that's been presented to  
6 the University of California, UC Davis, and also AIChE,  
7 American Institute of Chemical Engineers, by attachment.

8 Thank you for your time and listening to this  
9 concern.

10 BOARD CLERK FRENCH: Thank you. Next is Scott  
11 Wilson. I have activated your microphone and you may  
12 begin.

13 Scott Wilson, I have activated your microphone  
14 and you may begin.

15 SCOTT WILSON: I'm sorry I left my hand up. I  
16 have already spoken.

17 BOARD CLERK FRENCH: Next, we have Will Brieger.  
18 I have activated your microphone and you may begin.

19 WILL BRIEGER: Yes. Thank you. I am Will Brieger  
20 for Climate Action California and as always for my six  
21 grandchildren.

22 I just have a comment about science and a  
23 question to pose for the Board to consider. So, I guess  
24 you'll need to listen since there's a quiz at the end.

25 CARB excels at science-based environmental

1 regulation. And that's despite the fact that science is  
2 never finished. It's a process and it's one that works.  
3 CARB knows how to use it. For example, CARB used science  
4 and engineering to patiently, methodically, effectively  
5 deal with tailpipe emissions. Just now, you addressed  
6 another tough topic, the second largest methane source in  
7 California. And thank you for looking at that.

8           Next, we need to look at the largest methane  
9 source in California, which of course is livestock. There  
10 are at the moment zero legal requirements to control  
11 methane from livestock, zero. Now, every year, the  
12 science has gotten better and cheaper solutions emerge.  
13 Is that science perfect? Is it finished? No.

14           And that leads to the question I want to ask.  
15 I'm going to ask it two different ways. First, is one you  
16 can just ask your excellent legal office. Just how good  
17 does science need to be to support regulatory action?  
18 It's an important question. The other way to ask it is  
19 how long do my grandchildren need to wait?

20           So I appreciate your considering that and I will  
21 reach out to meet with some of you. Thank you.

22           BOARD CLERK FRENCH: Thank you.

23           Next, and I apologize if I mispronounce your  
24 name, is Al Sattler. I have activated your microphone and  
25 you may begin.

1           AL SATTLER: Good afternoon. Al Sattler,  
2 resident of Los Angeles County and frequent speaker before  
3 the South Coast AQMD.

4           First of all, I wanted bring your attention to a  
5 recent paper in Science magazine, *Global Methane Action*  
6 *Pays for Itself at Least Six Times Over*, in which they  
7 calculate the social cost of methane being about \$7,381  
8 per ton of methane removed. You might want to keep this  
9 in mind in future rulemaking having to do with issues of  
10 methane.

11           Also, I want to echo the comments with great  
12 skepticism about carbon capture storage. That is a  
13 technology that is not exactly helpful for energy. It  
14 tends be parasitic on energy and requires running --  
15 essentially, you having a pipeline the size of existing  
16 petrochemical pipelines where you're going to pump the  
17 molecules in reverse to try to pump them underground  
18 somewhere, hoping that they're going to stay there for  
19 thousands of years.

20           Thank you very much and thank you for your action  
21 earlier today.

22           BOARD CLERK FRENCH: Thank you.

23           Next is Patricia Parra. I have activated your  
24 microphone and you may begin.

25           PATRICIA PARRA: Greetings, Chair Sanchez and

1 members of the Board. Thank you for the opportunity to  
2 comment today. My name is Patricia Parra and I'm a  
3 Program Director at the Health Education Council, a  
4 nonprofit serving the greater Sacramento region.

5 I wanted to provided comment on the Driving Clean  
6 Assistance Program, DCAP. Our organization has had the  
7 opportunity to partner with the Placer County Air  
8 Pollution Control District to promote the program and  
9 provide direct application support in Placer County for  
10 low-income families and in multiple languages to ensure  
11 low-income families have access to this opportunity.

12 This program has been invaluable not only in  
13 advancing clean air and environmental goals in our hardest  
14 to reach communities, but in making reliable, low-emission  
15 vehicles accessible to low-income households who have  
16 historically been the most affected by environmental  
17 pollution and who continue to face the greatest risks from  
18 climate change.

