

BOARD MEETING
STATE OF CALIFORNIA
AIR RESOURCES BOARD

JOE SERNA, JR. BUILDING
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
CENTRAL VALLEY AUDITORIUM, SECOND FLOOR
1001 I STREET
SACRAMENTO, CALIFORNIA

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9:00 A.M.

TIFFANY C. KRAFT, CSR, RPR
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Mr. Jerry Hill

Mrs. Barbara Riordan

Mr. Daniel Sperling

Mr. John Telles

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Mr. James Goldstene, Executive Officer

Mr. Tom Cackette, Chief Deputy Executive Officer

Ms. Ellen Peter, Chief Counsel

Mr. Michael Scheible, Deputy Executive Officer

Ms. Lynn Terry, Deputy Executive Officer

Ms. Kathleen Quetin, Ombudsman

Mr. Robert Barham, Assistant Chief, SSD

Ms. Janette Brooks, Chief, Air Quality Measures Branch,
SSD

Ms. Edie Chang, Chief, Program Planning and Management
Branch, Office of Climate Change

Mr. Steve Church, Greenhouse Gas Technology & Field
Testing Section, Research Division

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APPEARANCES CONTINUED

STAFF

Ms. Cincy Castronovo, Staff Air Pollution Specialist,
Monitoring and Laboratory Division

Mr. Michael FitzGibbon, Chief, Air Quality Field Studies
and Administration Branch, RD

Mr. Kurt Karperos, Chief, Air Quality and Transportation
Planning Branch, PTSD

Ms. Andrea Juarez, Air Pollution Specialist, Air Quality
and Transportation Planning Branch, Planning and Technical
Support Division

Mr. David Mallory, Manager, Measures Development Section,
SSD

Ms. Sylvia Oey, Manager, Liasion Section, PTSD

Mr. Femi Olaluwoye, Staff, Technical Evaluation Section,
Stationary Source Division

Mr. Chuck Shulock, Assistant Executive Officer, Office of
Climate Change

Ms. Carla Takemoto, Manager, Technical Evaluation Section,
SSD

Ms. Monica Vejar, Board Clerk

ALSO PRESENT

Mr. David Atwater

Ms. Diane Bailey, NRDC

Mr. Jason Barbose, Environment CA

Mr. Bud Beebe, SMUD

Ms. Susie Berlin, McCarthy & Berlin

Mr. Bob Brown, Spartan Tank Lines, Inc.

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APPEARANCES CONTINUED

ALSO PRESENT

Mr. Chris Busch, Union of Concerned Scientists
Mr. Luis Cabrales, Coalition for Clean Air
Mr. Tim Carmichael, Coalition for Clean Air
Mr. Pete Carpenedo, Dassel's Petroleum, Inc.
Ms. Ann Chan, The Pacific Forest Trust
Mr. Stuart Cohen, Transportation and Land Use Coalition
Ms. Solange Echeverria, SEIU Local 1877
Mr. Bob Epstein, Environmental Entrepreneurs
Mr. Kevin Fay, ICCP
Mr. Tim Frank, Sierra Club
Mr. D. Douglas Fratz, Consumer Specialty Products Association
Mr. Charles Frazier, CA Black Chamber
Mr. Mike Freeman, WD-40 Company
Mr. Paul Gardner, Blaster Corporation
Mr. Gary Gero, California Climate Action Registry
Mr. Bob Hamilton, Access Business Group, Soap & Detergent Association
Mr. Brian Hill, Toro Petroleum Corp.
Mr. Elliot Hoffman, New Voice of Business
Ms. Bonnie Holmes-Gen, American Lung Association
Mr. Greg Johnson, Diversified Brands
Ms. Leilani Johnson Kowal, LA Deptent of Water and Power

