

MEETING
STATE OF CALIFORNIA
AIR RESOURCES BOARD

CALEPA HEADQUARTERS
BYRON SHER AUDITORIUM
SECOND FLOOR
1001 I STREET
SACRAMENTO, CALIFORNIA

THURSDAY, SEPTEMBER 28, 2017

9:02 A.M.

JAMES F. PETERS, CSR
CERTIFIED SHORTHAND REPORTER
LICENSE NUMBER 10063

A P P E A R A N C E S

BOARD MEMBERS:

Ms. Sandra Berg, Vice Chair

Dr. John Balmes

Mr. Hector De La Torre

Mr. John Eisenhut

Senator Dean Florez

Supervisor John Gioia

Ms. Judy Mitchell

Mrs. Barbara Riordan

Supervisor Phil Serna

Dr. Alex Sherriffs

Professor Dan Sperling

Ms. Diane Takvorian

STAFF:

Ms. Edie Chang, Deputy Executive Officer

Mr. Steve Cliff, Deputy Executive Officer

Mr. Kurt Karperos, Deputy Executive Officer

Ms. Ellen Peter, Chief Counsel

Ms. La Ronda Bowen, Ombudsman

Ms. Emily Wimberger, Chief Economist

Mr. Greg Binder, Branch Chief, Vehicle, Parts & Consumer Products Enforcement Branch, Enforcement Division(ED)

Mr. Pippin Brehler, Senior Attorney, Legal Office

Mr. Bart Croes, Division Chief, Research Division(RD)

A P P E A R A N C E S C O N T I N U E D

STAFF:

Ms. Martina Diaz, Manager, Diesel Equipment Enforcement Section, ED

Mr. Matthias Falk, Air Pollution Specialist, Emission and Exposure Research Section, RD

Mr. James Goldstene, Vehicle Program Specialist, ED

Mr. Jorn Herner, Branch Chief, Research Planning, Administration, and Emissions Mitigation Branch, RD

Mr. Aaron Livingston, Assistant Chief Counsel, Legal Office

Ms. Abigail May, Attorney, Legal Office

Ms. Heather Quiros, Branch Chief, Diesel Program Enforcement Branch, ED

Mr. Todd, Sax, Division Chief, ED

Mr. Webster Tasat, Manager, Central Valley Air Quality Planning Section, Air Quality Planning and Science Division(AQPSD)

Mr. Jon Taylor, Acting Division Chief, AQPSD

Ms. Sylvia Vanderspek, Branch Chief, Air Quality Planning Branch, AQPSD

Mr. Abhilash Vijayan, Manager, Emission and Exposure Research Section, RD

ALSO PRESENT:

Ms. Fariya Ali, Pacific Gas & Electric

Ms. Eileen Boken, Coalition for San Francisco Neighborhoods

Mr. Tim Carmichael, SoCalGas

Mr. Jon Costantino, Tradesman Advisors

A P P E A R A N C E S C O N T I N U E D

ALSO PRESENT:

Ms. Janet Dietzkamei

Ms. Genevieve Gate, Central Valley Air Quality Coalition

Ms. Bonnie Holmes-Gen, American Lung Association in California

Mr. Gary Graham Hughes, Friends of the Earth

Mr. Roger Isom, California Cotton Ginners and Growers Association, Western Agricultural Processors Association

Mr. Bill Magavern, Coalition for Clean Air

Ms. Rachael O'Brien, Agricultural Council

Mr. Mark Rose, National Parks Conservation Association

Mr. Chay Thao, San Joaquin Valley Air Pollution Control District

Ms. Janet Whittick, California Council for Environmental & Economic Balance

I N D E X

	PAGE
Pledge of Allegiance	1
Roll Call	1
Opening Remarks Vice Chair Berg	2
Item 17-9-1	
Vice Chair Berg	4
Motion	4
Vote	5
Item 17-9-2	
Vice Chair Berg	5
Motion	5
Vote	5
Item 17-9-3	
Vice Chair Berg	5
Deputy Executive Officer Chang	6
Staff Presentation	7
Board Discussion and Q&A	24
Mr. Thao	35
Mr. Isom	38
Ms. Gale	46
Mr. Rose	49
Mr. Magavern	52
Ms. Holmes-Gen	54
Ms. Dietzkamei	56
Board Discussion and Q&A	59
Motion	73
Vote	73
Item 17-9-4	
Vice Chair Berg	73
Deputy Executive Officer Chang	74
Staff Presentation	75
Ms. Whittick	89
Mr. Costantino	89
Mr. Magavern	91
Board Discussion and Q&A	92
Item 17-9-5	
Vice Chair Berg	116
Deputy Executive Officer Chang	116
Staff Presentation	117

I N D E X C O N T I N U E D

	PAGE
Ms. Ali	133
Mr. Carmichael	135
Ms. O'Brien	136
Public Comment	
Mr. Hughes	140
Ms. Boken	143
Adjournment	145
Reporter's Certificate	146

1 P R O C E E D I N G S

2 VICE CHAIR BERG: Good morning, everyone. I'd
3 like to call our meeting to order. Our September 28th
4 public meeting of the California Air Resource Board will
5 come to order.

6 Would you please join me in the Pledge of
7 Allegiance.

8 (Thereupon the Pledge of Allegiance was
9 recited in unison.)

10 VICE CHAIR BERG: Good morning, Madam Clerk. Can
11 we call the roll, please?

12 BOARD CLERK McREYNOLDS: Dr. Balmes?

13 BOARD MEMBER BALMES: Here.

14 BOARD CLERK McREYNOLDS: Mr. De La Torre?
15 Mr. Eisenhut?

16 BOARD MEMBER EISENHUT: Here.

17 BOARD CLERK McREYNOLDS: Senator Florez?
18 Assembly Member Garcia?
19 Supervisor Gioia?

20 BOARD MEMBER GIOIA: Here.

21 BOARD CLERK McREYNOLDS: Senator Lara?
22 Ms. Mitchell?

23 BOARD MEMBER MITCHELL: Here.

24 BOARD CLERK McREYNOLDS: Mrs. Riordan?

25 BOARD MEMBER RIORDAN: Here.

1 BOARD CLERK McREYNOLDS: Supervisor Roberts?

2 Supervise Serna?

3 Dr. Sherriffs?

4 BOARD MEMBER SHERRIFFS: Here.

5 BOARD CLERK McREYNOLDS: Professor Sperling?

6 BOARD MEMBER SPERLING: Here.

7 BOARD CLERK McREYNOLDS: Ms. Takvorian?

8 BOARD MEMBER TAKVORIAN: Here.

9 BOARD CLERK McREYNOLDS: Vice Chair Berg?

10 VICE CHAIR BERG: Here.

11 BOARD CLERK McREYNOLDS: Chair Nichols?

12 BOARD CLERK McREYNOLDS: Madam Chair, we have a
13 quorum. Or Madam Vice Chair, we have a quorum

14 VICE CHAIR BERG: Thank you very much. Well, as
15 you can see we have a little different set up this
16 morning. And so we do want to acknowledge that our
17 colleagues, Chair Nichols and our Executive Officer,
18 Richard Corey, are traveling on our behalf, and doing
19 great work, and they have left in, what I will say,
20 capable hands our team that is going to run our meeting
21 today.

22 So I think my first agenda item truly is to
23 welcome our new member to our Deputy Executive Officer,
24 Steve Cliff. We're delighted to have you taking over the
25 Mobile Source Division, also the Monitoring and Lab

1 Division, and everything else you're going to be getting
2 involved in. Steve has been with ARB for many years.
3 I've thoroughly enjoyed working with him on many, many
4 projects. And it is a delight to welcome you to the front
5 dais. Thank you very much Steve. Congratulations on
6 behalf of all of us.

7 DEPUTY EXECUTIVE OFFICER CLIFF: Thank you.

8 (Applause.)

9 VICE CHAIR BERG: So with that, I do have my
10 morning announcements to make.

11 First, we will start out that we do have
12 interpretation services, and specifically for our San
13 Joaquin Valley Item number 17-9-3. And you will be able
14 to get headsets are available outside of the hearing room.
15 And please sign up. You can pick those up at any time.
16 And we will have this translated for us this morning by
17 our translator.

18 Good morning

19 (Thereupon translated into Spanish.)

20 VICE CHAIR BERG: And thank you very much for
21 that. Anybody wishing to testify this morning should fill
22 out a request-to-speak card. Those are available in the
23 lobby outside the Board room. And then please turn those
24 cards into our Board clerk, which is over here to my left.

25 Also, speakers please be aware that we do impose

1 a three minute limit. Please state your name, first name
2 and last name, when you come up to the podium. And then
3 please put your testimony in your own words. The Board
4 does have the written testimony that you might be turning
5 in, and we will have that. But you being able to express
6 your thoughts in your own words is really very helpful to
7 the Board.

8 Then finally for safety reasons, please note the
9 emergency exits to the rear of the room. In the event of
10 a fire alarm, we are required to evacuate this room
11 immediately, go downstairs, and out of the building. When
12 an all-clear signal is given, we will return to the
13 hearing room and we will resume our hearing.

14 So I think that is it for our administrative
15 items, and so we'll move right on to our first -- our
16 first two agenda items are consent items. So starting
17 with Consent Item 17-9-1, I'd like to ask the Board Clerk
18 if any witnesses have signed up to testify.

19 BOARD CLERK McREYNOLDS: No.

20 VICE CHAIR BERG: And then if any Board Members
21 would like to bring this off the consent?

22 Then may I have a motion to move this forward?

23 BOARD MEMBER RIORDAN: Madam Chair, I'd be happy
24 to move Resolution 17-25

25 BOARD MEMBER BALMES: Second.

1 VICE CHAIR BERG: All in favor?

2 (Unanimous aye vote.)

3 VICE CHAIR BERG: Opposed?

4 Any abstentions?

5 Motion approved.

6 Our second consent item is 17-9-2, the proposed
7 amendments to the California evaluation procedures for new
8 after-market catalytic converters.

9 Has anybody signed up to have this removed?

10 BOARD CLERK McREYNOLDS: No.

11 VICE CHAIR BERG: Would any Board Members like
12 this removed off the consent item?

13 May I have a motion to move that forward?

14 BOARD MEMBER RIORDAN: I would so move, Madam
15 Chair?

16 BOARD MEMBER BALMES: Second.

17 VICE CHAIR BERG: All in favor?

18 (Ayes.)

19 VICE CHAIR BERG: Opposed?

20 Abstentions?

21 Motion passes.

22 Next on our agenda is an update on the
23 development of the PM2.5 State Implementation Plan for the
24 San Joaquin Valley. This was first brought before the
25 Board in the fall, and staff has provided an update this

1 year in May.

2 Today, we'll hear the progress that has been
3 working with the valley's air district, with the
4 stakeholders, and with a lot of hard work from many people
5 in developing a comprehensive plan to address the PM2.5
6 standards in the valley, an effort which will result in
7 cleaner, healthier air for the valley residents.

8 This item also includes the consideration of a
9 SIP revision that provides contingency measures for one of
10 the PM2.5 standards. And Board members, that is the
11 resolution we will be voting on after the update.

12 Ms. Chang, will you please introduce this item?

13 DEPUTY EXECUTIVE OFFICER CHANG: Thank you, Vice
14 Chair Berg.

15 In May -- woops. In May, staff presented an
16 update on the development of a comprehensive particulate
17 matter attainment plan for the San Joaquin Valley. Since
18 that time, staff has focused on evaluating and refining an
19 attainment strategy that will form the basis of a
20 comprehensive plan to address multiple PM2.5 standards for
21 the valley.

22 A series of in-depth technical discussions on air
23 quality modeling have taken place with district staff over
24 the last several months. This is a key element in
25 developing a comprehensive plan that projects attainment

1 for all of the standards in the next decade.

2 In addition, CARB staff have engaged with valley
3 stakeholders and have received input on near-term
4 reductions that are both necessary and feasible for
5 achieving healthy air in the valley.

6 These discussions, coupled with our ongoing
7 science-based evaluation of the data, support a balanced
8 approach that recognizes both NOx and directly emitted
9 PM2.5 reductions as necessary to reach attainment.

10 In today's presentation, staff will describe an
11 attainment strategy reflecting the importance of early
12 emission reduction opportunities for stationary sources,
13 as well as mobile sources. In addition to the update,
14 staff will also ask the Board to consider adoption of a
15 State Implementation Plan revision providing contingency
16 measures for the 15 microgram per cubic meter annual PM2.5
17 standard.

18 I will now ask Webster Tasat to give the staff
19 presentation.

20 (Thereupon an overhead presentation was
21 presented as follows.)

22 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION
23 MANAGER TASAT: Thank you, Ms. Chang. Good morning, Vice
24 Chair Berg and members of the Board.

25 --o0o--

1 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION

2 MANAGER TASAT: In today's presentation, I will update the
3 Board on development of a comprehensive strategy for
4 attaining multiple PM2.5 standards in the San Joaquin
5 Valley. Staff will also propose the Board take action on
6 contingency measures for the 15 and 65 microgram PM2.5
7 standards as a revision to the SIP. These proposed
8 contingency measures are required by the Clean Air Act and
9 will avoid pending sanctions set to take effect later this
10 year.

11 --o0o--

12 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION

13 MANAGER TASAT: Last October, the Board directed staff to
14 carry out several specific actions with respect to the
15 Valley's attainment of the 12 microgram annual standard
16 for PM2.5. These actions included the identification of
17 near-term reduction opportunities within a comprehensive
18 integrated plan for meeting the annual and 24-hour PM2.5
19 standards. And, staff was asked to conduct additional
20 public outreach and provide stakeholders with the
21 opportunity for input and discussion on development of the
22 PM2.5 attainment strategy.

23 Since the October Board meeting, CARB and the
24 district have held numerous workshops and community
25 meetings. Beginning last December, CARB staff hosted a

1 workshop on the fundamental science of particulate matter,
2 and potential reduction opportunities.

3 This past May, we held a community meeting in
4 Fresno to discuss a possible path to attainment, and
5 receive feedback from stakeholders. Most recently, staff
6 held a joint workshop in the district with -- in
7 Bakersfield earlier this week on strategies for bringing
8 the valley into attainment. The district has also held a
9 series of workshops and workgroup meetings focused on
10 various elements of plan development, including potential
11 control measures.

12 Combined, CARB and the district have held over a
13 dozen public meetings on development of a comprehensive
14 plan and reductions needed for attaining all the
15 health-based PM2.5 standards in the San Joaquin Valley.
16 Staff is pleased to report that the district has come
17 forward with a suite of measures critical to achieving
18 clean air in the valley. Regional stakeholders, and
19 especial the ag community, have been important leaders in
20 the development of the strategy.

21 --o0o--

22 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION
23 MANAGER TASAT: Ambient PM2.5 is made up of many
24 constituent particles that are either directly emitted,
25 such as soot and dust, or formed through complex reactions

1 of gases in the atmosphere. This pie chart shows the
2 composition of PM2.5 particles measured in the air in
3 Bakersfield, the area of the valley with the highest PM2.5
4 levels on an annual basis.

5 Particle composition can tell us a great deal
6 about the type of emission sources generating PM2.5 which
7 can then inform how and where to reduce those emissions to
8 protect public health in the most cost-effective manner
9 possible.

10 The three blue sections of the pie represent
11 PM2.5 that is predominantly directly emitted. As you can
12 see, these account for over half of the total PM2.5 in the
13 valley's air. Carbon particles make up the largest
14 portion at 43 percent, and originate from combustion
15 sources such as wood-burning stoves, fireplaces, and
16 commercial cooking operations. Eleven percent of the
17 PM2.5 is made up of ammonium sulfate particles that are
18 typically formed in the atmosphere from stationary
19 industrial sources.

20 Dust particles originating from agricultural
21 operations, roads, and unpaved lots in urban areas make up
22 seven percent of the total. The remaining section shown
23 in orange on the left side of the chart represents PM2.5
24 particles formed in the atmosphere mainly from the exhaust
25 of motor vehicles and other mobile sources.

1 DEPUTY EXECUTIVE OFFICER KARPEROS: I think we
2 have a slight technical problem with the slide. If you're
3 looking at your hard copies, I believe the number
4 percentages are on those. When they're broadcast on the
5 screen, we've lost that link. I apologize to you.

6 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION
7 MANAGER TASAT: It is important to note that while this
8 chart shows the percent composition of PM2.5 particles on
9 an annual average basis in Bakersfield, these percentages
10 may differ somewhat on a peak PM2.5 day in other valley
11 locations. However, the types of sources will remain the
12 same.

13 --o0o--

14 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION
15 MANAGER TASAT: Over the past several months, CARB and the
16 district have collaborated in refining inputs to our air
17 quality models and have performed over 80 modeling
18 simulations to assess contributing sources and the impact
19 of different emission reduction scenarios on PM2.5
20 concentrations throughout the valley. Many of these
21 simulations were conducted to address questions from
22 valley health and environmental advocates.

23 Valley-wide sensitivity modeling demonstrates the
24 greatest air quality benefits are typically achieved from
25 reductions in emissions of directly emitted PM2.5 rather

1 than from reductions in PM2.5 particles formed in the
2 atmosphere. That is, the greatest air quality benefits
3 are achieved by reductions to the directly emitted portion
4 of the pie chart we saw earlier.

5 Of course, mobile source emissions are also a
6 major contributor to PM2.5, and reductions in this area
7 will provide a significant air quality benefit in the
8 valley.

9 Now, let's discuss the reductions we can achieve
10 from mobile sources in greater detail.

11 --o0o--

12 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION
13 MANAGER TASAT: Since the valley is the primary corridor
14 for transportation through the State, emission reductions
15 from cars, trucks, and other mobile sources will result in
16 substantial air quality benefits. CARB's current mobile
17 source program will reduce NOx in the San Joaquin Valley
18 by over 150 tons per -- 57 tons per day.

19 As the current control program continues to
20 provide significant ongoing emission reductions, further
21 reductions, an additional 32 tons of NOx per day, will be
22 key in the valley's attainment strategy.

23 New measures in the State SIP strategy, adopted
24 by the Board in March, will achieve reductions through
25 development of more stringent engine standards, especially

1 those for heavy-duty trucks; zero-emission technologies in
2 a variety of on-road off-road applications; a new
3 inspection and maintenance program for heavy-duty trucks;
4 and adoption of new specifications for low-emission diesel
5 fuel.

6 These regulatory efforts will be supplemented
7 through incentive programs to accelerate turnover to
8 cleaner technologies, especially for heavy-duty trucks and
9 buses, tractors, and off-road equipment.

10 In addition to the reductions from the strategy
11 you approved last March, reductions from ag equipment
12 unique to the valley will be needed.

13 --o0o--

14 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION
15 MANAGER TASAT: The district has a long-standing,
16 well-funded, and effective incentive program for ag
17 equipment turnover. The effectiveness of this program
18 speaks to the leadership of the ag community, both to
19 secure the resources and to coordinate the implementation
20 of the program. Over \$400 million have been invested in
21 the replacement of older agricultural tractors with newer,
22 cleaner models, funding the turnover of over 5,000 Tier 0
23 and Tier 1 tractors.

24 This successful incentive program achieved three
25 times the emission reductions goal in the 2007 SIP, and

1 serves as an excellent demonstration that incentives can
2 play an important complementary role in achieving needed
3 reductions.

4 In the proposed new measure, incentive dollars
5 will be focused on continuing to accelerate the turnover
6 of older Tier 0 and Tier 1 tractors. To ensure the
7 realization of emission reduction benefits, staff is
8 contemplating a SIP commitment to an overall emission
9 reduction target, or backstop, which acts as a catalyst
10 for attracting near-term investments. The industry is
11 also evaluating emission reduction opportunities
12 associated with electrifying small farm utility vehicles.

13 Significant new State funds have recently be
14 all -- have recently been allocated by the legislature to
15 incentivize ag equipment turnover. The recent budget
16 allocates \$135 million for statewide ag diesel engine
17 replacements and upgrades with funds coming from the
18 Greenhouse Gas Reduction Fund, Air Quality Improvement
19 Program, and the California Energy Commission's
20 Alternative and Renewable Fuel and Vehicle Technology
21 Program.