19 Since we began promoting the program earlier this  
20 year, HEC has helped 43 individuals learn about and apply  
21 to the DCAP Program. One of the individuals we supported  
22 through this work is an asylum seeker with a wife and two  
23 young sons. After their only car was involved in an  
24 accident, he relied on rental cars just to get to work.  
25 Through DCAP, people like him can secure a safe,

1 dependable vehicle, something essential for anyone living  
2 in a rural area where transportation options are limited  
3 and distances to work, medical care, and even basic food  
4 access are long.

5 As CARB evaluates funding priorities for the  
6 coming years, we urge continued support for DCAP. Thank  
7 you for your leadership and for considering ongoing  
8 investment in this critical high-impact program.

9 BOARD CLERK FRENCH: Thank you.

10 Our last Zoom in-person -- or Zoom commenter is  
11 Molly Johnson. I have activated your microphone and you  
12 may begin.

13 MOLLY JOHNSON: Greetings, Chair Sanchez and  
14 members of the Board. Thank you for the opportunity to  
15 comment today. I am Molly Johnson, Air Quality Specialist  
16 with the Placer County Air Pollution Control District.  
17 And I would like to share comments on the Driving Clean  
18 Assistant Program, DCAP.

19 DCAP provides incentives statewide in California  
20 to assist low-income and disadvantaged communities in  
21 purchasing clean air vehicles. This statewide program  
22 administered by the Community Housing Development  
23 Corporation, CHDC, with funding from the California Air  
24 Resources Board is an essential and critical program that  
25 provides a tremendous benefit to small local air districts

1 with low-income and disadvantage communities that are  
2 disproportionately burdened by localized air pollution and  
3 the associated adverse health effects.

4           Small air districts do not have either the  
5 funding resources or administrative capacity to administer  
6 a program of this magnitude that combats climate change  
7 and predatory lending practices by offering incentives and  
8 continuous financial coaching. The Placer County Air  
9 Pollution Control District is also supportive of CHDC's  
10 Innovative Outreach Model that includes local air  
11 districts and community-based organizations. The Health  
12 Education Council is the CBO working with CHDC and PCAPCD  
13 to coordinate outreach and serve low-income households and  
14 communities as a trusted resource to assist applicants  
15 with the application process in multiple languages.

16           In 2022, the Sacramento Region was listed by U.S.  
17 EPA in the top five metropolitan statistical areas for  
18 particulate matter pollution. Although progress is being  
19 made, there is more work to be done to reduce air  
20 pollution in these types of investments playing an  
21 instrumental role and ensure that low-income households  
22 are not left behind in the state's transition to electric  
23 vehicles and are afforded access to clean mobility.

24           DCAP empowers individuals with limited credit and  
25 financial Challenges to secure reliable transportation

1 fostering financial stability and environmental  
2 responsibility.

3 We appreciate your support and investment in DCAP  
4 and urge continued investments in DCAP that strengthen the  
5 economy, improve public health, and the environment,  
6 particularly benefiting low-income --

7 BOARD CLERK FRENCH: Thank you. That concludes  
8 your time.

9 MOLLY JOHNSON: -- and disadvantaged households  
10 and communities.

11 BOARD CLERK FRENCH: That concludes open comment.  
12 I'll turn the microphone back to Chair Sanchez.

13 CHAIR SANCHEZ: All right. Thank you, all. The  
14 November 20th, 2025 CARB Board meeting is now adjourned.

15 (Thereupon the California Air Resources Board  
16 meeting adjourned at 3:12 p.m.)  
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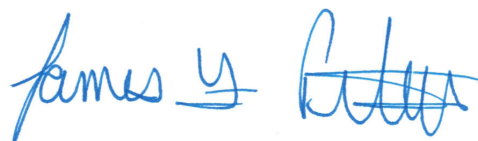
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I, JAMES F. PETERS, a Certified Shorthand Reporter of the State of California, do hereby certify:

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 8th day of December, 2025.



JAMES F. PETERS, CSR  
Certified Shorthand Reporter  
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