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APPEARANCES CONTINUED

ALSO PRESENT

Ms. Barbara Lee, CAPCOA

Mr. Steve Lopes

Mr. Bill McGavern, Sierra Club

Mr. Jim Mattesich, Personal Care Products Council

Mr. John May, CBE

Mr. Bruce McClaughlin, California Municipal Utilities
Association

Mr. Jay McKeeman, CLOMA

Ms. Patricia Monahan, Union of Concerned Scientists

Mr. Craig Moyer, Manatt, Phelps

Mr. Tim O'Connor, EDF

Dr. Bart Ostro, Ph.D., Chief, Air Pollution Epidemiology
Section, California Office of Environmental Health Hazard
Assessment

Mr. Timothy Papandreon, LACMTA

Ms. Michelle Passero, The Nature Conservancy

Ms. Kathryn Phillips, EDF

Mr. Shankar Prasad, Coalition for Clean Air

Mr. Michael Prather, Fred Kavli Endowed Chair of the
Department of Earth System Science, University of
California, Irvine

Mr. Doug Raymond, National Aerosol Association

Ms. Cathy Reheis-Boyd, WSPA

Ms. Laura Rico, SCUI Local 1877

Mr. Adam Selisker, CRC Industries, Inc.

APPEARANCES CONTINUED

ALSO PRESENT

Mr. Matt Vander Sluis, Planning & Conservation League

Mr. Michael Villegas, Ventura County Air Pollution Control
District

Mr. Barry Wallerstein, SCAQMD

Ms. Laurie Wayburn, Pacific Forest Trust

Mr. Jim White, BP representing WSPA

Mr. Joseph Yost, Consumer Specialty Products Association

Mr. Harry Zechman, Stoner, Inc.

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1 PROCEEDINGS

2 CHAIRPERSON NICHOLS: Good morning, ladies and
3 gentlemen. Welcome to the June 26th, 2008, public meeting
4 of the Air Resources Board.

5 It's customary for us to begin our Board meeting
6 with the Pledge of Allegiance to the flag which is up here
7 on the platform. If you'll stand and join me, please.

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

10 CHAIRPERSON NICHOLS: Thank you.

11 The Clerk will please call the roll.

12 BOARD CLERK VEJAR: Dr. Balmes?

13 Ms. Berg?

14 BOARD MEMBER BERG: Here.

15 BOARD CLERK VEJAR: Supervisor Hill?

16 BOARD MEMBER HILL: Here.

17 BOARD CLERK VEJAR: Ms. Kennard?

18 BOARD MEMBER KENNARD: Here.

19 BOARD CLERK VEJAR: Ms. Riordan?

20 BOARD MEMBER RIORDAN: Here.

21 BOARD CLERK VEJAR: Professor Sperling?

22 BOARD MEMBER SPERLING: Here.

23 BOARD CLERK VEJAR: Dr. Telles?

24 BOARD MEMBER TELLES: Here.

25 BOARD CLERK VEJAR: Chairman Nichols?

1 CHAIRPERSON NICHOLS: Here.

2 BOARD CLERK VEJAR: Madam Chair, we have a
3 quorum.

4 CHAIRPERSON NICHOLS: Thank you.

5 Just a couple of logistical comments for anyone
6 who isn't familiar with our procedures. We do have a
7 closed session that appears on our agenda each month as an
8 item in case we need a briefing on litigation matters.
9 However, we will not have a closed session today. It's
10 canceled.

11 Anyone who wishes to testify is requested to
12 please sign up with the staff at the tables outside the
13 boardroom. You do have the option of including your name.
14 It's not mandatory.

15 Everyone should be aware that the Board imposes a
16 time limit on speakers. Usually, it's three minutes. But
17 in the event of a very crowded agenda, we sometimes make
18 those even shorter, particularly if people are repeating
19 points that have been made before. And we appreciate it
20 if you are going to testify and you have written remarks
21 if you would not read your written remarks because they
22 will be in the record and we will read them. If you would
23 just summarize them briefly, that would be extremely
24 helpful.

25 Also the building safety people ask us to remind

1 you in the event of an alarm going off, the exists are at
2 the rear of the room. And if a fire alarm goes off, we're
3 asked to exit the building, assemble outside, and wait
4 until we get the all-clear signal. I think that's it as
5 far as logistical remarks are concerned.