22 I'll be talking in more detail about other
23 funding available later in the presentation.

24 --oOo--

25 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION

1 MANAGER TASAT: Based on implementing the measures I just
2 discussed from the current mobile source program as well
3 as new measures, we see a large air quality benefit. This
4 graph illustrates the greater than 50 percent reduction in
5 ammonium nitrate from mobile sources due to these
6 measures.

7 This represents a significant contribution
8 towards attaining the 24-hour standard. We will have a
9 chance to see how this reduction from mobile sources fits
10 into the overall picture at the end of the presentation.

11 But first, let's discuss reduction opportunities
12 from stationary sources.

13 --o0o--

14 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION

15 MANAGER TASAT: As shown earlier, a portion of the PM2.5
16 particles are due to emissions from mobile sources with
17 the remaining amount emitted from stationary sources. The
18 district is currently evaluating a suite of potential
19 measures which would lower PM2.5 levels.

20 These measures leverage recent advances in
21 technology that are both cost effective and feasible.
22 These measures include restrictions on discretionary wood
23 burning, controls on emissions for larger new restaurants
24 using under-fired charbroilers; updating conservation
25 management practices to include dust reduction measures;

1 establishing lower NOx limits for boilers, process
2 heaters, and non-ag stationary engines, and requiring
3 low-NOx flares; and finally electrification of
4 agricultural pumps.

5 --o0o--

6 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION
7 MANAGER TASAT: As mentioned earlier, effectively reducing
8 PM2.5 levels in the valley must also include reducing
9 directly emitted PM. Since May, the district has been
10 working on enhancing its approach to addressing direct PM,
11 particularly carbon particles coming from wood smoke and
12 commercial charbroiling.

13 In a few slides, I'll be presenting current and
14 proposed measures for these sources. But first, let's
15 look at why directly emitted carbon particles are an
16 important piece of the pie.

17 These particles are associated with a variety of
18 sources, including, as mentioned, wood smoke from
19 fireplaces and wood stoves, restaurant charbroilers, and
20 agricultural burning. The carbo from these combined
21 sources accounts for approximately 43 percent of annual
22 PM2.5 levels. And importantly, because of their location
23 within neighborhoods and communities, these sources are
24 more likely to result in localized health impacts.

25 Emission reductions from sources of direct PM2.5

1 provide significant air quality benefits relative to other
2 sources of PM2.5, but will also have immediate health
3 benefits to residents impacted by smoke and soot from
4 burning.

5 In addition to being health protective, analysis
6 has shown that these reductions from directly emitted PM
7 are very cost effective.

8 --o0o--

9 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION
10 MANAGER TASAT: Because wood burning and commercial
11 cooking rules are complex to develop and controversial,
12 this slide shows why they are important to consider.
13 Controlling emissions from restaurant charbroilers is
14 about 92 times more effective, and reducing emissions from
15 wood stoves and fireplaces is about 11 times more cost
16 effective than replacing heavy-duty trucks.

17 Because these types of rules are difficult to
18 develop and implement, the district is to be commended for
19 pursuing them. This chart does not imply that reducing
20 emissions from trucks is unimportant. Mobile source
21 controls are still a critical strategy for reducing NOx
22 from motor vehicles, but this chart does emphasize that
23 reducing PM2.5 is about more than just reducing NOx.
24 Controlling primary PM emission is a cost effective and
25 necessary approach.

1 --o0o--

2 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION
3 MANAGER TASAT: Before describing the district's measures,
4 I would like to highlight new funding that will be
5 important to achieving PM reductions. Funds totaling \$135
6 million have been earmarked for the valley through
7 existing or newly created program efforts, including
8 development of community level emission reduction plans
9 and replacements and upgrades of agricultural diesel
10 engines.

11 Additional -- additionally, substantial funding
12 may be available to the valley through the Greenhouse Gas
13 Reduction Fund. This slide provides a list -- a listing
14 of the funds.

15 --o0o--

16 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION
17 MANAGER TASAT: Residential wood burning includes
18 emissions from fireplaces and wood stoves, and accounts
19 for nearly one-third of PM2.5 carbon particles measured on
20 a peak winter day. These smoke particles also contain
21 toxic air contaminants.

22 Reducing the localized impact of wood burning can
23 provide significant health benefits. A recent study found
24 that reductions in wood smoke from district programs to
25 curtail wood burning had measurable health benefits. The

1 study showed that hospitalization rates for heart disease
2 declined over 15 percent since implementation of the
3 district's wood burning curtailment program.

4 Reductions in wood burning through curtailment
5 programs and incentive programs for cleaner devices
6 provide one of the most cost effective approaches to
7 achieving significant air quality benefits. These
8 programs also provide important co-benefits by reducing
9 exposure to air toxics.

10 The current district measure restricts
11 residential burning on poor air quality days and has
12 proven successful at lowering pollution from wood smoke.
13 In support of the current measure, the district's Burn
14 Cleaner Grant program has funded the replacement of over
15 12,000 polluting fireplaces and stoves with cleaner
16 burning alternatives.

17 CARB and district staff have discussed the need
18 to strengthen the curtailment program to achieve even
19 greater PM reductions. The district's proposed strategy
20 is to reduce PM levels at which both registered and
21 non-registered devices are allowed to burn.

22 Under the latest proposal, the district would
23 lower their curtailment level for registered wood burning
24 devices from 65 micrograms to 35 micrograms. For
25 non-registered devices, they would lower the level from 20

1 micrograms to 12 micrograms.

2 The district has also proposed expanding their
3 incentive program for cleaner burning devices to
4 facilitate implementation of this more stringent
5 requirement.

6 --o0o--

7 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION
8 MANAGER TASAT: Moving next to commercial charbroiling,
9 which is a large source of PM2.5 carbon particles year
10 round.

11 The district has required controls for
12 chain-driven charbroilers for a number of years. However,
13 under-fired charbroilers, which are not currently
14 regulated account for the majority of emissions.

15 Effective control technologies for under-fired
16 charbroilers are now becoming available, and the district
17 has funded demonstration projects at restaurants in the
18 valley. Based on the success of these demonstrations,
19 control technologies are now being installed at other
20 valley restaurants.

21 Proposed new actions would require installation
22 of controls for under-fired charbroilers in new larger
23 restaurants, and strongly incentivize controls in existing
24 restaurants focused in Bakersfield and Fresno.

25 These control technologies can reduce emissions

1 by 75 to 85 percent. The district is currently evaluating
2 potential mechanisms for generating funding to cover 100
3 percent of the cost to control emissions from existing
4 restaurants, and partially incentivizing the cost from new
5 restaurants in urban areas.

6 This graph shows the impact from controls on
7 carbon particles. Current and proposed measures to
8 control residential burning and commercial charbroiling
9 will reduce concentration of carbon particles by about 35
10 percent. This is a significant reduction in carbon, and
11 we are pleased that the district is taking this ambitious
12 approach to controlling direct PM emissions. Paired with
13 the 50 percent reduction in particles due to CARB's mobile
14 source program for NOx, this strategy yields substantial
15 air quality benefits.

16 --o0o--

17 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION
18 MANAGER TASAT: Now, as we look at the combined impact of
19 both the carbon and mobile source controls on this chart,
20 controlling these sources results in meeting the 35
21 microgram 24-hour standard by 2024.

22 --o0o--

23 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION
24 MANAGER TASAT: The mobile and source -- and carbon
25 measures I discussed earlier move us very close to meeting

1 the 12 microgram annual standard. This strategy -- the
2 strategy has yet to fully achieve attainment. The highest
3 concentrations remain in the Bakersfield area with a
4 predicted concentration within one microgram of the
5 standard.

6 We are encouraged by these results, and
7 experience tells us that we can work closely with the
8 districts to identify the further reductions that will be
9 needed to close the small remaining attainment gap.

10 --o0o--

11 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION
12 MANAGER TASAT: CARB staff will continue to work with the
13 district to identify measures to reach attainment of the
14 annual standard, noting that dust plays a bigger role in
15 attaining the annual standard than does for the 24-hour
16 standard, and dust from urban and agricultural activities
17 make up about seven percent of total PM measurement in
18 Bakersfield.

19 The district is currently evaluating enhancements
20 to their conservation management practices rule to control
21 agricultural fugitive dust and is assessing opportunities
22 to control emissions from almond harvests or harvesting
23 equipment.

24 --o0o--

25 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION

1 MANAGER TASAT: The next portion of the presentation will
2 focus on a revision to the SIP addressing attainment
3 contingency for the 15 and 65 microgram PM2.5 standards
4 for the valley.

5 --o0o--

6 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION

7 MANAGER TASAT: In the past, EPA policy has allowed
8 California to include emission reductions resulting from
9 our mobile source measures with an approved -- with
10 approved waivers without requiring those measures be
11 submitted separately into the SIP.

12 Based on this policy, EPA approved the attainment
13 contingency measures for the 15 microgram annual and the
14 65 microgram 24-hour standard that included mobile source
15 waiver measures several years ago.

16 Subsequent court action determined that waiver
17 approval by itself was not sufficient, and rules must also
18 be submitted into the SIP separately. Since reductions
19 from these waiver measures were part of this attainment
20 contingency measures, EPA withdrew their approval of
21 these -- the attainment contingency, which started
22 sanction clocks. The first sanction is set to take effect
23 beginning December 13th, 2017.

24 Staff have now included mobile source rules into
25 the SIP and EPA has approved them. CARB is advancing this

1 SIP revision to resubmit the contingency measures and
2 resolve the pending sanctions.

3 --o0o--

4 AQPSD CENTRAL VALLEY AIR QUALITY PLANNING SECTION

5 MANAGER TASAT: In closing, staff will continue to work
6 with the district on development of the strategy
7 incorporating the measures discussed today, along with
8 closing the attainment gap for the annual standard.

9 Staff also recommends approval of the PM2.5
10 contingency measures for the 15 microgram annual, and 65
11 microgram 24-hour standards as a revision to the SIP.

12 This concludes my presentation and we would be
13 happy to answer any questions you might have.

14 VICE CHAIR BERG: Thank you very much for that
15 presentation. I'll -- first, do we have a witness list?
16 Let's see what our process is going to be this morning.

17 Okay. Wonderful, we have four people that are
18 going to testify. But before I start the testimony, I do
19 believe -- I think I'm going to turn to the Board first.
20 And, Dr. Sherriffs, will you open us up?

21 BOARD MEMBER SHERRIFFS: I'll try.

22 Thank you. First, you know a great deal of --
23 thanks for the staff presentation, but this has been a
24 really remarkable process. And it's been remarkable where
25 we have gotten since last October. You know, there's so

1 many people to thank for what's been achieved. Now, it's
2 not time to celebrate. There's still a lot of work to do.
3 The devil is in the details, and we're not quite there,
4 but it's extraordinary how far we've come.

5 And again, thanks to the ARB staff, thanks to the
6 San Joaquin Valley Air Pollution Control District staff
7 for their diligence and their work on this. They're
8 finding collaboration working together on this, because
9 this is so important. PM2.5, I think as everyone is
10 aware, this is really critical to our work, to the air
11 district's work, for us as public health agencies.
12 Because this, in many ways, is the most dangerous stuff
13 that we're dealing with, the biggest direct health effect.
14 So it is so important.

15 Many, many groups and many people to thank for
16 how far we've -- we have come. There have been -- this
17 really has been a remarkable model of engagement I think.
18 You know, stakeholders and ag have played a big role in
19 supporting the process, agricultural particularly in terms
20 of helping finding funding to do many of these things,
21 finding incentives, both at the federal level and State
22 level, which is really critical to making this work.

23 You know, again, our staff, the San Joaquin
24 Valley staff, open minded, collaborative, driven by the
25 science. The fact that this was opened up to much more of

1 a public process, I think, has been very powerful. And I
2 really do have to also acknowledge and thank the
3 environmental justice community, the community groups,
4 because last October at the beginning of our Board
5 meeting, this is not the direction we were going. Because
6 really of pressure and encouragement from those community
7 groups, ARB and the air district agreed to engage and move
8 forward to work now, not later, on this plan.

9 And I don't think anybody did that, because they
10 thought we were going to succeed. Just the opposite, I
11 think everybody looked at the height of the hurdle and
12 thought, well, we won't get there, but okay, we'll start
13 working on it.

14 And again, through this process of engagement, we
15 are -- we can see this is possible. We are so close.
16 It's really, really extraordinary.

17 And I would say at the San Joaquin Valley Board
18 meeting last week, there was unanimous endorsement of
19 moving forward with this. I thought it was a very
20 thoughtful response on the part of the San Joaquin Board,
21 and really taking some very different directions that have
22 been done in the past. Thinking about hot spots is a new
23 way of approaching this, and is a critical piece of making
24 this work.

25 So a real, as I say, unanimous commitment to

1 these outlined strategies. And, you know, again, thanks
2 for everyone, all of the stakeholders, the boards, the
3 public groups, agriculture for working together for
4 improving public health.

5 VICE CHAIR BERG: Thank you very much. We do
6 have three Board members that have been very active on
7 this. And so what I'd like to do is get their input, go
8 to the public statements, and have the rest of the Board
9 members close it up. Would that be all right for our
10 process?

11 And then, Senator Florez, would you please give
12 opening comments.

13 BOARD MEMBER FLOREZ: Thank you. I do have just
14 a couple of questions for staff on process. So in front
15 of us is a resolution that I read. It sounds as though we
16 are, in essence, closing a chapter with the air district
17 in terms of items that are -- were being worked on from
18 October to this point or are these items still open? So
19 that if we're voting on a resolution that says all is good
20 and well, that there are still items remaining.

21 And the reason for that question, to get to the
22 second part of the question, is we still have outstanding
23 issues I believe on biomass. There's a conference on
24 biomass in November. I sure would hate to close something
25 up and have some good recommendations come out of that and

1 somehow not incorporate all of the work that we're going
2 to be talking about with biomass.

3 There's also an issue of agriculture inventory.
4 It's great we have funding. It great we have a little bit
5 of thought process about that, but I'm not sure we have
6 closure on the ag inventory item itself. And then
7 ammonia, obviously, is great progress. I think at some
8 point -- but I think we're still maybe not on the same
9 page when it comes to what will be ultimately that
10 standard. It's a hard standard. I understand that, but
11 it seems that's something we should be talking about as
12 well.

13 And then lastly, it seems to me that we made
14 great progress, because this Board held up a process that
15 normally it's kind of gone through. We wait for a
16 rejection, and then ultimately we kind of try to figure
17 out what we're going to do next. And I'm very happy that
18 the resolution includes item 3, which says a commitment
19 for development and submission of a new SIP to the U.S.
20 EPA within one year of the San Joaquin Valley's failure to
21 attain.

22 That's a lot of work for a year. And it's a lot
23 of work once you've been denied. And I'm just wondering
24 whether or not that's even a realistic time frame for the
25 district and the Air Board if that SIP is rejected to

1 actually meet that mandate that's in the resolution.

2 I guess my thought is, the great progress and the
3 holdup in October in Fresno was really to have the Board
4 have this resolution truly in front of us, so that great
5 work had been done, and a lot of work has been done. I'd
6 probably say we're 80 percent there.

7 My question is simply on the 20 percent whether
8 it's biomass, whether it's ag burning, and more
9 importantly whether we've laid out ARB options, and local
10 district options. And we are able to have the public look
11 at all of those options from a cost perspective, and
12 actually ask the question were all these considered in a
13 public way, would be important, I think, at least for me,
14 to vote on this resolution, because it seems this
15 resolution is getting the closure.

16 So, I'm sorry, to confuse the original question,
17 which is what are we voting on. But now you know all of
18 the issues that would probably prevent me from feeling
19 comfortable with the resolution in its current form. So
20 I'll go ahead and let staff take it from there.

21 DEPUTY EXECUTIVE OFFICER KAPEROS: Okay.
22 Senator, Florez, let me try to answer your questions. The
23 short answer, and I'll try to give you more detail to
24 explain, is the vote on the resolution would not close the
25 books on the development of the PM2.5 plans, either for

1 the 12 microgram or the 35 microgram standards. We
2 have -- we essentially -- staff essentially compressed
3 into this one item with a vote at the end on the narrow
4 issue of contingency.

5 So the -- as we said in the staff presentation,
6 EPA withdrew an approval of a past contingency measure
7 because of how we were accounting and handling from an
8 administrative perspective the submittal of ARB's mobile
9 source measures into the SIP. Once we got that decision
10 from the courts back in 2013, 2014, staff have cleared out
11 the backlog, as it were, and submitted all of ARB's mobile
12 source measures into the SIP. And that allows us now to
13 resubmit the contingency passage to EPA narrowly for the
14 15 microgram standard and get that cleared. That vote
15 then is entirely, in a, sense separate than ongoing
16 development of the attainment plans.

17 And as was commented earlier, we've come a long
18 ways, but now the devil is in the detail as we put pencil
19 to paper and actually write the plan. So the back and
20 forth between ourselves, and the air district, and the
21 engagement with the various stakeholders in the
22 communities has been focused on what can the strategies
23 be? What are the strategies that get us there?

24 And we think we have mapped out those strategies
25 in broad concepts that get us to the 24-hour standard in

1 2024. But as one of the graphs showed you, we're just a,
2 you know, a hair's width above the annual standard in
3 2025.

4 So we need to do two things. We need to go back
5 and now start to write the details of what those measures
6 will look like for both of those standards, and then go
7 through a public process so people can see that. That's
8 where the information on cost effectiveness and the other
9 factors that you were taking about will come out.

10 BOARD MEMBER FLOREZ: Okay.

11 DEPUTY EXECUTIVE OFFICER KAPEROS: We also need
12 to go back and sort of cast our net broadly again about
13 what are the opportunities we have in front of us to get
14 that last little bit on the annual standard.

15 So you talked about ammonia. There's thoughts
16 about what we can be doing to more effectively control the
17 dust from urban areas exposed -- you know, vacant lots and
18 that type of thing in urban areas, and other sorts of
19 strategies that might get us that last little bit. So I
20 hope that helps.

21 BOARD MEMBER FLOREZ: Yeah, you -- thank you very
22 much for that.

23 Just a couple follow-ups. One, thank you for the
24 staff and for Dr. Sherriffs for working with our local air
25 district. It is -- it's an interesting district, to say

1 the least.

2 (Laughter.)

3 BOARD MEMBER FLOREZ: And I appreciate all of the
4 work that goes into the back and forth between the
5 district. Is the district here today as a partner?

6 Okay. At some point, I'd like to hear from them,
7 Madam Chair, if we could just to how they're feeling about
8 this process, what they've heard? Are we going to
9 continue to have ongoing conversations with our
10 environmental justice communities who have been absolutely
11 awesome in pushing our Board as well to as much openness
12 as possible. And I would like to hear it from them at
13 some point as well on how they feel this progress is
14 going.

15 Congratulations, Dr. Sherriffs, for pushing this.
16 I really think it was a good pause, but I think we're now
17 around the corner. And, I believe, I think our vote on
18 this is March or something of that sort.

19 DEPUTY EXECUTIVE OFFICER KAPEROS: Right now,
20 the -- yes, the air district has tentatively scheduled
21 their December consideration of the plan, and that,
22 because of our calendar, would be March.

23 BOARD MEMBER FLOREZ: Okay. So we have that time
24 to look at some of those issues. I think it's a very
25 powerful thing that we're working together on biomass, for

1 example. I think that's awesome. Overdue. It's focused.
2 I know that there have been Board members here that have
3 been talking about this for a bit. And I want to say
4 thank you to the staff for working with our local district
5 on that.

6 I just would like to see what comes out of that,
7 that we might be able to incorporate. And then when we
8 look at fireplaces, or we look at ag burning, or if we
9 look at biomass and some of the factors that go into kind
10 of the pollution factors. I think that's a super
11 important thing to continue to try to push.

12 So I do want to thank staff. It's been great
13 work. And I would say that we're almost there. We just
14 need to kind of get to that last 20 percent.

15 Thank you, Madam Chair.

16 VICE CHAIR BERG: Thank you.

17 Mr. Eisenhut, will you give some opening remarks.
18 And then I think we're going to go to the witness list,
19 and then we'll bring it back to the Board.

20 BOARD MEMBER EISENHUT: Thank you, Vice Chair
21 Berg. My simple metric for the -- for removing -- for a
22 measure of having removed the tension of a proposal is the
23 size of the audience and the number of commenters.

24 (Laughter.)

25 BOARD MEMBER EISENHUT: And with that in mind, I

1 think we've done well.

2 (Laughter.)

3 BOARD MEMBER EISENHUT: I wouldn't have predicted
4 this last May when we -- when we last heard this item. So
5 I compliment all parties on moving this forward.

6 I have a couple of kind of in-the-weeds comments.
7 One, I want to build on Senator Florez's comment about the
8 need for -- and we've talked about this before, for a
9 mobile ag inventory, and not having had this excluded from
10 the process. I think there is a positive story to tell.
11 And one way that we can tell that story is through
12 measurement.

13 And the other is even more detailed, and Senator
14 Florez referred to ag burning. I would address this to
15 the District. There -- there is -- there are -- ag
16 burning accrues from orchard removal. And there are ways
17 to dispose of orchard removal of trees without burning.
18 There's a cost associated with that. Currently, the cost
19 associated with obtaining a burning -- a burn permit to
20 burn removed orchards is less than the cost of removing an
21 orchard and disposing of it in a more environmentally
22 friendly way.

23 And we get what we incent. And I strongly
24 encourage the Board -- or the district, excuse me, to look
25 at their fee structure. That's a very small detail, but

1 it's important to those people who are down wind from ag
2 burning. And I know we can do the right thing. We don't
3 incent it correctly.

4 And then finally, I am very heartened by the
5 inclusion of contingencies at the end of this plan. And I
6 will just leave it there. I think that's -- it provides
7 good closure to this process.

8 So thank you.

9 VICE CHAIR BERG: So let's start with our public
10 testimony. And kicking us off, which we're thrilled, is
11 our San Joaquin Valley Air District. Mr. Thao, thank you
12 for being here.

13 MR. THAO: All right. Okay. We're on. All
14 right. Good morning, Madam Chair and members of the
15 Board. My name is Chay Thao. I'm the planning manager at
16 the San Joaquin Valley Air Pollution Control District.
17 And as you know, the challenges that we face in the San
18 Joaquin Valley are unmatched by any other regions in the
19 nation.

20 And since 1992, we've adopted over 600 rules.
21 And with the Air Resources Board's mobile source measures,
22 today in the San Joaquin Valley, precursor emissions for
23 both ozone and particulate matter are at historically low
24 levels. And also, population exposure to high levels of
25 ozone have been reduced by over 91 percent, and population

1 exposure to high concentrations of PM2.5 have been reduced
2 by over 78 percent.

3 So despite all this progress, we still face
4 significant challenges in meeting the latest federal
5 health-based standards enacted and established under the
6 Clean Air Act.

7 But I'm happy to report to you that over the past
8 two years, and especially since your October 2016 Board
9 meeting in Fresno, that we have left no stone unturned in
10 crafting strategies to reduce PM2.5. Now today, as I
11 stand before you and as mentioned earlier, we are able to
12 show attainment of the 24-hour PM2.5 standard. And we are
13 very, very close to showing attainment of the annual
14 standard.

15 And for that, I want to express -- we want to
16 express our gratitude, especially to valley businesses and
17 farmers, and to valley residents who participated in this
18 process. We also want to express our gratitude to valley
19 businesses, especially representatives of valley
20 agriculture who worked closely with us to advance the
21 recently enacted legislation to extend the cap and trade,
22 and to target significant funds to reduce air pollution in
23 the San Joaquin Valley.

24 Although our upcoming State Implementation Plan
25 will include some of the most stringent regulations in the

1 nation, these funds will be critical in our effort to
2 reduce emissions and attain the applicable standards in a
3 timely fashion.

4 And now that the plan -- the spending plan has
5 been adopted, we are looking forward to working with ARB
6 to allocate these funds to provide the necessary emission
7 reductions, and provide improved health -- public health
8 in the disadvantaged communities in the San Joaquin
9 Valley.

10 In conclusion, we still have a lot of work ahead
11 of us in order to finalize this attainment plan. Now,
12 moving forward, we will work with ARB staff to finalize
13 the modeling, to finalize the technological feasibility
14 and the socioeconomic assessment of these proposed
15 measures -- and I'm almost done -- and get a better
16 accounting of the funds that are available, both at the
17 local, State, and federal levels. And all of this work
18 will be conducted through an open public process, and with
19 additional workshops to follow.

20 And on behalf of the San Joaquin Valley Air
21 Pollution Control District, I would like to thank your
22 staff for working closely with us, and helping us with
23 this monumental challenge.

24 Thank you for your time.

25 VICE CHAIR BERG: Mr. Thao, on behalf of the

1 Board, we would like you to know how much we appreciate
2 the district and all the hard work that you've done. We'd
3 really appreciate if you would also carry that back with
4 you today, because it's been a yeoman's lift. And we do
5 want to recognize that that, of staff and your board, has
6 been a great job. Thank you very much.

7 MR. THAO: Will do. Thank you.

8 VICE CHAIR BERG: Good morning, Roger.

9 MR. ISOM: Good morning. Roger Isom, California
10 Cotton Ginners and Growers Association, and Western
11 Agricultural Processors Association.

12 And I want to start by first thanking the staff
13 and members of the Board for acknowledging agriculture's
14 involvement in this. I've said this before this Board, I
15 just want to reiterate today, we have not been sitting by,
16 and never have been. From the very beginning, we've been
17 involved and taken a role in acknowledging that we have an
18 issue in the San Joaquin Valley, and that we have a very
19 unique situation in the San Joaquin Valley with regards to
20 agriculture and how we achieve these goals.

21 So let me start with the funding part of it. And
22 I want to just emphasize that it's not just a good thing.
23 It's the answer, or it's at least the biggest answer for
24 us. And it's why we spent a lot of political capital and
25 a lot of effort in making sure that with this greenhouse

1 gas cap-and-trade bill that a lot of those funds would not
2 only come back to the valley, but come to agriculture
3 because a lot of our food processors are paying those.
4 But not only to get greenhouse gas reductions, but take
5 advantage of that, and get criteria pollutant reductions
6 to help us with ozone and PM2.5.

7 There is a significant amount of money coming to
8 agriculture to replace pump engines, trucks, tractors,
9 harvesters. And we're going to make sure that that gets
10 done on a very timely basis. I think the staff -- the ARB
11 staff acknowledged it in the first go-around that we
12 exceeded your goal by three times, as a result of
13 incentive programs, and taking advantage of that.

14 I don't know that we're going to do three times
15 what our goal is now, but I can assure you that ag is
16 committed to making sure we achieve our part of this
17 through that program.

18 I think to emphasize that even more, we have
19 partnered with the district to take advantage of potential
20 funding for ATVs to go to electric. That's something that
21 wasn't even on the Board or at the table for discussion.
22 We've taken a leadership role in doing that, and submitted
23 over 250 potential replacements in the first year alone.

24 And the only limiting factor, to be honest with
25 you, is money. If we can get more money, we're going to

1 bring more ATVs to the table.

2 And speaking of that farm bill -- or the
3 cap-and-trade funding, rest -- or keep in mind that that
4 money isn't just for ag. There's additional funds in
5 there. There's 60 million for food processors, which the
6 staff and I were in a meeting yesterday at CDFA, that
7 that's going to get us some additional reductions. There
8 are trucks money in there that will get us additional
9 reductions. Transportation money that will get us
10 additional reductions. So it's a significant win for
11 everybody in that.

12 Also, it was brought up about almond harvesting.
13 Next week, we start an almond harvesting research project
14 on testing four, quote unquote, low-dust harvesters
15 actually out in the field. And that's through the Almond
16 Board, and through the air district through their funding
17 process to conduct that research. And again, that process
18 started a long time ago and we're going to continue to do
19 that.

20 The two challenges we have, and that I would ask
21 for your help, and especially some of the Board members,
22 is that one goal is to electrify. And I'll look at it
23 from electrify pump engines. And if I can just real
24 quickly, I'll be very brief, cause we really do need your
25 help on this, is PG&E is in a general rate case right now,

1 which would significantly increase rates. That's going to
2 discourage electrification.

3 The second part of that is they're changing the
4 peak hours from the 12:00 to 6:00 to 5:00 to 9:00. That's
5 going to discourage solar. There's been a huge conversion
6 to solar, especially when they allowed net metering and
7 aggregation. This could have the potential of stopping
8 solar in an agricultural setting. We need your help on
9 that. So with that, thank you very much.

10 VICE CHAIR BERG: And, Roger, we have a question,
11 a follow-up question for you before you leave.

12 BOARD MEMBER BALMES: Yes, Mr. Isom. You know,
13 I'm a city boy, so could you educate me truly about the
14 use of ATVs in ag? I mean, just -- would this be -- is
15 this a significant use, because I'm all for electrifying
16 agricultural vehicles. I just need a little education
17 here.

18 MR. ISOM: So I'm not sure of the word
19 "significant". It's a source. We do -- almost every farm
20 has at least one ATV. Typically, our irrigators use these
21 to go check on water, go check on the pumps, run parts,
22 things like that. I do have some farms, depending on the
23 crops that they're going, that have more ATVs than others.
24 But the technology has changed.

25 We did a demonstration project with ARB about 10

1 years ago, when barefoot motors had the first kind of
2 electric ATV, if you will. And, at that time, it was the
3 only thing on the market, and had some limitations, only
4 runs so long. And, you know, we work by miles, right? I
5 mean, you don't want to be three miles away from the ranch
6 and be dead. You've got to have some way.

7 We think the technology has come a long way to
8 the point where it may get some extended use. In fact,
9 one of the applicants that we had in looking at this,
10 actually wants to replace one of their tractors with one
11 of these, because it's smaller. If it's electric, it's
12 going to be more efficient for them.

13 It just needs to know if he can -- it can haul
14 whatever parts, the chainsaw, whatever, out to the
15 different areas of the orchard take advantage of that. So
16 if the initial flood of phone calls and emails I got, as
17 we put this application together for the district, is an
18 indication, it could be significant, at least in terms of
19 numbers. It's -- you know, emissions, I think we're
20 talking pounds versus tons, but at this point, you know,
21 we'll take it.

22 BOARD MEMBER EISENHUT: Sandy.

23 BOARD MEMBER BALMES: Thank you.

24 BOARD MEMBER EISENHUT: Just let me add to this
25 just briefly for our urban friends. I think the use of

1 the term "ATV" is probably a little misleading. Think of
2 them as motorized golf carts. Probably a four-wheeled
3 vehicle with a little bench seat in the front and a --

4 BOARD MEMBER GIOIA: But for those of us who
5 don't golf, that may not be a meaningful comparison
6 either.

7 (Laughter.)

8 BOARD MEMBER EISENHUT: And they're ubiquitous in
9 farming communities for the reasons Roger has mentioned,
10 but --

11 BOARD MEMBER GIOIA: Even us urban folks know
12 what those are, yes.

13 BOARD MEMBER EISENHUT: And they run all day,
14 so...

15 MR. ISOM: Yeah, I would just add that again in
16 terms of this technology advancing, one of the things we
17 found out is that this is one area that California might
18 not actually be the leader. In researching this, we found
19 out in the southeast where there's a lot of hunting that
20 electric quads are quite popular, because they want to
21 sneak up on their game.

22 But they've actually got now a 72-volt electric
23 quad that is four-wheel drive. And that's something we
24 had not seen before. That was knew. And that could
25 actually answer a lot of questions or concerns that our

1 folks had. We're actually starting next week a series of
2 meetings with the different manufacturers. We're starting
3 with Cushman next week with the air district. Meeting
4 with those to find out what -- how long will your battery
5 last, how long does it take to charge, how much power does
6 it have? Can it pull? Those type of things. So we're
7 really on the cusp of seeing what we can do with that.

8 BOARD MEMBER FLOREZ: Madam Chair, can I just?

9 VICE CHAIR BERG: One more question. Thank you.

10 BOARD MEMBER FLOREZ: We have Mr. Isom here,
11 could I just ask a couple questions?

12 VICE CHAIR BERG: Yes.

13 (Laughter.)

14 BOARD MEMBER FLOREZ: Sorry, Roger.

15 So just a couple questions. Number one, you
16 mentioned the PG&E solar renewable, something obviously
17 this Board is concerned with, CEC is concerned with. Are
18 you interacting with CEC on micro grids in order to kind
19 of pool some of these water districts and get them off of
20 kind of traditional types of energy?

21 MR. ISOM: No, not me personally. I know the Ag
22 Energy Consumers Association is to a certain, but to what
23 level I can't answer that.

24 BOARD MEMBER FLOREZ: Okay. I would ask you to
25 hopefully engage a little bit in that, because that's

1 going to, in essence, with the folks you've mentioned,
2 PG&E and others, what might be able to kind of move ag to
3 a cleaner environment, and particularly the fact that we
4 have over 50 water districts running from Bakersfield all
5 the way up to Fresno. Those are very power-intensive
6 entities. And it seems as though that movement and CEC's
7 push in that is something that you could look into.

8 The other is are you connecting -- I guess Mr.
9 Musk is having his semi-truck electric vehicle push, I
10 believe next month or something of that sort. I think we
11 have an Air Board meeting the same day, but I know it's
12 going to be unveiled in Hawthorne. Is the AG Industry
13 interacting with that type of movement with -- for larger
14 hauling trucks that are completely electric?

15 MR. ISOM: Yes. Right now -- our initial focus
16 right now is, what we call, yard dogs or yard goats, the
17 trucks that we use on the property to move trailers
18 around, for example, at our cotton gins or our almond
19 haulers that trailers get brought in and we park them, and
20 then we haul them into the gin or the hauler to unload.

21 That technology, which is -- we typically get
22 ours from the ports. As they wear them out, we buy them,
23 and then use them --

24 BOARD MEMBER FLOREZ: Yeah.

25 MR. ISOM: -- to try to go hybrid or electric

1 there. We've been working with the district to try to get
2 one of the manufacturers to provide us with those to start
3 testing them.

4 BOARD MEMBER FLOREZ: Okay. The only reason I
5 ask is you mentioned dust control, a big issue for the
6 Board. Watering of roads is probably half the effort.
7 The other effort is once those almonds are in that truck,
8 and they go down Lerdo Highway or go down any of our
9 highways, all that dust literally shakes from the truck on
10 the freeway into the air.

11 So I'm thinking it might be a nice connection,
12 before all of my urban friends here on the board move all
13 those trucks from Musk to the port, that the ag industry
14 really think about those large amounts of almonds -- by
15 the way, which are -- 80 percent of the world's almonds
16 are in the central valley and grown. You know, that is a
17 lot of dust. So I would hope that we would be able to try
18 to figure out that dust combined with the combustion,
19 trying to figure out a cleaner way to move that stuff.

20 MR. ISOM: Yes.

21 BOARD MEMBER FLOREZ: Thank you.

22 VICE CHAIR BERG: And thank you very much, Roger,
23 for your continued efforts.

24 Good morning.

25 MS. GALE: Good morning, Board. My name is

1 Genevieve. I'm here on behalf -- is it not on?

2 I can just move closer.

3 Hello again. My name is Genevieve. I'm here on
4 behalf of CVAQ, the Central Valley Air Quality Coalition.
5 And I'd like to thank Board members for their opening
6 remarks on this plan, and also CARB staff for their hard
7 work on this plan and their willingness to work with all
8 stakeholders.

9 From a community perspective, I'd like to offer
10 some insight on the process as we've moved forward. We
11 have received modeling on ammonia reductions in ag burning
12 and residential burning. So thank you, staff, for
13 that -- those data points. We have yet to see an
14 agricultural equipment inventory. However, we are
15 lightened to see a commitment on a regulatory back-stop.

16 Two days ago, we had a public workshop down in
17 Bakersfield, and the turnout was really great. We had
18 about 75 to 100 people there. I know Kurt and I were
19 trying to find chairs from all different rooms to fill up
20 the room. And I would say the general theme from
21 community residents at that workshop was we want clean air
22 now. Move faster, be stronger, and deliver benefits for
23 the communities most in need, especially those that are
24 not around an air monitoring site. That was a big theme.

25 So I'll finish my comments by focusing on one

1 thing this Board can do to move faster and to move
2 stronger, and that would be ammonia. Ammonia combines
3 with NOx to form half of our particle pollution. And yet,
4 we don't hear much on ammonia. Repeatedly we've been told
5 that reducing ammonia will have insignificant effects on
6 attainment.

7 However, based on the modeling that we've
8 received, this is not true. Just a 30 percent reduction
9 in ammonia across the valley would garner Bakersfield a
10 3.3 mic drop in particle pollution on days when pollution
11 is at its worst. The U.S. EPA signifies a 1.3 mic drop as
12 significant. And so across the valley, you would get a
13 1.7 microgram drop in particle pollution.

14 So in Bakersfield, this is three times more
15 effective than your agricultural equipment incentives and
16 rules. It's 825 times more effective than lowering NOx
17 limits on boilers. And it's 3,300 times more effective
18 than NOx limits on flares.

19 So reducing ammonia by just 30 percent would have
20 significant benefits for attainment, but more importantly
21 for public health. It is a toxic gas that affects
22 communities. So I'd like to end by pushing this agency to
23 explore potential ammonia controls. What would it look
24 like? How much would it cost? Those are some pretty
25 pertinent questions.

1 And I'd also like to push your agency to actively
2 merge your climate programs with your air quality goals.
3 I find often times these two are not talking. And
4 especially on dairy digesters and methane reductions, we
5 would not like to see an inadvertent increase in NOx and
6 ammonia from dairy digesters.

7 Two more sentences?

8 (Laughter.)

9 VICE CHAIR BERG: Please finish.

10 MS. GALE: And we also don't want to see
11 reductions in NOx and ammonia as an additional good
12 co-benefit. We'd rather see reductions in criteria
13 pollutants on par with reductions in climate pollutants.
14 And hopefully, we can merge those two goals for the
15 benefit of the valley.

16 Thank you.

17 VICE CHAIR BERG: And thank you very much for
18 coming today. Appreciate those comments.

19 Good morning.

20 MR. ROSE: Good morning. Thank you for having me
21 today. My name is Mark Rose with the National Parks
22 Conservation Association. I'm the Sierra Nevada field
23 representative for them. I'm also a resident and work in
24 Fresno.

25 First off, I just want to thank you all for

1 hosting this and thank the Board and the district for
2 working together to get us this far. I think that's quite
3 the accomplishment.

4 I'm commenting today because the San Joaquin Air
5 District's 2.5 rule affects Yosemite's Sequoia and Kings
6 canyon with air pollution originating from the Central
7 Valley district. Additionally, parts of Yosemite, Sequoia
8 and Kings Canyon are within the air district's
9 jurisdiction. Actually, all of Sequoia and Kings Canyon
10 is within the air district's jurisdiction.

11 Fine particulates are the predominant source of
12 haze, which significantly diminish views and visibility
13 within the Parks. Additionally, 2.5 is a major concern
14 for park goers, because when we exercise we inhale up to
15 ten times the Amount of dirty air as compared to normal
16 breathing.

17 First, I'd just like to start out with a question
18 on if the district or the Air Board knows when or where
19 they will be presenting on modeling. I know that the last
20 workshop said that they were going to present on modeling.
21 Is that going to happen any time in the future?

22 VICE CHAIR BERG: I'm looking at staff.

23 DEPUTY EXECUTIVE OFFICER KAPEROS: We don't have
24 that scheduled yet, but we can communicate with the
25 commenter when we do have that scheduled.

1 VICE CHAIR BERG: Okay. So it's not scheduled
2 yet, but they will communicate with you.

3 MR. ROSE: Okay. Thank you. And I'd also like
4 to suggest that prior to that, you provide the modeling to
5 the public well in advance, if possible.