6 We have a big day ahead of us with a lot of
7 important items, and it's really just a pleasure to
8 welcome everybody here today. We do have a couple of
9 regulatory items as well as the release of our draft
10 Scoping Plan for our implementation of California's global
11 climate law. And we're looking forward to a very lively
12 discussion.

13 But I think it's probably a good way to start to
14 actually begin talking about the health effects that
15 relate to the temperature and heat waves that we're
16 experiencing in California. So I'm going to ask our
17 Executive Officer James Goldstene if he will introduce
18 this item.

19 EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman
20 Nichols. Good morning, members of the Board.

21 While effects of heat waves and higher average
22 temperatures on mortality have been studied elsewhere,
23 there have been few studies conducted here in California.
24 To fill this gap, the Office of Environmental Health
25 Hazard Assessment, OEHHA, has recently examined the

1 effects of temperature on both mortality and
2 hospitalization in California.

3 OEHHA staff will present an overview of the
4 recently published findings on temperature-associated
5 health effects in nine California counties. Dr. Bart
6 Ostro from OEHHA will make the presentation.

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

9 DR. OSTRO: Good morning, members of the Board.
10 I'd like to first thank the audience for coming out to
11 hear me.

12 I'm going to give a brief overview of some of the
13 work we've done in OEHHA relating to the health effects of
14 climate change.

15 --o0o--

16 DR. OSTRO: First I wanted to acknowledge the
17 many collaborators at OEHHA who have been involved in the
18 project. There's a lot of data and a lot of analysis to
19 be conducted here. And also thank both the Energy
20 Commission and the Department of Public Health for
21 additional support --

22 --o0o--

23 DR. OSTRO: -- and assistance.

24 The climate change models for California of
25 course predict higher average temperatures and also an

1 temperature effects. And later, there's been some
2 analysis indicating that some portion of those are related
3 to air pollution.

4 Third, we wanted to identify sub-groups that are
5 particularly susceptible to temperature.

6 Fourth, we wanted to look at the heat wave of
7 2006 and determine the full effects of that heat wave and
8 also indicate how high were the effects per degree that we
9 observed. I'll be reporting on results of those first
10 four factors today.

11 And two other things we're working on is whether
12 there's effects of temperature and heat waves on hospital
13 admissions. And also based on all the results above, what
14 are the potential public health impacts in terms of number
15 of cases of mortality and hospitalization and emergency
16 room visits and so on resulting from future changes in
17 climate.

18 --o0o--

19 DR. OSTRO: So the data that we collected for
20 many of the studies were for nine California counties. We
21 looked at the warm seasons for five years, '99 to 2003.
22 And of course we collected mean, minimum, maximum daily
23 apparent temperature. Apparent temperature is a variable
24 that looks at both temperature and humidity and is an
25 indication of how hot it really is in terms of body

1 stress.

2 We had vital statistics on mortality and hospital
3 admissions from the Office of Public Health. We looked at
4 all causes as well as some desegregation by disease, age,
5 and race. We also had air pollution from our friends at
6 ARB.

7 --o0o--

8 DR. OSTRO: This chart shows the counties that
9 were used in the analysis, our nine counties. And these
10 nine counties were chosen because these were counties that
11 also had a lot of data on PM2.5. So we could look at the
12 effects of PM2.5 at the same time. And you can see we
13 have a nice range from the northern coastal counties that
14 have milder climates of course to the southern inland
15 counties that showed very high apparent temperatures as we
16 went from the blue to the orange and to the red showing
17 the hottest counties that we were looking at.

18 --o0o--

19 DR. OSTRO: So the methodology that we used were
20 similar to those methods that we used for air pollution
21 studies. I think many people are familiar with the time
22 studies we've looked at with air pollution. In these
23 studies, we look at daily counts in a given metro area,
24 daily counts of mortality. Every day we look at that over
25 say a three or four-year period. We compare that with

1 daily levels of temperature. We control for other things
2 that might effect for mortality so that we're sure that
3 our relationship is not being biased or confounded. And
4 then we estimate the association between air pollution or
5 temperature on mortality.