6 Next, I'd like to say at the workshop
7 presentation, there was a slide that stated that the
8 district, ARB, and EPA believes the hot spots strategy is
9 permissible under existing law. We just want to ensure,
10 given the rack of certainty in that statement that this
11 rule has been properly vetted just to prevent further
12 delay in implementation.

13 We'd also like to say that given the district's
14 obligation to uphold public health, we are concerned about
15 whether the strategy evenly distributes resources across
16 the Central Valley.

17 Next, we want to urge ARB and the districts to
18 ensure more clarification as well as inclusion of specific
19 control measures, when it comes to ammonia and CAFOs and
20 dairy operations, as well as control measures for biomass
21 facilities -- industrial biomass facilities.

22 We think that if those are included, the district
23 would have no problem in having attainment for all of the
24 standards much sooner.

25 Finally, we would like to make a suggestion that

1 in future presentations in order to provide clarity to the
2 public, ARB and the district frame emission reduction
3 strategies with more specific correlation for source
4 categories.

5 And that's it. Thank you very much.

6 VICE CHAIR BERG: Thank you.

7 MR. ROSE: And I look forward to working with you
8 in the future.

9 VICE CHAIR BERG: Yes, thank you very much for
10 your comments.

11 Good morning.

12 MR. MAGAVERN: Good morning, Vice Chair Berg and
13 Board members. I'm Bill Magavern with the Coalition for
14 Clean Air. And I agree, as others have said, we've come a
15 long way from last October's hearing in Fresno. And I
16 want to thank especially Board members Sherriffs, Florez,
17 and Eisenhut, as well as the staff who have done so much
18 hard work to get us here.

19 I think this is as important as anything that
20 this agency does. As you know, the San Joaquin Valley has
21 the worst particulate matter problem in the entire
22 country. We have millions of people who are subject to
23 these damaging health effects. And I think that the
24 research over the years has shown that particulate matter
25 is even more damaging to our health than we had thought

1 say 15 or 20 years ago.

2 So I first want to second all the comments that
3 Genevieve made on behalf the CVAQ, in particular the need
4 to focus more on ammonia. Secondly, we support the
5 adoption today of contingency measures, because as we know
6 getting to attainment will require follow-through on
7 behalf of both the district, when we look at the burning,
8 and the cooking, and the other measures that are required,
9 and also on the part of CARB when it comes to the mobile
10 source measures.

11 And if we look at those mobile source measures,
12 one of them is a heavy-duty inspection and maintenance
13 measure, which we agree is very important. What no one
14 has pointed out so far is that that relies in large part
15 on the passage of legislation, which has been introduced
16 by Senator Leyva. But actually passing that into law will
17 take a lot of work and effort.

18 So we're going to be part of that. I know ARB
19 and the entire administration are committed to that, but
20 we'll need a lot of help to actually get that enacted into
21 law next year, and to get those emissions that we're
22 counting from inspection and maintenance in the heavy-duty
23 sector. So we look forward to continuing to work with you
24 on this important plan and thanks for your attention to
25 it.

1 VICE CHAIR BERG: Thank you very much.

2 Good morning.

3 MS. HOLMES-GEN: Good morning, Vice Chair Berg
4 and Board members. Bonnie Holmes-Gen with the American
5 Lung Association in California. And stepping up our air
6 pollution control efforts in the valley is incredibly
7 important to our State strategy to meeting out our federal
8 standards. And it's especially critical to the
9 thousands -- hundreds of thousands of individuals with
10 asthma and lung disease, the children and seniors, and
11 other vulnerable communities in the San Joaquin Valley who
12 are living with the dangers of air pollution and the over
13 a hundred day -- hundred polluted days for ozone and very
14 serious particle pollution problems.

15 Our annual State of the Air Report data
16 underscores the importance of driving down particle
17 pollution emissions in the valley to improve air quality
18 and lung health. And, in fact, our trend charts over the
19 past 17 years of the report show the progress that we've
20 made in reducing particle pollution in the valley, but it
21 also shows that progress has stalled or we've seen
22 increased numbers of unhealthy days in several areas of
23 the valley. A lot of that has been due to the recent
24 drought and fires, the smoke, and other conditions
25 linked -- also linked to climate change.

1 And so we appreciate the progress that's been
2 made in developing this valley strategy. And we're here
3 to urge the staff and the Board to continue to work
4 closely with the air district to develop measures to get
5 rapid progress toward meeting our standards through wood
6 burning/ag burning controls, mobile source controls,
7 restaurant controls. And we appreciate the outreach
8 that's occurred.

9 Clearly, incentives is -- and the GGRF funds is a
10 huge -- can be a huge boost to efforts in the valley. And
11 we want to work with you to make sure we're directing as
12 much of those funds as we can toward helping the valley
13 effort, and particularly want to mention transition to
14 zero emissions in the mobile sector, and ag equipment, and
15 ag vehicles.

16 This has come up. We've had some really good
17 discussion about this. And I just wanted to underscore
18 the point that there are zero emission new technologies
19 across the types -- across classes of vehicles, and duty
20 cycles. We have electric options in just about every
21 category. There are new announcements coming out about
22 class 7 and class 8 electric heavy-duty engines. So we're
23 very excited about the progress and we want to see that
24 put to work in the valley to clean up the air.

25 We appreciate the hot spot clean-up strategy, but

1 we do want to make sure as we go forward that we're
2 helping improve air quality in all communities throughout
3 the region. So we want to just make that point also to
4 make sure, as we're finalizing the strategy moving forward
5 that there's a careful look to make sure we're not leaving
6 any communities behind.

7 And also, please -- while we want to focus on
8 regulatory strategies, don't leave out public education.
9 Everyone in the valley needs to feel apart of this effort
10 to understand the role that they can play from walking to
11 biking to using zero-emission technologies.

12 Thanks for elevating the importance of this
13 valley effort.

14 VICE CHAIR BERG: Thank you.

15 And our last speaker. Good morning.

16 MS. DIETZKAMEI: Good morning. I'm Janet
17 Dietzkamei. I'm a Fresno City resident and I have asthma.
18 I've come here to stress the importance of getting our air
19 breathable for those of us in the Fresno Valley -- San
20 Joaquin Valley who have asthma, and for those who are
21 going to suffer the effects of the air who don't yet have
22 asthma, may one day have it.

23 I do not go outside of my house unless the air
24 quality is 13 micrograms cubic meter on PM2.5. Above
25 that, I go out with a mask. If it's above that with

1 ozone, I don't go out at all, because I can't breathe.

2 If I go out and not observe these cautions, I get
3 pneumonia. I end up in the emergency room or the
4 hospital. It starts with coughing, unable to breathe,
5 goes into bronchitis, and then pneumonia. And this is
6 swift. This doesn't happen over a period of time. It
7 happens all of a sudden.

8 During the winter months, residential burning is
9 very prevalent in the part of Fresno where I live. The
10 amount of PM2.5 produced on non-burn days is exactly the
11 same as that produced on days when we are not supposed to
12 burn when the PM2.5 has gone above what is regarded a safe
13 level.

14 I recommend -- since serious actions must be
15 taken, in an area where we have the worst air quality in
16 the entire United States, I recommend that we execute a
17 complete burn ban for residential fireplaces, both inside
18 and out during the months of November, December, January,
19 and February in urban areas such as Fresno city and
20 Bakersfield. That would be a quick fix to reduce PM2.5 in
21 our air when it is so bad due to inversion and other
22 situations in the valley.

23 People without central heating would, of course,
24 be able to use the fireplace. But hopefully, they would
25 be using a fireplace -- a stove that is EPA provided or

1 that -- with -- that runs on natural gas.

2 I have a purple air monitor in my yard. I cannot
3 go outside without first consulting that monitor to see if
4 the air is safe for me to go out. In the case of PM2.5, I
5 will go out with a mask up until the point of 35
6 micrograms per cubic meter. It is very difficult to live
7 inside of a house constantly. I have cabin fever.

8 I would like to also say that we would like to
9 encourage electric vehicles, POV personal vehicles, to be
10 used in Fresno and on our freeways. But that can't happen
11 until we have chargers. I won't get one, because I travel
12 frequently north and south, and I have -- I can't depend
13 on being able to have a charge that would get me to
14 Northern California to Southern California. We need
15 chargers, and that will encourage people to start buying
16 those electric vehicles.

17 I'd like to mention one little thing about dust.
18 Lately, I'm noticing --

19 VICE CHAIR BERG: I'll need -- I'll need you to
20 make a closing comment, because I did let you go over a
21 little bit, okay?

22 MS. DIETZKAMEI: Dust. The street cleaners now
23 are not using water when they clean the streets and clouds
24 of dust are going up. I'd like to mention that.

25 Thank you very much for your attention. This is

1 very important for so many people in the San Joaquin
2 Valley.

3 Thank you.

4 VICE CHAIR BERG: And thank you very much, ma'am,
5 for making the time to come up and testify for us. We
6 really do appreciate it.

7 MS. DIETZKAMEI: Very happy to do so.

8 VICE CHAIR BERG: Thank you.

9 Okay. With that, I am going to close the record
10 specifically on this agenda item for the Board vote that
11 will be taking place a little bit -- in a few minutes.

12 But I'd like to return back to Board comments,
13 and I'm going to call on Ms. Mitchell first.

14 BOARD MEMBER MITCHELL: Thank you, Madam Vice
15 Chair.

16 I want to congratulate the district and the ARB
17 board staffs for the wonderful collaboration that has
18 happened with respect to this -- this plan that we are
19 embarking on. And I must say we have made remarkable
20 progress since last October.

21 But this is an example of the Air Resources Board
22 who's responsible for mobile sources working very well
23 with the district responsible for the stationary sources
24 in arriving at a plan that will dramatically reduce the
25 emissions in a very severely impacted district in our

1 state.

2 I want to say that incentive funding is critical.
3 It's critical for the turnover of the dirtier vehicles and
4 the ag equipment to the cleanest possible equipment. And
5 we can see from mobile source emission figures that mobile
6 sources are 39 percent of the problems for the PM2.5 in
7 the valley, that this incentive funding is really needed.

8 I also want to encourage our staff and Board
9 members, to the extent that we can, to work with the
10 Public Utilities Commission on getting the electric rates
11 where they need to be because we are embarking on a
12 program in the State that concentrates on increasing
13 electric vehicles, and just -- and the conversion to
14 electric sources for most of our energy.

15 So it's critical that the PUC work with our
16 public utilities, both in the Northern California and
17 Southern California, to make sure that we're getting those
18 rates right, and get the time of rates -- the timing on
19 those rates correctly.

20 I'm curious about the comments made here on
21 reductions of ammonia, and would like the staff to comment
22 on that, that perhaps we have not addressed that
23 adequately.

24 DEPUTY EXECUTIVE OFFICER KARPEROS: So it's the
25 ammonia that combines with the oxides of nitrogen to

1 produce the nitrate that is the 39 percent that you
2 referred to in your comment. Under U.S. EPA guidance, you
3 have to do an analysis to identify what are the major
4 contributors to the ambient PM2.5.

5 And the guidance is to do an analysis with a
6 30-percent reduction in ammonia, and up to a 70 percent
7 reduction in ammonia, or any of the pollutants that
8 you're -- the precursors that you're looking at to
9 determine if they're significant.

10 When we do that analysis at the 30 percent level,
11 you're just hitting the bar where EPA would consider that
12 a significant precursor. At the 70 percent cut level, you
13 are well above the bar. Now, you need to compare that.
14 You need to then match that with what are the feasible
15 reductions that can be achieved from ammonia from --
16 particularly from dairies. And that's the process that is
17 underway now.

18 The concern has been that any of those measures,
19 the feasibility of those measures, too expensive, et
20 cetera. But now with some of the incentive monies that we
21 have, that we think there may be opportunities to
22 incorporate ammonia reductions into our other efforts.
23 And that's what we're looking at.

24 BOARD MEMBER MITCHELL: Thank you.

25 The other question I have is on the sanctions

1 timeline, when would sanctions kick in for the district?

2 DEPUTY EXECUTIVE OFFICER KARPEROS: I don't have
3 the specific date, but it's the end of the year related to
4 the contingency measure element, which is the separate
5 part of the action today, which I believe is what you were
6 asking about.

7 BOARD MEMBER MITCHELL: So the plan that we have
8 in front of us is sufficient to avoid any sanctions being
9 imposed, is that correct?

10 DEPUTY EXECUTIVE OFFICER KARPEROS: So let me --
11 let me clarify again, if I may. And this was the similar
12 we that Senator Florez had. So we briefed you on the
13 status of the plan that we are still developing and now we
14 need to go back and do the details, and bring that plan to
15 you early next year. The district will take it the end of
16 the year, and then we'll bring it to you early next year.

17 Separate from that is a SIP that's actually
18 already been submitted to EPA several years ago. But one
19 element of that was disapproved because of this
20 administrative procedure about whether the mobile source
21 measures had been submitted or not.

22 So your action today is related just to that --
23 that one narrow element to a SIP submittal that went
24 forward several years ago. Does that help, I hope?

25 BOARD MEMBER MITCHELL: So the resolution that we

1 passed to on enforced -- enhanced enforcement will cover
2 that problem?

3 DEPUTY EXECUTIVE OFFICER KARPEROS: Yes. Yes, it
4 would. And then when the -- the SIP that we bring to you
5 early next year will have its own additional set of
6 contingency measures at that time.

7 BOARD MEMBER MITCHELL: I see. Okay. Thank you
8 very much.

9 VICE CHAIR BERG: Dr. Balmes.

10 BOARD MEMBER BALMES: Thank you, Vice Chair Berg.
11 So I have actually been doing research in the Fresno area,
12 and actually in the San Joaquin Valley for longer than I
13 care to admit, over 17 years, initially with CARB funding,
14 before I was on the Board, and now with NIH and U.S. EPA
15 funding.

16 And actually our U.S. EPA component of our
17 Children's Environmental Center is under threat as many
18 other extramural research projects from U.S. EPA are. But
19 I really wanted to echo what the woman from Fresno who has
20 asthma brought up. I've studied kids with asthma in
21 Fresno, not adults. But even though the air quality is
22 much better in Fresno even than when we started our
23 research around 2000, we are still finding air pollution
24 effects on kids with allergies and asthma, and actually
25 kids without either one. In terms of lung function, we've

1 seen air pollution effects on the lung function of kids
2 without asthma.

3 And actually on the train up from Berkeley, I was
4 preparing a summary of our Children's Environmental Health
5 Center Research. There's going to be a national meeting
6 in San Francisco next month. And, you know, the headline
7 of this abstract was basically despite the fact that air
8 quality is better in Fresno, we're still seeing measurable
9 effects, adverse health effects in kids. And it's not
10 just asthma and allergies, we're now seeing effects with
11 regard to obesity and diabetes risk.

12 So I just want to sort of highlight the public
13 health importance of the work that our staff and the staff
14 of the district is doing to try to control exposures to
15 PM2.5. I also wanted to underscore what Senator Florez
16 mentioned about biomass smoke exposure, that's another
17 area that I've done research in for a long time, not so
18 much in the Central Valley, but regarding wildland fires
19 in our national forests and with regard to household air
20 pollution and developing countries around the world.

21 But biomass smoke is an issue. Matter of fact in
22 the Bay Area during the Labor Day weekend when it was very
23 hot and there was stagnant air, we also had wildland fire
24 smoke, we actually had higher PM2.5 for a day than Delhi.
25 Yeah. Delhi was 90 something micrograms per meter cubed

1 when we were 150 Micrograms per meter cubed at least
2 briefly.

3 So bottom line is we still have to keep our eye
4 on the ball with regard to PM2.5 from all sources. I
5 think that what the district and our staff have put
6 together is a step forward, but I agree we have more to
7 do, and I look forward to those continued efforts to
8 control PM2.5 in the valley.

9 VICE CHAIR BERG: Thank you very much.

10 Ms. Takvorian.

11 VICE CHAIR BERG: There is another -- yes, so
12 I'll -- yes.

13 BOARD MEMBER TAKVORIAN: Okay. Thank you. And I
14 just wanted to add my congratulations to everyone who
15 worked so hard from the CARB staff to the district staff,
16 business community, and especially to the environmental
17 justice community who I know has been tracking this issue
18 for a very long time.

19 Senator Florez and Ms. Mitchell actually asked my
20 question, and I appreciate Mr. Karperos's response. I
21 wondered if the ammonia measure and the research that
22 you're doing could come forward at the same time at the
23 March meeting. Because I appreciate that you're talking
24 about what the process is, and I think that's part of what
25 Ms. Gale was asking about. But I wondered if we could get

1 some time frame on that that I think would help to not
2 just send it into the ozone, if you will.

3 (Laughter.)

4 BOARD MEMBER TAKVORIAN: Not a good thing to say.
5 But that -- that we could -- because we made such good
6 progress on this, and I think part of it came from all of
7 you really setting strong timelines, and moving forward
8 with a process that the community could depend on. So I
9 wondered if you could respond to that, and then also - and
10 I'm sorry if I missed it - what the process will be for
11 looking more deeply at biomass burning. Those are my two
12 questions.

13 Thank you.

14 DEPUTY EXECUTIVE OFFICER KARPEROS: So first, to
15 the ammonia question, I think the resolution of the basic
16 science questions about how ammonia interact with some of
17 our other strategies and what opportunities we have, to be
18 perfectly frank, won't be complete by the March timeline.
19 We can certainly come forward with you at that time and
20 talk about the additional analysis that's been done, the
21 modeling done that I was alluding to, and also the status,
22 the researching what we think are the potential outcomes
23 going forward. So we can certainly do that in the March
24 time frame.

25 The process for addressing the biomass question,

1 as Senator Florez alluded to, there's a summit coming up.
2 Out of that, we should be able to draw some information
3 that we can reflect into the plan. And then as I alluded
4 to earlier to find that last increment of reductions we
5 need for the annual standard, we'll be sitting down with
6 the district and as -- you know sort of re-casting our net
7 about whether there's opportunities. And that will be one
8 that we put on the table with them.

9 BOARD MEMBER TAKVORIAN: Thank you.

10 VICE CHAIR BERG: And so before I call on Dr.
11 Sherriffs, is there anybody else that would like to make a
12 comment. And so -- oh, okay.

13 BOARD MEMBER FLOREZ: I have a question.

14 VICE CHAIR BERG: Why don't we go with the quick
15 question, first.

16 BOARD MEMBER FLOREZ: Yeah, I just have a quick
17 question to follow up on Diane's question to staff on
18 the -- well, mostly the ammonia issue. And I guess my
19 question would be - I'm trying to frame it correctly - do
20 we -- is there an opportunity for staff to come back next
21 meeting and give us a little more information on the
22 ammonia issue, meaning how much further we can get with
23 the local air district in terms of getting more precise
24 data, a better read for the Board to understand what are
25 the limitations, what are the barriers, what is preventing

1 us from taking a deeper dive into that. And that means
2 not bringing an answer, but really trying to understand
3 what is preventing us from getting to the next steps on
4 the ammonia issue.

5 I'm -- you know, I think it's been mentioned, on
6 one side we're talking a lot about kind of the, you know,
7 pollution and a whole host of really important issues.
8 But on the other side, you know, this is one of those
9 co-benefits issues when we talk about ammonia that is
10 absolutely important, I think, to the Board on whole other
11 matters. Is that problematic or can we get some sort of
12 report next meeting?

13 VICE CHAIR BERG: So would it be possible to look
14 at the November time frame, since I believe the October
15 meeting in Riverside is pretty packed.

16 BOARD MEMBER FLOREZ: That's fine.

17 VICE CHAIR BERG: So could we look out maybe to
18 November?

19 DEPUTY EXECUTIVE OFFICER KARPEROS: That was the
20 one thing I was going to -- that's the one thing I was
21 going to suggest, Vice Chair Berg, is that we use the
22 November meeting for that, so that we're not waiting till
23 March to give you sort of an up-to-date status on where
24 things stand.

25 BOARD MEMBER FLOREZ: Thank you. And I just --

1 I'm more concerned not necessarily from our staff's
2 perspective of pushing on the issue. I'm more interested
3 on the local district's ability to produce what's
4 necessary for us to get some movement on this. So if
5 there's any issue, maybe we can inform the Chair and our
6 Executive Director as well that -- up to that time in
7 November, if we just aren't making any progress on it, it
8 would be good for you folks to know that, not necessarily
9 on our side, but trying to get the local board to push a
10 little harder on that issue I think is important.

11 DEPUTY EXECUTIVE OFFICER KAPEROS: I understand.

12 BOARD MEMBER FLOREZ: Thank you.

13 VICE CHAIR BERG: Thank you.

14 Dr. Sherriffs.

15 BOARD MEMBER SHERRIFFS: Thank you.

16 No wrap-up here but just the concerns about ag
17 burning and just the valley air district is sponsoring in
18 November a two-day summit regarding alternatives to open
19 burning. So very much engaged in moving that progress
20 forward.

21 I just want to again acknowledge the involvement
22 of people. Ninety percent of the people who testified,
23 thanks to Kurt, thanks to Sylvia, thanks to Roger, thanks
24 to Janice, thanks to Genevieve, have been -- ah, the 99
25 corridor. They were in Bakersfield on Tuesday. They're

1 here today. I hope everybody was driving a fully electric
2 car or hydrogen powered. But, you know, again, I think
3 that's emblematic of the involvement, the commitment to
4 making this work and how important it is, and just
5 thanking everyone again for that.

6 A question. We talk about the localized impacts
7 of PM2.5. And as we think about the hot spots, that's an
8 important issue, and I wonder if you could just comment a
9 little bit so that people can understand better how far
10 does PM2.5 go and...

11 DEPUTY EXECUTIVE OFFICER KAPEROS: Yeah. Let me
12 address that issue. We alluded to the hot spots -- in
13 staff's presentation, we alluded to the hot spots approach
14 that the district was looking at. We actually didn't use
15 that term. That came from the comments. So the idea is
16 that - and I'll use cooking as the example - it's
17 appropriate and we think -- and we're seeing examples that
18 it's very feasible as new restaurants are constructed
19 throughout the valley, that they can put on these new
20 state-of-the-art controls. And there are restaurants that
21 are doing it voluntarily right now without incentives and
22 without any regulatory push.

23 Habit Burger, if you are going down 99, and you
24 want a hamburger -- I shouldn't hawk for them, but they do
25 use that technology right now.

1 (Laughter.)

2 DEPUTY EXECUTIVE OFFICER KARPEROS: The idea then
3 though behind the hot spots approach is there are areas,
4 and I'm going to talk about Fresno County and Kern County,
5 not a small geographic hot spot by any stretch of the
6 imagination, that when we look at the carbon signature on
7 the filters for the PM that we are measuring, that we see
8 a large contribution from cooking. And so the idea then
9 is in addition to a valley-wide strategy for new
10 restaurants that you would focus in these hot spots
11 county-wide an effort to incentivize and then potentially
12 back-stop with a rule, the installation of these sorts of
13 technologies on existing restaurants.

14 We showed you a chart of with a very, very tall
15 column for heavy-duty trucks and very tiny little columns
16 for -- in terms of cost for these sorts of retrofits, to
17 indicate that it's really important to be looking here.
18 But we have to understand that those are, in some cases,
19 mom and pop restaurants. And so incentives are going to
20 be particularly important for those sorts of conversions.

21 And in order to use the incentive money to its
22 maximum effect, you want to focus it on those areas where
23 we're seeing on the filters a significant signature from
24 cooking.

25 VICE CHAIR BERG: Okay. Thank you very much.

1 Well, in summary, what I have really heard from direction
2 from the Board, first and foremost, the process works, and
3 it's impressive. As a Board member that has sat through
4 many San Joaquin Valley, not near as many as Ms. Riordan,
5 but --

6 (Laughter.)

7 VICE CHAIR BERG: -- that they did seem
8 insurmountable these issues. And yet today, we're really
9 seeing how the process does work, the engagement does
10 work. That when leaders of all sides, of all stakeholders
11 come together, that we really do find solutions and that
12 standards can be attained.

13 Second, we need to remain vigilant. It isn't
14 over. The devil is in the details. We have a lot of work
15 to do between now and March. There are some critical
16 issues still on the table on how to proceed forward. And
17 so what I'm hearing from the Board is go forth, work hard,
18 be vigilant because implementation will be critical.

19 Third, be open and actively seeking those
20 measures to close that gap on the annual PM standard. So
21 we're a smidgen short, and we do need to find those
22 measures.

23 And fourth, and probably as important, thank you
24 to all, not only our staff, the San Joaquin Valley
25 District, but all the stakeholders, industry, the NGOs,

1 the community activists. This has absolutely been an
2 example an exemplary example of how it takes a village.
3 And so we thank you for that.

4 So, Board, before us is --

5 BOARD MEMBER SHERRIFFS: Motion to approve the
6 contingency plans.

7 VICE CHAIR BERG: Yes, and I have -- I appreciate
8 that. I have a motion to approve.

9 Can I have a second?

10 BOARD MEMBER BALMES: I'll second.

11 VICE CHAIR BERG: We have a second.

12 All in favor?

13 (Unanimous aye vote.)

14 (Senator Florez abstaining.)

15 VICE CHAIR BERG: Any opposed?

16 BOARD MEMBER FLOREZ: I abstain.

17 VICE CHAIR BERG: And we have Senator Florez
18 abstaining.

19 Okay. I think we're done. Congratulations.
20 Great job.

21 So as we do the staff switch over for our next
22 agenda item -- so our next agenda item is an update on our
23 California Air Resources Board Enforcement Policy. I can
24 say that, and I think on behalf of the Board, enforcement
25 is one of the cornerstones to an effective regulatory

1 agenda. And so I'm excited to get this update. Todd Sax
2 and his group have been actively pursuing, understanding
3 our policy, and looking at better ways to effectively
4 efficiently, and to engage people more in our enforcement
5 policy.

6 Staff will present updates to not only our
7 penalty policy, but developing a broader enforcement
8 approach in response to increasing statutory maximum
9 penalties for mobile sources and stationary source
10 violation, but also engaging our regulatory -- our
11 regulated stakeholders, and making them a more active part
12 of the process, most importantly how to be in compliance
13 rather than out of compliance.

14 Ms. Chang, will you please introduce this item?

15 DEPUTY EXECUTIVE OFFICER CHANG: Yes. Thank you
16 Vice Chair Berg.

17 The Enforcement Division developed its current
18 penalty policy in 2011 in response to legislative
19 mandates. Over the last two years, legislation has
20 increased penalties for mobile source, air toxic control
21 measure, stationary source, and greenhouse gas violations.
22 As a result of these legislative actions, CARB staff
23 undertook a public process to update its penalty policy
24 and develop broader and more transparent enforcement
25 policies.

1 The resulting enforcement policies describe a
2 fair and equitable process for responsible parties,
3 including increased transparency to the public, and will
4 guide the agency going forward in all of its enforcement
5 activities.

6 Martina Diaz will now provide the staff
7 presentation.

8 (Thereupon an overhead presentation was
9 presented as follows.)

10 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

11 DIAZ: Thank you, Ms. Chang.

12 Good morning, Vice Chair Berg and members of the
13 Board. Today, we are presenting an overview of the
14 proposed enforcement policy, which updates and expands
15 upon our current penalty policy.

16 --o0o--

17 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

18 DIAZ: I will start with an overview and goals for the
19 project, then present the proposed enforcement policy and
20 discuss next steps.

21 --o0o--

22 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

23 DIAZ: Our enforcement program is rooted in several key
24 principles including public health and environmental
25 protection, fairness and treatment under the law,

1 deterrence, and responsiveness to the public.

2 --o0o--

3 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

4 DIAZ: Our goal is to achieve comprehensive compliance in
5 every program the Board adopts. We have many different
6 tools at our disposal from compliance assistance and
7 training to traditional enforcement, outreach, and media.

8 A regulation is to be designed from the ground up
9 with enforceability as a critical component in order for
10 enforcement efforts to be effective and compliance to be
11 achieved.

12 --o0o--

13 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

14 DIAZ: Our enforcement program is broad in scope, covering
15 every rule adopted by the Board, and utilizing all of the
16 tools at our disposal. Beyond traditional enforcement, we
17 offer training, register equipment for various uses, and
18 conduct public outreach, especially in the context of
19 environmental justice. We are also partners with other
20 divisions during the regulatory process to ensure that
21 regulations are enforceable.

22 --o0o--

23 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

24 DIAZ: Our current penalty policy was published in 2011
25 pursuant to legislation at that time, and describes the

1 agency's enforcement authority, enforcement process, and
2 methods staff uses to assess penalties.

3 --o0o--

4 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

5 DIAZ: In 2016, AB 1685 was enacted in response to the
6 Volkswagen case, which increased penalties for Part 5
7 violations of the Health and Safety Code from \$5,000 to
8 \$37,500 per vehicle per violation. Maximum penalties also
9 increased for automobile dealers to \$10,000 per violation,
10 and remain at \$500 for small off-road engines.

11 As important as the increase in penalties, AB
12 1685 provides powerful new tools to hold manufacturers
13 accountable. For example, we may not require payment of
14 penalties before allowing additional vehicles to be sold
15 into California, and can require a vehicle subject to
16 enforcement action to be brought back to a certified
17 condition. Moving forward, maximum penalties will
18 increase with the California Consumer Price Index.

19 As part of the legislative process, staff agreed
20 to update the 2011 penalty policy through a public
21 process.

22 --o0o--

23 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

24 DIAZ: AB 617 was enacted in July of this year. The
25 legislation increased maximum strict liability, civil, and

1 criminal penalties for violations involving stationary
2 sources, air toxic control measures, and greenhouse gas
3 violations. Specifically, penalties increased from \$1,000
4 to \$5,000 per violation per day. As with AB 1685, maximum
5 penalties will increase with the California Consumer Price
6 Index. All air quality penalties increase as a result of
7 AB 617 or AB 1685.

8 --o0o--

9 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

10 DIAZ: To update the penalty policy, we established
11 several goals. First, we wanted to update the policy in
12 light of the increased penalties. Beyond that, we wanted
13 to streamline the document to be clear on what our
14 policies and procedures are, and to make sure we cover all
15 of our enforcement programs.

16 We wanted to use the policy to provide greater
17 transparency about how our program works. And finally, we
18 wanted to provide a full public process and ensure we
19 address all of the public's comments.

20 --o0o--

21 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

22 DIAZ: We held a total of six public workshops and
23 webinars. We also organized the working group which
24 provided input on policy language. The working group
25 consisted of about 12 attendees from 12 different

1 organizations and met three different times.

2 --o0o--

3 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

4 DIAZ: Next, I will describe the proposed policy.

5 --o0o--

6 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

7 DIAZ: The proposed enforcement policy represents an
8 incremental improvement to the current penalty policy.
9 Our fundamental enforcement approach, rooted in a
10 case-by-case approach to penalty assessment is consistent
11 with our current policy. The proposed policy is expanded
12 in scope, and helps prioritize cases in an attempt to move
13 less egregious cases more quickly, both through
14 establishing a new approach for minor violations, and
15 through emphasizing voluntary disclosure.

16 Finally, the proposed policy establishes a
17 process for periodic meetings with the public to discuss
18 the implementation of enforcement programs. I am now
19 going to talk about each of these elements. I will start
20 with the fundamental approach.

21 --o0o--

22 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

23 DIAZ: The description of the enforcement process in the
24 proposed policy is consistent with the 2011 penalty
25 policy. Working with the legal office, we identify

1 violations, evaluate information, notify the responsible
2 party, and work with the responsible party to resolve the
3 violation.

4 Ultimately, we settle the case by bringing the
5 party into compliance and assessing a penalty, or we work
6 with the Legal Office to resolve the case in a court of
7 law. As a result of conversations with stakeholders, we
8 are emphasizing in the policy that the opportunity to
9 discuss occurs at each point in the process.

10 --o0o--

11 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

12 DIAZ: The proposed policy is consistent with the approach
13 to assessing penalties as described in the 2011 penalty
14 policy. We describe each of the eight factors established
15 in the Health and Safety Code, which we are required to
16 consider by law when assessing penalties.

17 These factors are shown on this slide. Our goal
18 is to be as clear as possible in describing how we
19 consider each factor. When assessing a penalty, staff
20 weighs the relevant facts and circumstances across all of
21 these factors. Not all factors apply in every case.

22 --o0o--

23 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

24 DIAZ: We also explicitly reference deterrence,
25 investigation costs, and litigation risk as general

1 factors that will be considered in the context of the
2 eight factors when deciding on an appropriate penalty. In
3 assessing penalties, staff generally considers all
4 relevant facts and circumstances in each case. A penalty
5 must be large enough to deter future violations by the
6 responsible party and others in the industry.

7 A responsible party should never profit from a
8 violation. And so the penalty should remove any economic
9 benefit of noncompliance.

10 Additionally, we consider investigation costs and
11 litigation risk. When our investigation costs are high,
12 we will seek to recover them. We also weigh the relative
13 strengths and weaknesses of each case in assessing a
14 penalty. Finally, we expanded a table from the 2011
15 penalty policy to include the range of per unit penalties
16 assessed by program over the past several years.

17 Our penalties are a greater deterrent when
18 responsible parties understand what those penalties can
19 be.

20 --o0o--

21 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER
22 DIAZ: Next, I will discuss how they expanded -- how we
23 expanded the scope of the policy.

24 --o0o--

25 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

1 DIAZ: There are several areas in the proposed policy that
2 expand beyond the scope of the 2011 penalty policy. The
3 proposed policy provides links to compliance assistance
4 throughout the agency, and discusses the importance of
5 regulatory design, effective outreach, and implementation
6 approaches to the overall success of a regulatory program.
7 That latter point was something emphasized by stakeholders
8 during the development process.

9 Coincidentally, for the past two years, staff has
10 been working internally on new procedures to help ensure
11 regulations are developed with improved stakeholder
12 engagement, a more detailed understanding of the economics
13 of the industry, and a plan to implement and enforce the
14 rule. These new procedures are being tested on some
15 regulatory efforts and progress.

16 The proposed policy also contains an updated
17 table with links to each program that we enforce.

18 --o0o--

19 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

20 DIAZ: The proposed policy is specific in our commitments
21 to addressing environmental justice, including outreach to
22 community groups, an affirmation of our commitment to
23 conduct 50 percent of mobile source inspections in
24 disadvantaged communities, and supporting the CalePA
25 multi-media task forces.

1 The policy also describes our commitment -- our
2 complaints program. Our goal is to provide a clear and
3 easy process for lodging complaints to resolve those
4 complaints quickly, and to report results back to
5 complainants.

6 --o0o--

7 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

8 DIAZ: The proposed policy describes how our enforcement
9 program applies to stationary sources. Currently, our
10 real is focused on supporting local air district programs
11 through training and direct enforcement support on
12 request, often to more rural air districts.

13 We also sometimes establish memorandum of
14 understanding with local air districts to enforce
15 regulatory programs, and our policy includes a table
16 showing which air districts are authorized to enforce
17 different CARB regulatory programs.

18 We enforce greenhouse gas requirements where
19 districts do not. One question stakeholders raised is
20 whether or not CARB might take enforcement action where a
21 local air district is also enforcing that same
22 requirement. Our proposed policy leaves open the
23 possibility in extraordinary circumstances, although we
24 have never had to do so in the past.

25 AB 617, as you know, presents a new set of

1 challenges. As AB 617 is implemented, we will work with
2 the new Office of Community Air Protection to revisit our
3 stationary source enforcement programs.

4 --o0o--

5 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

6 DIAZ: One section in the proposed policy focuses on
7 public communication and information protection. The new
8 policy clarifies the information which is potentially
9 subject to disclosure. This includes completed
10 investigation files after a case has been resolved and
11 closed, notices of violation and similar enforcement
12 letters whereas na agency we are taking action, and
13 settlements agreements.

14 At the same time, the new policy describes
15 information that is protected from disclosure. This
16 includes investigation material while the investigation is
17 underway, and no action has been taken, confidential
18 business information, and information protected by
19 attorney-client privilege.

20 Many stakeholders are concerned that releasing
21 notices of violation may be unfair, especially when a case
22 is not settled. It may have financial ramifications to
23 the company. While we understand the concern, we also
24 have a fundamental responsibility to the public to explain
25 how our enforcement program works, and to comply with

1 public disclosure laws.

2 To strike what we see as a fair balance, the
3 proposed policy is clear on what a notice of violation
4 must contain, including language about what a notice of
5 violation represents and that notices of violation and
6 similar letters will only be issued if staff believes the
7 violation may be proven in a court of law.

8 --o0o--

9 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

10 DIAZ: Now I will discuss how the policy helps us
11 prioritize our case load and move less egregious cases
12 more quickly to completion.

13 --o0o--

14 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

15 DIAZ: There are two areas in the policy where we
16 attempted to build streamlined procedures for less
17 egregious cases.

18 One of these areas is voluntary disclosure. Our
19 policy on voluntary disclosures is rooted in the CalEPA
20 agency-wide approach to voluntary disclosure. One comment
21 we received from stakeholders is that our current
22 voluntary disclosure policy can discourage voluntary
23 disclosure if all of the conditions cannot be met.

24 Our proposed policy clarifies potential penalty
25 reductions and allows staff to determine an appropriate

1 penalty reduction depending on the extent to which stated
2 criteria are met. We want to encourage volunteer
3 disclosure because that can help achieve higher
4 industry-wide compliance rates.

5 --o0o--

6 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

7 DIAZ: One way to prioritize our work is to process less
8 egregious cases more quickly. To move towards this goal,
9 we have developed a minor violations framework that is
10 included in the policy and applied in the context of the
11 eight statutory factors. Violations are considered minor
12 if they have no emissions impact, did not impede our
13 ability to judge compliance, are corrected and resolved
14 expeditiously, and the responsible party has been
15 completely cooperative.

16 In this case, staff may use enforcement
17 discretion to reduce penalties by 75 percent or more,
18 depending on the compliance history of their responsible
19 party, staff resources to identify, process, and resolve
20 the violation, the economic benefit of non-compliance, and
21 harm to the function of the regulatory program.

22 Many stakeholders requested a wider
23 interpretation of minor violation to cover what they
24 consider to be paperwork violations, such as failure to
25 submit carry-over certification applications or failure to

1 properly report greenhouse gas emissions. These types of
2 violations harm the function of our regulatory program,
3 may impede our ability to judge compliance, and as a
4 result are now minor violations. We feel it is best to
5 start with a narrow interpretation of minor violation, and
6 to assess the program as it is implemented.

7 --o0o--

8 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

9 DIAZ: Now, I will discuss how the policy helps establish
10 an ongoing dialogue with stakeholders.

11 --o0o--

12 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER

13 DIAZ: During the working group discussions, several
14 stakeholders identified instances where when they or their
15 clients were subject to enforcement actions, were unclear
16 on the policy behind enforcement actions, and/or did not
17 agree with staff's fundamental interpretation of the law.

18 Under the current penalty policy, these
19 discussions occur in the context of settlement discussions
20 between responsible party and staff. Several stakeholders
21 suggested that we create an opportunity for ongoing
22 broader dialogue between stakeholders and enforcement
23 staff. The goal of the dialogue would be to foster a
24 better understanding up front of how we enforce ARB
25 regulations.

1 To the extent all parties better understand up
2 front how we enforce regulations and assess penalties for
3 noncompliance, the more effective our enforcement program
4 will be. We also think these type of discussions could
5 provide an opportunity to better understand issues that
6 arise from different types of regulatory approaches.

7 --o0o--

8 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER
9 DIAZ: Finally, I will discuss next steps.

10 --o0o--

11 ED DIESEL EQUIPMENT ENFORCEMENT SECTION MANAGER
12 DIAZ: Now that we have completed the presentation to you
13 about our proposed updated enforcement policy, we are
14 interested in what you think. Once we update the document
15 to address any comments or questions you may have, we will
16 finalize the policy and begin installing new internal
17 procedures to implement the changes.

18 As we implement the policy, we will be scheduling
19 regular meetings with stakeholders to discuss enforcement
20 program implementation, and providing regular enforcement
21 division updates as is appropriate and are requested.

22 This concludes our presentation, and now we would
23 like to answer any questions that you may have of us.

24 Thank you.

25 VICE CHAIR BERG: Thank you very much. We have

1 three witnesses. I'd like to bring those witnesses up
2 before I turn to the Board for any comments.

3 MS. WHITTICK: Good morning, Vice Chair Berg and
4 members of the Board. My name is Janet Whittick and I'm
5 here with the California Council for Environmental and
6 Economic Balance, CCEEB.

7 We offer our support today for the enforcement
8 policy and wanted to acknowledge our appreciation of this
9 Board, Dr. Sax, and the team at the Enforcement Division
10 who led this effort.

11 The policy was developed through a very
12 productive and open process, and resulted in a policy that
13 is much more clear and transparent for stakeholders.
14 Moreover, the process provided us an opportunity to raise
15 a number of important issues related to ARB's reporting
16 and climate change programs. While our discussions with
17 staff are still ongoing, we believe we've made progress
18 and look forward to continuing our engagement with ARB as
19 its work in these programs evolves.

20 So thank you very much for your time today.

21 VICE CHAIR BERG: And thank you for coming.
22 Good morning.

23 MR. COSTANTINO: Good morning. Jon Costantino,
24 Tradesman Advisors. Not speaking on behalf of any one
25 client, though I did participate and the staff listened to

1 my statements on behalf of lots of clients.

2 I want to thank them for the open and -- the open
3 process, the communication and listening to all the issues
4 we had. As Janet said, we felt it was productive, and
5 moving forward.

6 I think, a couple of the major points were
7 addressed were the communication and the clarity of what a
8 notice of violation is going to look like, so people
9 really know what is coming when they see it. So that's
10 important.

11 One of the other things that came up out of this
12 process was that enforcement has gotten more complicated.
13 Districts used to be on one end, and the Air Board on the
14 other. Now, there's some cross-over. So knowing who your
15 regulator is, especially on rules like the methane rule,
16 and things where there's local enforcement is really
17 important. And I think we've taken steps in that regard.

18 Look forward to the ongoing discussion that we're
19 going to continue.

20 And the last point is, it was brought up several
21 times in the presentation as well that, you know, the best
22 enforcement is the one you never have to take. And that
23 helps if enforcement and the regulatory staff are working
24 together from the very beginning. And I want to encourage
25 that to continue.

1 Thank you.

2 VICE CHAIR BERG: Thank you, Jon.

3 Hi, Bill

4 MR. MAGAVERN: Good morning again. Bill Magavern
5 with the Coalition for Clean Air. As you know, your
6 enforcement staff do valuable work. We have a lot of
7 great laws and regulations on the books, but those are not
8 fully effective unless they're enforced. And I think it's
9 important to remember that Volkswagen was far from the
10 first vehicle manufacturer to cheat on emissions testing.

11 I hope that this time the enforcement has been
12 stiffen enough that any future companies thinking about
13 cheating will be deterred from that.

14 A few specific comments on the policy update.
15 First of all, I think that we need to make sure that the
16 minor violations category does not grow so large that it
17 becomes a loophole that allows for serious violators to
18 get off with light punishment. So I think that's
19 something that's important to keep an eye on.

20 Secondly, it is crucial that enforcement actions
21 are communicated to the public. So we want to make sure
22 that the public's right to know is fully observed.

23 And thirdly, we applaud the recent steps to focus
24 enforcement in the areas that need it the most, the
25 environmental justice areas, the disadvantaged

1 communities. So glad to see that, and we want to see more
2 of that.

3 And then a final comment, which I don't think is
4 addressed in this update, but I always like to keep in
5 mind that when we talk about enforcement, we need to
6 remember that in the most egregious cases, there should be
7 criminal penalties. And again, we're talking about the
8 worst of the worst. But let's look, for example, at
9 Volkswagen, where the federal government has actually
10 executed criminal prosecutions against some of the
11 executives. And we know that in a lot of cases,
12 particularly with the big multi-national corporations, if
13 you don't hold individuals accountable, then they will try
14 to violate, as Volkswagen did, in that case.

15 During the Schwarzenegger administration, CalEPA
16 did an overview of enforcement policy. And one of the
17 conclusions of that review was that within CalEPA there
18 needed to be more criminal enforcement actions taken in
19 the very worst case. So I just hope that that will be
20 kept in mind.

21 Thank you.

22 VICE CHAIR BERG: Thank you.

23 And that concludes our list of public comments.

24 Do I have any Board comments?

25 BOARD MEMBER GIOIA: I do.

1 VICE CHAIR BERG: Thank you.

2 Supervisor Gioia.

3 BOARD MEMBER GIOIA: Yeah, I want to just make
4 sure I get a couple things clear. And this is really also
5 gets to maximum penalties. There's reference here to
6 penalties going from \$1,000 to \$5,000 a day, but -- in the
7 bill except as listed in other sections. You know what
8 would be useful, because there's a range of penalties --
9 and I'm putting my hat on as a member of the Bay Area Air
10 Quality Management District, where we get asked all the
11 time what are maximum penalties.

12 It's very complicated to understand, because
13 there's, right, penalties for strict liability, for
14 negligence, for intentional actions. So these -- this
15 maximum of one thousand -- \$5,000, is that a strict -- is
16 that for the strict liability as opposed to intentional or
17 negligent actions?

18 ENFORCEMENT DIVISION CHIEF SAX: It's for strict
19 liability, yes.

20 BOARD MEMBER GIOIA: So what's the maximum
21 penalty for stationary sources for negligence, and then
22 for intentional?

23 And if you can't answer now, what would be really
24 useful is to prepare a chart, a matrix that actually I
25 think that should be on the web, because what you have is

1 you have penalties and multiple code sections. And so
2 often when we talk about maximum penalties, strict
3 liability is very different, right? It's like, okay, it
4 happened. We can't prove negligence or intention, but it
5 happened. But intentional and negligence raise to a
6 higher level, the penalties, as they should.

7 So I'd like to see us prepare a chart that is
8 understandable by the public, as well as frankly
9 regulators, because I can tell you my colleagues on the
10 air district, we don't always know what the maximum
11 penalties are.

12 That put in one place what all the penalties are
13 for these various categories, right, strict liability,
14 negligence, intentional, all of that, and for types of
15 facilities, if there's a differentiation, because
16 sometimes there is.

17 And these you're referring to non-vehicular
18 penalties, right, generally in this? You make
19 reference -- at least, in 617 the increases where for
20 non-vehicular, meaning I guess stationary sources?

21 ENFORCEMENT DIVISION CHIEF SAX: Well, so a
22 couple of things. So the penalties in 617 also apply to
23 air toxic control measures.

24 BOARD MEMBER GIOIA: Right.

25 ENFORCEMENT DIVISION CHIEF SAX: So air toxic

1 control measures would include things like the Truck and
2 Bus Rule or the in-use off-road rule.

3 BOARD MEMBER GIOIA: Right.

4 ENFORCEMENT DIVISION CHIEF SAX: So penalties
5 have increased for that. We do have a table in the
6 existing policy. It's appendix B. And what it does
7 provide is the Health and Safety code maximums for strict
8 liability, and it also includes a range of penalties that
9 we've assessed by program, which is often different than
10 the maximum penalties.

11 The maximum penalties are either in part 5
12 violations for vehicles. They're per vehicle per
13 violations. And, in part 2 violations for, like ATCMs and
14 stationary sources, those are daily penalties.

15 BOARD MEMBER GIOIA: Right. Can you list
16 somewhere -- it just -- there's not --

17 ENFORCEMENT DIVISION CHIEF SAX: Yeah.

18 BOARD MEMBER GIOIA: -- and I guess I'm focusing
19 first on stationary sources. And then it sounds like it's
20 more complicated to figure out how to list them for mobile
21 sources, because there's a lot of different programs. And
22 so I'll leave that to you to think about.

23 But it seems it would be easy for stationary
24 sources to list those maximum daily penalties, or max --
25 sometimes our maximum penalties maybe per an event. But

1 this came up, and -- because also, some of the local air
2 districts have been sponsoring legislation, as you
3 probably know, to increase some of the maximum penalties
4 in the negligent or intentional categories that aren't
5 always very high.

6 I mean even for strict liability for many
7 facilities, whether it's 1,000 or 5,000 a day, that's
8 frankly pretty small for a very large facility.

9 ENFORCEMENT DIVISION CHIEF SAX: So what we can
10 do, I think, is update appendix B to add in the maximum
11 penalties for willful or intentional for different types
12 of programs.

13 BOARD MEMBER GIOIA: Right. And is that -- and
14 then posting it somewhere where it's easily found on the
15 web, can you do that and then send that out?

16 ENFORCEMENT DIVISION CHIEF SAX: Yes, we can and
17 we will.

18 BOARD MEMBER GIOIA: It would be good to see
19 that. Will you do that?

20 ENFORCEMENT DIVISION CHIEF SAX: We will.

21 BOARD MEMBER GIOIA: The other issue is unclear
22 to me. Where is it?

23 The -- and this regards the voluntary reporting.
24 Penalties may be reduce -- well, no, there was another
25 section here. Sorry. I'm finding it, where penalties

1 would be lowered for voluntary reporting. What slide was
2 that?

3 ENFORCEMENT DIVISION CHIEF SAX: Yeah, so
4 there's -- it's page 12 of the policy, and it is slide 22.

5 BOARD MEMBER GIOIA: Slide 22, right. So
6 rooted -- right, so penalties may be reduced between 25
7 and 75 percent, depending on the extent to which factors
8 are met. So can you talk a bit more about what those
9 factors are?

10 ENFORCEMENT DIVISION CHIEF SAX: Sure.
11 Absolutely. So the policy on page 12 refers to the
12 factors that we consider under voluntary disclosure. They
13 include that the responsible party discovered the
14 violation through a voluntary audit or other systematic
15 procedure or practice, that the violation was not
16 discovered due to legal mandate, that the responsible
17 party disclose the violation in writing no more than 21
18 days after the discovery of the violation, the disclosure
19 was independently offered and not made in response to a
20 pending investigation, the violation was corrected
21 immediately, the party agreed to take specific actions to
22 prevent recurrences, the party has not committed similar
23 program violations within the past three years, and the
24 violation did not cause actual harm or present imminent or
25 substantial endangerment to human health or the

1 environment, and that the party did full cooperation.

2 So what's a little bit different than we did
3 before, those factors were the same in our old policy and
4 in the current policy that we're proposing.

5 BOARD MEMBER GIOIA: I'm trying to think, am I
6 missing something? Because I know from the perspective of
7 again putting a hat at the county and at the air district,
8 facilities are required to report a release in most types
9 of violations, I mean, if it's a release for example. And
10 so are we saying -- I'm not reading this to say that they
11 get a penalty -- they get their penalty decreased because
12 they voluntarily reported it.

13 I want to -- there's an interplay between, you
14 know, a lot of different regulations at different levels
15 of government, because if they're required to report a
16 violation that they find, why is that voluntary
17 compliance? That's like you're following the law.

18 ENFORCEMENT DIVISION CHIEF SAX: Yeah. So a
19 couple of issues here that are relevant. One of them is
20 that every air district has their own enforcement programs
21 and their own policies and procedures that they follow.
22 And because the regulations are different at a district
23 level than the regulations that we apply to sources that
24 we regulation, the process is going to be a little bit
25 different.

1 So our policy is related to the types of things
2 that we enforce on. So, for example, the programs that we
3 deal with from a stationary source basis are things like
4 the landfill methane rule, sulfur hexafluoride switch
5 gear, mandatory reporting, stuff like that.

6 BOARD MEMBER GIOIA: So this -- this section
7 applies to fines that ARB would administer, not fines that
8 a local air district would administer?

9 ENFORCEMENT DIVISION CHIEF SAX: That is correct.

10 BOARD MEMBER GIOIA: So if the local air district
11 has a -- so in a sense, if there's an additional fine that
12 ARB could impose that's separate and apart from what an
13 air district would impose, that's where this comes into
14 play?

15 ENFORCEMENT DIVISION CHIEF SAX: Yes. And that
16 sort of relates to one of the comments that we received
17 just a few minutes ago that when there's a violation of
18 district rules, if falls under the purview of the air
19 district and they conduct that enforcement. We will
20 provide support to the district, if they request it, and
21 we'll sometimes try to make sure that we're comfortable
22 with what they're doing, but that's really the district
23 has got the primary role on enforcement in those cases.

24 BOARD MEMBER GIOIA: But -- so are we saying that
25 there are times that even with our rules that it's a

1 voluntary compliance as opposed to a mandatory compliance
2 on something, and therefore we're going to reduce your
3 fine if you voluntarily tell us about what you did?

4 ENFORCEMENT DIVISION CHIEF SAX: No. If there
5 are -- so if there are reporting requirements that apply,
6 and they -- at a stationary source, and they are not met,
7 the district can enforce on that -- on that failure to
8 report.

9 At issue, from our perspective when it relates to
10 our programs, is how egregious is that violation. And
11 there are cases where, for example, in a Part 5 violation
12 for a failure to certify, where failure to submit a
13 carry-over application, for example, is a very important
14 issue, because certification is the fundamental
15 enforcement process, it's the fundamental process that we
16 use to ensure vehicles meet the strict emission standards
17 that we set. And so we consider that to not be a
18 reporting violation, because it's integral to the program.

19 There are other types of cases like when we're
20 looking at Truck and -- the Truck and Bus Rule, for
21 example, where if somebody failed to report into the
22 compliance reporting system, but they're able to
23 demonstrate that they actually complied with all of the
24 requirements of the rule, that would be more of a true
25 reporting violation. And if they came to us and

1 voluntarily disclosed that, we might consider that -- we
2 might consider reducing penalties in that case, because we
3 would think it's appropriate and we could move the case
4 more quickly.

5 So what this policy does is it allows us the
6 flexibility to try to treat less egregious cases more
7 quickly --

8 BOARD MEMBER GIOIA: Right, I understand that.

9 ENFORCEMENT DIVISION CHIEF SAX: -- and move them
10 through the process.

11 BOARD MEMBER GIOIA: I think that makes sense.
12 It's just the notion that if someone voluntarily reports
13 something that they may be, at some point, required to
14 report in a mandatory way, that they're -- that that is a
15 factor to consider lowering their fine.

16 ENFORCEMENT DIVISION CHIEF SAX: No, it's going
17 to be program specific and district specific as well.

18 VICE CHAIR BERG: The other thing I would mention
19 as, you know, sitting on the other side of the regulatory
20 enforcement area being a regulated party, the -- we -- how
21 many people out of the universe of regulated parties do we
22 end up visiting or were able to inspect? What percentage
23 would you say?

24 ENFORCEMENT DIVISION CHIEF SAX: It's a pretty
25 low percentage. So I can give you an examples. There's

1 more than a million trucks that operate in California, and
2 we inspected 16,000 last year.

3 VICE CHAIR BERG: So when we're looking at having
4 an opportunity for a regulated party to realize that they
5 have gone out of compliance on something, and there is an
6 opportunity to self report, and not that that will
7 guarantee a reduction in the penalty, but that could be on
8 the table, we do need to have a reason for, I would say,
9 85 percent of people that sit back and say, well, I can
10 wait to get caught, or I can self report and get things
11 squared away and go forward.

12 Now, out of those 85 percent, there's a lot of
13 people that fix things and they just hold their breath
14 that we're not going to walk through the door. And I can
15 tell you on the times, specifically with DTSC, where we
16 have found in my company that we have not done something
17 correctly, the ability to work with DTSC, bring certainty
18 that I'm not waiting just for somebody to walk in the
19 door, has been a really important part of not only my
20 people who skipped a beat, but also to be in compliance.

21 So I am a big proponent of really getting the
22 word out that self-reporting doesn't mean you're showing
23 up to the guillotine.

24 BOARD MEMBER GIOIA: Right. No, I think in that
25 context -- I think, I guess what I often deal with in the

1 Bay Area are large facilities who usually are required to
2 report, and that something has gone wrong, even if it's
3 not visible. We want folks who -- you know, folks who
4 spend a lot of time monitoring their processes, so a large
5 facility, and have a requirement to report, even if the
6 regulators wouldn't see or hear of the violation.

7 VICE CHAIR BERG: Well, certainly. And using
8 self-reporting as your main mechanism, in other words, you
9 keep going out of compliance on several things, that's
10 kind of like your teenager coming back and saying, well, I
11 just can't get into curfew on time. You know, the first
12 time you're willing to say okay, but about the third time,
13 time to come down. Grounded.

14 (Laughter.)

15 VICE CHAIR BERG: Thank you very much.

16 Ms. Mitchell.

17 BOARD MEMBER MITCHELL: Thank you, Madam Vice
18 Chair.

19 One of the complaints that I hear quite often in
20 the South Coast District is the trucks that are on the
21 road. And usually, it involves, you know, trucks that are
22 belching huge amounts of smoke as they go down the road.

23 And so I'm wondering, and I ask this in the staff
24 report, what enforcement activities we engage in? And
25 Bill Magavern mentioned this morning this pending

1 legislation on heavy-duty vehicle inspections. And so I'm
2 kind of wondering how those two things go together, what
3 we're already doing, this pending legislation that we may
4 see passed in another year or so, and just kind of bring
5 those things together for me.

6 ENFORCEMENT DIVISION CHIEF SAX: Sure. So our
7 current enforcement process up to this point has been
8 based in a couple of areas. One, we inspect trucks, and
9 we issue citations. And the other is that we conduct
10 investigations, identifying non-compliant fleets, bringing
11 them into compliance, and issuing penalties. I think we
12 reported in our annual report early this year that we
13 inspected about 16,000 trucks, initiated about 4,700
14 citations, and we closed -- we close about 150, 200 diesel
15 cases a year for several million dollars.

16 There is a -- we also reported in our annual
17 report that there's about a 70 percent compliance rate
18 with the program. It's -- the compliance rates are higher
19 in some newer -- in some of the out-of-state fleets and
20 they're lower in some of the smaller California
21 intra-state fleets. And so we have a big challenge ahead
22 of us.

23 SB 1 that was adopted earlier this year requires
24 that effective January 1, 2020 when vehicles come up for
25 registration, they will need to demonstrate compliance

1 with our rules, or they will not allow to be registered.

2 That presents a particular challenge to us. And
3 what we are doing internally is looking to try to develop
4 a completely different enforcement-based process to try to
5 get ahead of that -- to try to get ahead of what's going
6 to happen in 2020 and to try to process fleets more
7 quickly.

8 We've been working on this to some extent. We've
9 mentioned -- I've mentioned the smart audit process to you
10 in the past. That provided some improvement to us, but
11 it's not enough, so we're looking at redesigning our
12 process to try to be a lot more effective in moving trucks
13 more quickly. And that provides some trade-offs for us
14 that we're still working through within the agency. And I
15 think, at some point, we'll be able to come back and
16 provide a more comprehensive answer to that question.

17 Finally, as Mr. Magavern mentioned, there is a
18 bill pending in the legislature, SB 210, that would
19 provide for a heavy-duty inspection and maintenance
20 program. And we see that program as being really
21 important, because one of the things that an I&M program
22 is, is an enforceability mechanism for our existing rules.
23 And so being able to make sure that there is a built-in
24 process for fleet operators to ensure their trucks are not
25 operating in -- are not operating improperly, are not

1 smoking, that there's a built-in process to hold them to
2 be self-accountable to that, rather than having to rely on
3 us catching them at the roadside is what's going to really
4 provide a much improved compliance rate.

5 So we have a lot of work to do. We don't have a
6 lot of time, but I think we're working -- not just within
7 our division, but across the agency as a whole to try to
8 find ways to get in front of this relatively substantial
9 challenge.

10 BOARD MEMBER MITCHELL: So under that pending
11 legislation and existing SB 1, a truck will not be able to
12 get registered if it doesn't meet certain inspection and
13 maintenance requirements, is that what we can expect?

14 ENFORCEMENT DIVISION CHIEF SAX: Under SB 1, the
15 requirement will be in 2020 that they will have to
16 demonstrate compliance with the Truck and Bus Rule.

17 BOARD MEMBER MITCHELL: Okay.

18 ENFORCEMENT DIVISION CHIEF SAX: The Heavy-Duty
19 Inspection and Maintenance Program that would be developed
20 under SB 210 would require vehicles to pass a test
21 procedure in order to be registered. And that test
22 procedure would most likely be on-board diagnostics based,
23 but there are a number of different approaches that we are
24 currently evaluating.

25 And what's important I think is that the

1 legislation provide us the authority to be able to set up
2 a program that we need to and also provide us the
3 flexibility to evolve our program over time as
4 technologies change.

5 BOARD MEMBER MITCHELL: And under the SB 210 I&M
6 rule, do we have an existing standard that would be
7 applied when trucks go through this registration process?

8 ENFORCEMENT DIVISION CHIEF SAX: So currently
9 right now, when we cite a truck, we can evaluate it for
10 whether or not it's smoking. And there is what's called
11 an opacity limit. It's a 40 percent limit that applies to
12 1991 and newer trucks. The problem that we have is that
13 that opacity limit isn't really relevant to
14 filter-equipped truck.

15 And if you remember earlier this year, we
16 presented to you on a technology we're trying to develop
17 with our Monitoring and Laboratory Division that would be
18 able to detect trucks that exceed a proposed five percent
19 opacity limit. I think what's -- one of the issues -- so
20 we have a current Inspection and Maintenance Program per
21 se. It's our Heavy-Duty Vehicle Inspection Program, and
22 Periodic Smoke Inspection Program.

23 And so you have to meet that opacity limit if
24 you're pulled over on the road. And under the Periodic
25 Smoke Inspection Program, you're required to do testing

1 once a year to demonstrate compliance with that opacity
2 limit.

3 Staff is looked at ways to update that program.
4 One of the things that's important from our perspective is
5 that when we conduct enforcement on trucking fleets right
6 now, about half of them are not compliant with the
7 Periodic Smoke Inspection Program, meaning they haven't
8 done their tests, not necessarily that they're failing the
9 40 percent opacity limit, because almost everybody passes
10 that, especially if they have a filter, but that they're
11 not doing toes tests.

12 And so if we update the program, to have a lower
13 opacity limit. I also think it's important that we find
14 ways to have a stronger encouragement to fleets to conduct
15 those tests, so that there's a self-enforcing mechanism to
16 the program that will allow it to have a greater
17 effectiveness than it would have if we were just
18 inspecting trucks on the roadside.

19 BOARD MEMBER MITCHELL: The other thing that is a
20 bit of a concern is if SB 2010 passes, what about the
21 human resources that we have within the agency to meet the
22 requirement? Do we have enough personnel? Do we have
23 enough staff? Are we going to be able to do it?

24 ENFORCEMENT DIVISION CHIEF SAX: Yeah, I mean,
25 that's a really critical question. But I think one of the

1 things that an I&M program would offer as an opportunity
2 is to change the way in which we do enforcement for diesel
3 trucks more generally. And so I think what you would see
4 is reallocation of resources within the agency to move
5 from the existing way in which we both enforce and process
6 programs to being able to implement that program.

7 But you're right, resources are going to be
8 important for making sure that a program like that works,
9 and we need to be thinking of that ahead of time so that
10 we're prepared should a program like that be authorized
11 and then ultimately adopted as a regulation.

12 BOARD MEMBER MITCHELL: Thank you. Thank you for
13 those answers.

14 VICE CHAIR BERG: Thank you. Any other Board
15 questions or discussion?

16 Ms. Takvorian.

17 BOARD MEMBER TAKVORIAN: Just a quick question.
18 Thank you, Madam Chair. Thank you for the report. And I
19 appreciate all the work that's gone into the new approach
20 that you're taking for enforcement, and especially the
21 focus on disadvantaged communities and environmental
22 justice communities.

23 One of the things we talked about in the staff
24 briefing that I just wanted to raise and we've talked a
25 lot about disclosure by the regulated community, and

1 you've talked about outreach to communities and working --
2 on the staff briefing, at least you talked about working
3 with air districts, which I think is all good.

4 I wonder whether we could enhance the work that
5 you're doing with disadvantaged communities, and
6 particularly groups in those communities that are
7 monitoring truck activity. I know that our organization
8 and others like ours that are adjacent to port facilities
9 are pretty consistently working with residents where
10 there's violations of truck routes, where there's idling
11 violations.

12 And, you know, we've set up ways that residents
13 can document that, but I think that we may be falling down
14 in our reporting of those to CARB. And if so, if there
15 could be a more efficient way of getting that done, you
16 would have more eyes and ears, because I had the same
17 questions as Ms. Mitchell in terms of resources --
18 resources now as well as for the future that it's really
19 important and I know we're really strapped.

20 So, you know, I know we're not deputizing people
21 in the community, although we might want to think about
22 that. But we could think about how there could be an easy
23 way for community members to report that, and that there
24 could be a follow-up then, because I know folks are in the
25 communities. Lots of folks have smartphones now, and if

1 there was an easy way to take a quick photo of the license
2 plate and report the situation, perhaps that would be
3 helpful overall. Maybe you have a comment on that.

4 ENFORCEMENT DIVISION CHIEF SAX: Yes, I can -- I
5 think I can touch on four things. One is that we
6 mentioned in the policy, and we've had in place for the
7 last couple of years a team of staff that conducts
8 outreach to different community groups.

9 And some of these are what's called IVAN
10 networks, identify violations and -- I forget what the N
11 stands for. But what's important about that is that those
12 are local community organizations that were organized
13 around trying to report and enhance enforcement efforts.

14 And so we outreach and send staff to those
15 community groups. It's been successful in terms of
16 building relationships with the community, but I don't
17 think we've had the kind of success like you're describing
18 in terms of trying to better integrate our inspection and
19 enforcement activities with complaints and reports from
20 the public.

21 CalEPA recently updated their complaints program.
22 And it's a web-based system. And it provides the
23 capabilities you're describing. We work with that and we
24 work very closely with them. And I would like to over
25 time migrate our complaint system to something that looks

1 more like that. The last thing I would say is that we
2 also, and we mentioned this in the policy, sometimes set
3 up MOUs with local air districts who enforce -- who can,
4 for example, cite trucks, or off-road equipment.

5 And one of the districts that's been most
6 progressive in that area is the San Diego Air Pollution
7 Control District. We are currently working with them on
8 an updated MOU that would provide them an additional
9 ability to go beyond what they've been doing right now.
10 And if that's successful, we would see that potentially as
11 a model for working with other air districts.

12 One of the things that is an issue for the
13 districts is they have their own regulations to enforce,
14 like John was describing. And so it's always a challenge
15 to -- whether or not the districts would have resources to
16 take on also supporting our programs. But I think, you
17 know, we're always looking to find ways to work with both
18 communities groups and districts to team with them in ways
19 that can be effective, and we just need to do more of
20 that.

21 VICE CHAIR BERG: Since -- just as a follow-up
22 question, since expectations -- setting expectations or
23 understanding expectations is really important, I can
24 imagine with complaint, either websites or mechanisms,
25 there could be an expectation that one truck that's out

1 there somebody picks up that information and acts on it
2 immediately and it's off the road in a week.

3 So I think it would be helpful to kind of walk
4 through or just indicate what the process is, because
5 these take awhile.

6 ENFORCEMENT DIVISION CHIEF SAX: So you're
7 absolutely right. We do process a number of complaints.
8 I have -- so I printed out my annual report, but I don't
9 want to scrounge to find those statistics, but we do get
10 thousands of complaints a year. And it's a real challenge
11 for us to follow up with those. And oftentimes what we
12 find is that the complaints that are submitted to us
13 aren't complete. And so we often might not have a license
14 plate, or by the time we get it, and are able to respond,
15 an idling truck, for example, is long gone.

16 We do have a process that we have in place to
17 help put up no idling signs around communities, for
18 example, to try to address when we see complaints in a
19 particular location over time. You're right I think that
20 we need to manage expectations on that point. And, you
21 know, we are looking at our complaints program to find
22 ways to be -- respond more quickly. It's just trying to
23 balance that against the work we've been talking about in
24 the context of SB 1 is going to be an issue, because we do
25 have limited resources, and we need to focus on where the

1 maximum emissions reductions are.

2 VICE CHAIR BERG: And I fully agree, and I hope
3 that you weren't interpreting my comments that I felt that
4 we should be able to do it quicker. Maybe just a
5 figure -- just so that people understand and don't come
6 back to us with why we aren't able to do things faster.

7 BOARD MEMBER TAKVORIAN: Right. And I -- thank
8 you. If I could just follow up, I really agree with that,
9 and I don't think just because you have a phone and you
10 can take the information down, but if we're clearer in the
11 communities about what information is helpful, and what
12 will help to move it more quickly, then that, I think,
13 would be great, because to have to follow up and get
14 information that a community member could no longer
15 provide, because, as you say, the truck is gone.

16 But I do think that collaboration, because I know
17 some of this is getting reported to the ports, and not
18 necessarily to the air districts, right, because these are
19 trucks that are utilizing the ports. So is there a
20 partnership there that could be helpful?

21 And I'm not trying to make work. Sorry. But if
22 it's helpful, then perhaps we can think about those kind
23 of partnerships as well.

24 VICE CHAIR BERG: That's a great thought.

25 ENFORCEMENT DIVISION CHIEF SAX: Yeah. So first

1 off, I appreciate your suggestions, and it's not make
2 work. We want to have an effective program. And one of
3 the reasons why we're here presenting to you is because we
4 want your input on this kind of stuff. So appreciate it
5 very much. And your idea about the ports is a good one.
6 We actually have an MOU with the Port of Los Angeles who
7 does enforce our programs, but expanding that more widely
8 is something we can certainly look into.

9 VICE CHAIR BERG: Great. Well, seeing no other
10 comments, then this is not a regulatory item. This is an
11 informational item. And so we'll look forward to
12 additional updates.

13 I would encourage Board members, as you think
14 about issues around enforcement, to contact Todd and his
15 group, because they really are interested in our input,
16 and our thoughts, and how we might look at things
17 differently.

18 And to Todd and your group, congratulations.
19 Yeoman's work. And we really appreciate it. We look
20 forward to the next update.

21 So while we'll do a staff change, we're on our
22 last agenda item. It is also an informational update.

23 And so I just saw Ms. Peter look over and we're
24 good?

25 THE COURT REPORTER: Yes.

1 VICE CHAIR BERG: You're amazing. I want to go
2 on record. Could you write that down that Vice Chair Berg
3 says you're amazing.

4 (Laughter.)

5 VICE CHAIR BERG: Our last agenda item today is
6 an informational update on Assembly Bill 1496, methane hot
7 spots survey. And while staff is getting themselves
8 situated, Ms. Chang, could you please introduce this item?

9 DEPUTY EXECUTIVE OFFICER CHANG: Thank you, Vice
10 Chair Berg.

11 Today, staff will present an informational update
12 on the methane hot spots survey. In 2015, the Governor
13 approved Assembly Bill 1496 which requires the California
14 Air Resources Board to undertake monitoring and
15 measurements of high emission -- emission methane hot
16 spots in California.

17 As part of the AB 1496 research program, CARB
18 contracted with NASA's jet propulsion laboratory to
19 conduct a statewide aerial survey over California. JPL
20 applied advanced remote sensing methods to detect and
21 characterize anthropogenic methane emissions. This
22 project is being jointly funded by CARB and the California
23 Energy Commission, and will study all major methane
24 emission sources in the State.

25 I will now ask a Matthias Falk of the Research

1 Division to give the staff presentation.

2 (Thereupon an overhead presentation was
3 presented as follows.)

4 RD AIR POLLUTION SPECIALIST FALK: Thank you, Ms.
5 Chang. Good morning, Vice Chair Berg and members of the
6 Board.

7 Today, we will present an update on the
8 reasonably concluded phase 1 of the California Statewide
9 Methane Survey, a ground-breaking multi-agency
10 collaborative research effort between CARB, the California
11 Energy Commission, CEC, and NASA Jet -- NASA's Jet
12 Propulsion Laboratory, JPL to study methane emissions
13 sources throughout the State.

14 --o0o--

15 RD AIR POLLUTION SPECIALIST FALK: In today's
16 presentation, we will provide a brief overview of the
17 importance of methane to CARB and the motivation for the
18 survey in particular. We will then present information on
19 the technical approach of the research effort, and discuss
20 the major findings from the study. We will conclude with
21 a presentation with an outlook of the relevance of these
22 findings on CARB policies and programs.

23 --o0o--

24 RD AIR POLLUTION SPECIALIST FALK: As you are
25 aware, methane is the second largest contributor to

1 statewide GHG emissions in California, and contributes
2 roughly nine percent to statewide GHG emissions. However,
3 due to its distinctive nature as a short-lived climate
4 pollutant, the climate impacts of methane are even more
5 pronounced in the shorter term.

6 As such, any mitigation of methane will provide
7 immediate climate benefits, and will go a long way towards
8 restricting the global temperature rise within the
9 recommended increase of two degrees or less to prevent
10 catastrophic climate impacts.

11 --o0o--

12 RD AIR POLLUTION SPECIALIST FALK: California's
13 methane emissions are distributed largely throughout the
14 central valley into urban areas. The largest contributor
15 to the methane emissions is the agricultural sector, which
16 contributes roughly 60 percent to the total statewide
17 inventory, while the waste and industrial sectors
18 contribute about 20 percent each.

19 However, recent scientific research utilizing
20 multi-year atmospheric measurements from the CARB statewide
21 GHG monitoring network has indicated that the bottom-up
22 emissions inventory may be underestimated by roughly 30
23 percent. These additional emissions could originate from
24 uninventoried sources, such as natural emissions, or
25 underinventoried sources.

1 There's also an indication that a small fraction
2 of sources with disproportionate contributions, also
3 called super emitters, may be responsible for a large
4 contribution to statewide emissions. Such behavior has
5 been observed in the motor vehicle sector and could offer
6 an important opportunity for mitigating emissions in the
7 State. This provided an important motivation for CARB to
8 conduct a comprehensive statewide survey of methane
9 sources.

10 --o0o--

11 RD AIR POLLUTION SPECIALIST FALK: Although
12 various sectors contribute to California's methane
13 emissions, the reason Aliso Canyon natural gas leak
14 highlighted the impact of even one large episodic emission
15 event on the emissions landscape, and our collective
16 process in meeting air quality and climate goals.

17 Even though the Aliso Canyon leak persisted only
18 for months and not years, the leak at its peak,
19 contributed roughly 30 percent to daily statewide methane
20 emissions. This leak was large enough to be seen from
21 space by satellites. It also resulted in the addition of
22 roughly 109,000 metric tons of methane equivalent to the
23 climate impacts from burning roughly one billion gallons
24 of gasoline.

25 --o0o--

1 RD AIR POLLUTION SPECIALIST FALK: The importance
2 methane emission research was further highlighted by a
3 recent study by NASA and the University of Michigan
4 investigating the long-term methane trends over the
5 continental U.S. over a seven-year period. Their analysis
6 of satellite data showed a large persistent methane hot
7 spot over the four corners region.

8 However, the second largest hot spot in the U.S.
9 was found centered over California's San Joaquin Valley.
10 This California hot spot covers an area of 1,500 square
11 miles in the Central Valley. Also, these hot spots can be
12 caused either by a small number of large sources, a large
13 number of small sources, or a combination of both. These
14 findings showcase the need to conduct a consistent and
15 comprehensive statewide survey of methane emission
16 sources.

17 --o0o--

18 RD AIR POLLUTION SPECIALIST FALK: In
19 consideration of these findings and the relative climate
20 impacts of methane, California has implemented a
21 world-leading methane research and mitigation program.
22 The California legislature passed Senate Bill 605 and
23 1383, which require CARB to develop and implement an SLCP
24 strategy by 2016 and 2018 respectively.

25 Senate Bill 888 currently requires any PUC

1 penalties assessed against the gas company for natural gas
2 leak to be directed to mitigation of the leak. California
3 also adopted Assembly Bill 1496, which directs CARB to
4 monitor and investigate methane hot spots in the State,
5 and integration of these findings into CARB's programs and
6 policy.

7 Collectively, these and various other efforts
8 have positioned California as the world leader in climate
9 change mitigation efforts.

10 --o0o--

11 RD AIR POLLUTION SPECIALIST FALK: In response to
12 the passage of AB 1496, CARB, in collaboration with the
13 CEC, funded the NASA JPL to conduct a comprehensive;
14 statewide methane point survey. NASA also provided
15 additional funding to perform enhanced data analysis on
16 the survey results. Overall, this joint study has a
17 budget of two million U.S. dollars.

18 In today's presentation, we will show the
19 importance findings from the first phase of the research
20 effort, which are already providing critical insights into
21 methane emission sources in the State.

22 While data acquisition flights for the first
23 phase of the study ended in fall 2016, research flights
24 for the second phase are currently underway. And interim
25 report with results from the first phase of the study is

1 available now, and a final report will be submitted after
2 completing all flight surveys and analysis at the end of
3 summer 2018, which will include a robust emission
4 estimated for all sources surveyed in the studies.

5 Throughout the phase one airborne data
6 acquisition, CARB staff also conducted ground surveys to
7 support the effort with data for validation and point
8 source identification.

9 --o0o--

10 RD AIR POLLUTION SPECIALIST FALK: The study
11 utilized a groundbreaking application of one of JPL's
12 advanced research technology sensors called the Airborne
13 Visible Infrared Imaging Spectrometer Next Generation or
14 AVIRIS-NG. AVIRIS-NG is an airborne imaging instrument, a
15 pushbroom-type sensor that scans the landscape below the
16 aircraft line by line with hundreds of color bins for the
17 entire reflected solar spectrum from the ultraviolet to
18 the near infrared.

19 For this study, the aircraft operated at
20 approximately three kilometer altitude above ground which
21 resulted in a 1.8 kilometer-wide swath and one- to
22 three-meter image pixels on the ground. As a result, it
23 can scan thousands of point sources a day and identify
24 locations to within less than 10 meters on the ground.

25 The sensor detects methane molecules by

1 RD AIR POLLUTION SPECIALIST FALK: This survey
2 studied approximately 180,000 individual facilities and
3 components. The survey completeness varied by sector.

4 For example, this survey sampled roughly 50
5 percent of dairies, 45 percent of oil and gas wells, 35
6 percent of power plants, 38 percent of top-emitting
7 landfills, and roughly 100 percent of refineries and
8 underground natural gas storage facilities.

9 The phase two survey will complement phase one
10 efforts, and is expected to increase the survey
11 completeness, especially for facilities like landfills,
12 power plants, and compressors.

13 The fraction of surveyed infrastructure where
14 point sources were detected also varied greatly, with zero
15 percent of the surveyed power plants, and 94 percent of
16 refineries showing methane plumes, for example. These
17 numbers will be updated after phase two.

18 --o0o--

19 RD AIR POLLUTION SPECIALIST FALK: The first
20 phase of the study found 329 large methane plumes
21 associated with point sources. All the detected point
22 sources shown on the map are color coded by sectors.
23 Landfills are shown in blue, dairies in green, oil and gas
24 related sources in red, and finally refineries, as part of
25 the energy industry sector, in yellow.

1 The largest cluster of sources occurs in the San
2 Joaquin Valley and agrees roughly with the spatial pattern
3 observed by SCIAMACHY satellites as shown in earlier
4 slides.

5 --o0o--

6 RD AIR POLLUTION SPECIALIST FALK: The next few
7 slides will go through the maps for each sector with the
8 locations of potential sources on the left-hand map, and
9 the point sources found in the study on the right-hand
10 side map.

11 For clarity, please note that the boxes on the
12 left-hand side map indicate the general area of interest
13 where the flights took place, but do not indicate actual
14 flight coverage.

15 The map on the left here shows the spatial
16 distribution of the areas in California. The survey
17 sampled dairies mainly in the San Joaquin Valley and some
18 in Southern California. Dairies in the north of the State
19 were not sampled. Overall, 22 percent of surveyed dairies
20 had detectable point sources, and more than half of all
21 detected point sources in this study were associated with
22 the dairy manure management sector

23 The sensor used in the study will not see enteric
24 fermentation and area source contributions to methane
25 emissions will not be detected. Source persistence and

1 variability are a major confounding factor in
2 understanding overall dairy emissions.

3 --o0o--

4 RD AIR POLLUTION SPECIALIST FALK: The oil and
5 gas sector analysis also highlighted important findings.
6 This study found that well heads and storage tanks are
7 likely responsible for the largest fraction of detected
8 methane point sources in this sector with most of the
9 detections occurring in the Kern County oil fields. The
10 prevalence of methane plume also varied significantly by
11 oil and gas field.

12 These observations provided a baseline before
13 CARB's oil and gas regulation goes into effect on January
14 1st, 2018, and phase two fly-overs are currently
15 revisiting target areas from phase one.

16 --o0o--

17 RD AIR POLLUTION SPECIALIST FALK: The results
18 from refineries and power plants were also noteworthy.
19 After a survey of over 160 power plants, measurements
20 during phase one did not find any detectable methane
21 emissions at power plants. The research team is
22 continuing a more comprehensive survey of power plants in
23 phase two, but these results were significant.

24 On the other hand, large methane plumes were
25 observed at nearly every refinery and -- but the observed

1 refinery sources were highly episodic.

2 --o0o--

3 RD AIR POLLUTION SPECIALIST FALK: For the waste
4 sector, the phase one study surveyed about 38 percent of
5 top-emitting landfills with the greater coverage in
6 Southern California. The survey suggests that a small
7 fraction of facility presented persistent large plumes,
8 but some landfills show almost no methane. Phase two is
9 expected to provide a more complete survey of large
10 landfills in the rest of the State.

11 Of special note was the Sunshine Canyon Landfill
12 located in Southern California, which consistently had the
13 largest persistent methane plumes in phase one.
14 Wastewater treatment plants did not show any detectable
15 methane plumes during this study.

16 --o0o--

17 RD AIR POLLUTION SPECIALIST FALK: The survey
18 results show that all sectors have members in the top 10
19 percent of sources, which together contain 60 percent of
20 the overall observed methane enhancement. It is also
21 important to note that only a small fraction of California
22 infrastructure, in fact, less than 0.2 percent of surveyed
23 sources had large detectable methane plumes.

24 However, emissions from identified large point
25 sources could contribute significantly to the statewide

1 methane emissions. A better assessment of this will be
2 possible after the completion of phase two of this study.

3 --o0o--

4 RD AIR POLLUTION SPECIALIST FALK: Results of
5 this study have already begun to inform CARB programs and
6 policies. For example, the California Methane Survey
7 results provide a pre-regulated -- regulatory baseline and
8 enforcement aid for CARB's oil and gas regulations.

9 The findings of this study are also useful to
10 better understand spatial patterns of emissions in
11 livestock manure management, and potential control
12 systems, and will inform the mitigation efforts underway.

13 The ability to scan large areas, and many
14 potential sources with pinpoint accuracy, has already
15 proven to be able to detect leaks in a natural gas
16 distribution system and in underground natural gas storage
17 facilities. Thereby, supporting the statewide effort to
18 monitor these systems for public safety.

19 The location of potentially large point sources
20 has also been useful to information environmental justice
21 efforts by identifying locations for follow-up research in
22 disadvantaged communities. While methane itself is not
23 toxic, certain sources may co-emit associated pollutants
24 that may be toxic, such as benzene emissions from the oil
25 and gas production.

1 As mentioned earlier, CDFA in consultation with
2 CARB and other State agencies is proceeding with the dairy
3 mitigation effort under SB 1383, which aims to reduce
4 methane emissions by this sector by 40 percent.

5 CEC also has a portfolio of methane-related
6 research, including a current call for proposals for large
7 field studies to detect and quantify methane emissions
8 from oil and gas facilities in the San Joaquin Valley.

9 Additionally, CARB has ongoing in-house research
10 projects regarding both measurements and modeling of
11 methane emissions from local to statewide scales.

12 --o0o--

13 RD AIR POLLUTION SPECIALIST FALK: The study
14 presented here is only one part of a larger research
15 framework that covers spatial scales from satellite
16 observations, airborne studies, ambient tower networks.,
17 mobile studies, as well as process-based studies.

18 Since the passage of AB 32, California has
19 implemented a variety of research efforts, including
20 in-house research, partnerships and collaborations with
21 leading researchers across the world, and innovative
22 extramural research contracts to leverage the expertise in
23 the UC/CSU system, national labs, and other research
24 organizations.

25 Together, all these efforts from a tiered

1 observation system to understand methane emissions from
2 process to statewide emissions.

3 --o0o--

4 RD AIR POLLUTION SPECIALIST FALK: In summary,
5 this study was able to provide important information to
6 understand the statewide methane emission sources for the
7 various emission sectors. The study suggested large
8 methane sources could be a critical contributor to
9 statewide emissions, and potentially present an
10 opportunity for emissions mitigation.

11 For this, however, CARB needs to understand the
12 persistent -- persistence and episodic nature of the
13 emissions in order to obtain robust emission estimates,
14 which I expected with the final report of the study by the
15 end of next summer.

16 In this context, further analysis is needed to
17 determine which sources are normal process emissions as
18 opposed to leaks and other malfunctions. There are
19 serious concerns over cuts to federal programs that could
20 affect progress. The federal government currently
21 proposes several -- severely reduced or completely
22 eliminated funding for NASA's earth observation efforts,
23 which would affect the availability of JPL resources and
24 sensors for future follow-up studies.

25 New technologies, such as those funded by DOE's

1 ARPA-E program are expected to improve leak detection
2 facility level emissions and mitigation efforts.

3 And this concludes the staff presentation. We
4 will be happy to answer any questions from the Board.

5 VICE CHAIR BERG: Thank you very much for such a
6 great presentation. We have three witnesses. I'd like to
7 call them first, and then see if we have any Board
8 questions.

9 Do we have our list up

10 So Mr. Ali from PG&E.

11 Welcome. Thank you.

12 MS. ALI: Thank you. Good afternoon, Vice Chair
13 Berg and members of the Board. My name is Fariya Ali
14 speaking today on behalf of PG&E.

15 We'd like to thank staff today at ARB, the CEC,
16 and JPL for the research efforts as highlighted in today's
17 presentation. PG&E supports this and other efforts to
18 help identify and mitigate methane emissions in order to
19 help meet the State's climate goals.

20 For this Methane Hot Spots Survey, PG&E
21 collaborated with the research team on their flyovers of
22 facilities, and we look forward to continuing to work with
23 the researchers on the next phase of the study, which will
24 include developing methods to calculate actual emission
25 rates as mentioned.

1 This will be an important step towards accurately
2 quantifying and prioritizing the largest sources of
3 emissions for mitigation.

4 We have also been working with other partners in
5 the industry, government, and academia on methane emission
6 abatement R&D projects, including enhanced methane
7 detection with mobile and aerial devices, testing
8 stationary methane sources, performing more frequent leak
9 surveys at high pressure facilities, and improving leak
10 quantification a geographic tracking.

11 In addition to R&D, PG&E has implemented many
12 measures in recent years to increase the safety of the gas
13 system and reduce emissions. For example, our commitment
14 to timely leak repair has helped us reduce our grade 2 and
15 2 plus leak backlog by 99 percent from 2010 to 2015, which
16 in turn helps to minimize fugitive methane emissions from
17 our system.

18 The interconnected nature of these benefits
19 underscore that a safe reliable gas system is not only
20 essential to PG&E and its customers, but to California and
21 the future of our climate's success. We look forward to
22 continuing to work with you on this effort.

23 Thank you.

24 VICE CHAIR BERG: Thank you very much.

25 And good afternoon.

1 MR. CARMICHAEL: Good morning -- or good
2 afternoon, members of the Board. Tim Carmichael with
3 Southern California Gas Company, echoing the comments of
4 Fariya from PG&E. First of all, SoCalGas supports ARB's
5 efforts to identify and mitigate methane emissions. We
6 greatly appreciate the collaborative approach that we've
7 had with the Air Resources Board staff, and the staff of
8 the Jet Propulsion Laboratory.

9 The data collected through the statewide methane
10 survey is already being put to good use to identify and
11 address sources of emissions. I want to highlight just a
12 couple of things that we're doing in the development of
13 new technologies to reduce methane emissions.

14 We're using fiber optic cables and point sensors
15 to detect methane leaks in pipelines that may have been
16 damaged by third parties. We're using infrared cameras
17 to -- and helping develop infrared cameras to check for
18 leaks after new pipelines are installed. And we're
19 starting to use drones and help develop drones for methods
20 of aerial survey to spot emissions from above.

21 SoCalGas supported SB 1383, which has already
22 been discussed. It establishes a 40 percent methane
23 reduction goal from all sources. And we support the Air
24 Resources Board Short-Lived Climate Pollutant Plan.

25 We will continue to work with the ARB and other

1 agencies to identify and mitigate emissions from sources
2 in our system, and to reduce methane emissions from
3 organic sources to help the State achieve the short-lived
4 climate pollutant goals.

5 Thank you very much

6 VICE CHAIR BERG: Thank you.

7 MS. O'BRIEN: Good afternoon, Vice Chair, members
8 of the Board. Rachael O'Brien with the Agricultural
9 Council. I'm also here today on behalf of Dairy Cares.
10 They were not able to make the meeting. And I wanted to
11 start off with thanking the Air Resources Board on
12 their -- for supporting research to better understand
13 emissions and identify practical solutions for addressing
14 dairy methane emissions.

15 I also wanted to note, like our -- like our
16 utility counterparts, the dairy industry is also
17 participating in research efforts around measuring and
18 modeling, includes providing research funding and
19 technical support to research teams, to better understand
20 the nature of emissions, to mitigate those sources, and to
21 help us achieve our State goals. We also were supporters
22 of SB 1383, as well as the Short-Lived Climate Pollutant
23 Plan here at AR -- Air Resources Board and want to
24 continue in our efforts as partners to address these
25 sources.

1 Thank you.

2 VICE CHAIR BERG: Thank you very much.

3 And that concludes our list of public comments.

4 No question, this is very important research, and
5 really interesting information as we start looking at
6 this. Is there any other Board comments or questions?

7 Thank you, Dr. Balmes.

8 BOARD MEMBER BALMES: Matthias, thank you for a
9 nice presentation. I got briefed yesterday, so this --
10 I've heard it twice in two days, and I really appreciate
11 the work and want to support it, and just want to point
12 out that, you know, the refineries are a big source, as we
13 heard, of methane emissions. And with methane emissions
14 come other toxic emissions. Matthias and I talked about
15 this.

16 And I just -- you know, it just brings home that
17 we have to be always worried about emissions of toxics, at
18 the same time we're worried about greenhouse gas emissions
19 and who lives near refineries. I don't have to remind my
20 environmental justice colleagues on the Board, that it's,
21 you know, poor people of color, so -- who have health
22 risks independent of refinery emissions.

23 So I'm just really glad that we're going to be
24 looking more carefully, especially at Northern California,
25 Bay Area refineries.

1 VICE CHAIR BERG: Thank you.

2 Any other comments?

3 Well, we do look forward to the next round of
4 information, and an additional update on this very
5 important work.

6 Thank you very much for all your great work.

7 Well, that includes our specific agenda items,
8 but we do have two people for public comment. And before
9 we take the public comment, I would just like to take a
10 moment to bring to the -- my fellow Board members'
11 attention. There is a little booklet in front of you.
12 This is our 2016 Superior Award -- Accomplishment Awards
13 that is given to our staff who have done outstanding work
14 for the previous year.

15 Today -- this year we honored over 180 staff
16 members with individual and team awards for outstanding
17 work in 2016. Besides doing incredible work, ranging from
18 implementing new programs to monitoring methane hot spots,
19 just as the update that we just heard about, and ensuring
20 that we can account for all of the funds we collect from
21 cap-and-trade auctions to increasing compliance with our
22 heavy-duty vehicle requirement. We all know working with
23 this amazing staff, the amount of passion and dedication
24 they have, and the great work as they make us look really
25 good sitting up here.

1 One of the new things we did this year was they
2 did do individual and some group videos. And I have asked
3 staff to tee up one of those videos, because I thought it
4 would be great for the Board to see that.

5 And so could we play that, please?

6 (Thereupon a video was played.)

7 VICE CHAIR BERG: All right. Our executive
8 leadership was very clever in getting these people to do a
9 little testimonies about their job without letting them
10 know that they were award winners. And so these were
11 shown at last week's meeting, and next week we have our
12 celebration in El Monte, and I'm looking forward to
13 attending that.

14 We would really appreciate, I think on behalf of
15 the Board, would you please let managers know to let their
16 people know how proud the Board is that we did take this
17 up as an item within our Board meeting, and we are very
18 proud of them, and very appreciative of all of their great
19 work. So thank you very much for that, and great job.

20 So our last is we do have two requests for open
21 comments. And so these will also be three minutes. And
22 the Board will not be acting on these open comments, but
23 they are an opportunity for the public to come and voice a
24 concern, and then we will put it through proper channels
25 as needed.

1 So first up, Gary Hughes, please.

2 I always get confused, Gary, whether that one is
3 working, but I know this one is for sure.

4 MR. HUGHES: So much shorter.

5 VICE CHAIR BERG: I know.

6 MR. HUGHES: All right. I'm just noticing the
7 clock is only at two minutes. I'm going to try to keep
8 this within --

9 VICE CHAIR BERG: Well, we have a three minute
10 right there to your --

11 MR. HUGHES: All right. Thank you so much.

12 Esteemed directors of the Board, thank you for
13 your stamina in staying to the very end of your director's
14 meeting. I'm appreciative of the opportunity to provide
15 comment on a non-agenda item. My name is Gary Graham
16 Hughes and the I'm Senior California Advocacy Campaigner
17 with Friends of the Earth.

18 I'm offering comments during this open comment to
19 draw attention to our organization's concern about
20 processes by which the State of California is embarking
21 upon foreign policy under the umbrella of climate change
22 mitigation policy development.

23 We are concerned about the opaque manner in which
24 international relations are being engaged by the
25 California State government without appropriate

1 legislative oversight or public accountability.

2 Our immediate request is that the upcoming
3 discussions regarding the scoping plan update be perceived
4 by the directors here as an opportunity to require staff
5 to provide specific and in-depth information on the manner
6 by which high risk dynamics of corruption and human rights
7 violations and potential international partners are being
8 addressed and evaluated by ARB staff.

9 We would like to see the directors here assert a
10 higher level of Board oversight and public accountability
11 of California's State officials international climate
12 policy activities. Why are we making this request?

13 As you well know, California does not have a
14 foreign ministry. Thus, on many occasions, the Air
15 Resources Board has begun to act as a de facto State
16 Department with other foreign governments and their
17 subnational jurisdictions. And this includes the
18 development of possible market-linkage proposals, which
19 have been included in the drafts of the scoping plan
20 update and also the proposal to bring international
21 sector-based offsets, or the red-based offsets into
22 California's carbon market.

23 These international carbon trading schemes are
24 deeply problematic due to the human rights and indigenous
25 land rights violations associated with forest-based

1 carbon-credit seems. The organization has a long history
2 of engaging on these issues, and we remain very concerned
3 that the Air Resources Board is not prepared to properly
4 address these very serious international environmental
5 justice and economic development affairs.

6 One really prime example is that we've been
7 hearing from our partners in Aukra that there is a fair
8 amount of harassment and intimidation of the indigenous
9 communities that are voicing concerns about the red
10 projects in Aukra.

11 And then also, we have partners in Mexico that
12 sent a letter to Chair Nichols and Governor Brown about
13 the Ayotzinapa crimes which occurred just three years ago
14 in Mexico in Guerrero. And we are not satisfied with the
15 fact that our partners down there have never received a
16 response to that letter. And there is a lot of evidence
17 right now that the cover up of the crime by the Mexican
18 federal government was really egregious.

19 And we know now that the Mexican Army was
20 involved with those crimes. And there's human rights
21 organizations in Mexico that are working on this. So we
22 really encourage the directors here to assert yourselves
23 during the scoping plan update process to really take a
24 look at how California is engaging in international
25 climate policy. And that the public, the residents of

1 California, want to make sure that California's climate
2 policy is equitable, fair, and just.

3 So thank you for your attention.

4 VICE CHAIR BERG: And thank you very much for
5 coming this afternoon.

6 Oh, yes, please. Thank very much, Eileen.
7 Please come up.

8 MS. BOKEN: Eileen Boken Coalition for San
9 Francisco Neighborhoods. However, I am here on my own
10 behalf.

11 When I attended the CARB meeting for the draft
12 funding guidelines for agencies that administer CCI, I saw
13 for myself that CARB understands the value of community
14 involvement. I have also attended one of CalSTA workshops
15 for the guidelines for TIRCP. A request was subsequently
16 sent asking if I was the only community representative at
17 the workshop.

18 Apparently, I was. I did not receive a response
19 to the question if other community representatives had
20 submitted comments. The perception is that CalSTA does
21 not value community involved to the same extent as CARB
22 does, and that CalSTA decisions seem to be made with
23 little or no community input.

24 The concerns regarding CalSTA extend to concerns
25 regarding the San Francisco MTA. The SFMTA has received

1 two TIRCP grants totaling \$86 million. These two grants
2 will be used for the purchase of high-floor LRVs.
3 Although, well suited for some areas of San Francisco,
4 these high-floor LRVs are less suited to other areas,
5 particularly the west side of the city.

6 Low-floor or ultra low-floor LRVs would be better
7 suited for the west side, especially along the Taraval
8 Street transit and neighborhood commercial corridor.
9 SFMTA's decision to use TIRCP funds solely for high-floor
10 LRVs reflects a significantly expanded and consolidated
11 authority.

12 This authority was granted to it by a misleading
13 voter initiative. With this authority and along with a
14 selected group of stakeholders, the SFMTA comes to most of
15 its decisions. I am urging CARB to set guidelines for
16 administering agencies, such as CalSTA, that would also
17 address the issues created by SFMTA.

18 In the CARB CCI workshop, the principle of do no
19 harm was suggested -- was discussed. Although projects
20 may have benefits, sometimes the negative impacts outweigh
21 the benefits. I would urge CARB to require administering
22 agencies, such as CalSTA, to review existing and future
23 grants, to identify both the benefits and the negative
24 impacts. I would urge CARB to use the power of the purse
25 to audit projects beyond adherence to guidelines and apply

1 penalties as needed.

2 As the actress Rita Hayworth reportedly said,
3 it's not who wears the pants it's who's money is in the
4 pockets.

5 (Laughter.)

6 MR. BOKEN: On a completely different topic, I
7 have some articles that I've submitted on alternative
8 fuels for marine vessels, airplanes, and vehicles.
9 Noteworthy is the Bay Crossings article on the hydrogen
10 ferry that gives kudos to CARB. And this is the newsstand
11 copy.

12 VICE CHAIR BERG: Thank you very much for coming.
13 We appreciate that information.

14 And so this closes the public comment period, and
15 I believe brings our meeting to a close. So we are
16 adjourned, and we will see you in Riverside next month.

17 Thank you very much.

18 (Thereupon the Air Resources Board meeting
19 adjourned at 12:21 p.m)

20

21

22

23

24

25

1 C E R T I F I C A T E O F R E P O R T E R

2 I, JAMES F. PETERS, a Certified Shorthand
3 Reporter of the State of California, do hereby certify:

4 That I am a disinterested person herein; that the
5 foregoing California Air Resources Board meeting was
6 reported in shorthand by me, James F. Peters, a Certified
7 Shorthand Reporter of the State of California, and was
8 thereafter transcribed, under my direction, by
9 computer-assisted transcription;

10 I further certify that I am not of counsel or
11 attorney for any of the parties to said meeting nor in any
12 way interested in the outcome of said meeting.

13 IN WITNESS WHEREOF, I have hereunto set my hand
14 this 10th day of October, 2017.

15
16
17
18 
19

20
21 JAMES F. PETERS, CSR
22 Certified Shorthand Reporter
23 License No. 10063
24
25