6 We also used a second method which is the case
7 cross-over method, which uses individual data. And I'm
8 not going to go into the details of that, except to say
9 that previous studies that people have conducted indicate
10 that the time series in case cross-over methods give
11 relatively similar effects. But we wanted to make sure
12 that held in our temperature studies in California. So we
13 did both types of methods.

14 And we conducted separate analyses for each
15 county relating temperature to mortality. Then we
16 combined the county estimates through a meta analysis.
17 And I should say we also worked with colleagues at Harvard
18 to do a parallel study using the similar methodology
19 looking at nine non-California counties.

20 --o0o--

21 DR. OSTRO: This is our first set of results.
22 And let me walk you through what the graph is showing.

23 On the vertical access, it's the percent change
24 in mortality due to a ten degree change in apparent
25 temperature.

1 In the green and orange, we have the case
2 cross-over and time series results.

3 The bottom lag zero, lag zero-three, lag
4 one-three indicate the lag between the temperature and
5 when we were expecting the mortality. Lag zero means same
6 day temperature effecting mortality. Lag zero-three means
7 temperature today and the three previous days and looking
8 at its effect on mortality. And lag one-three meaning the
9 effects of the three previous days on --

10 --o0o--

11 DR. OSTRO: -- the three previous days effecting
12 mortality.

13 And then we have the dot there where the 2.3 is
14 indicated is the central estimate from the meta analysis
15 of all nine counties with a confidence interval.

16 And, finally, the statistics tell us if the 95
17 percent confidence interval that's shown there does not
18 touch the zero point on the access that it's statistically
19 significant at a .05 level.

20 So this graph indicates first of all that the
21 case cross-over and time series methods gave very similar
22 results independent of what lag that we used. That the
23 lag tended to give us similar results as well. And that
24 the effects that we found say for a lag zero same day
25 temperature effecting mortality was about 2.3 percent. So

1 that means that temperature today on average will give
2 about a 2.3 percent change in mortality on the same day
3 with the associated confidence interval.

4 So we went ahead. And most of our other studies
5 used the case cross-over. And there's pros and cons to
6 using either the time series or the case cross over. We
7 went ahead and did the case cross-over study methods for a
8 lot of subsequent analysis. But the finding here is
9 important mortality effects.

10 --o0o--

11 DR. OSTRO: The next thing we looked at is
12 looking at disease-specific mortality. We want to see
13 which types of diseases were being effected by
14 temperature. And as expected, we found more effects on
15 cardiovascular mortality. You can see about a 2.6 percent
16 increase. That was statistically significant. We also
17 saw excess risks for all pulmonary and respiratory
18 disease, though the respiratory disease was not
19 significant in this case.

20 Preliminary work that we're doing on hospital
21 admissions, however, do show respiratory effects of
22 temperature changes, particularly among young children.
23 We're seeing increases in pneumonia and asthma and other
24 illnesses.

25 Next slide.

1 --o0o--

2 DR. OSTRO: The next thing we looked at was the
3 effects of air pollution and how does that effect the
4 temperature relationship. So the first line shows what
5 we've already reported, a 2.3 percent change due to
6 temperatures, same day temperature.

7 And then what we did is one pollutant at a time
8 we entered ozone, PM2.5, carbon monoxide, and NO2 into the
9 model to see if it took away or attenuated the effects of
10 average temperature. And you can see from the results
11 here that there was no evidence in California that the
12 temperature effect was attenuated or reduced when we
13 included air pollution in the model. So it appears that
14 we're able to estimate separate effects from air pollution
15 and for temperature.

16 --o0o--

17 DR. OSTRO: The next question we looked at was
18 the issue of susceptibility. And here we looked at
19 age-specific mortality relating to temperature. And from
20 this you can see that we have increased risk among several
21 different age populations, specifically among those 65 and
22 above, 75 and above, 85 and above we see an excess risk of
23 about two and a half percent or two percent in those
24 groups.

25 And also in the very young population, of

1 particular note, we saw an increase in mortality of young
2 infants under one year old relating to temperature and
3 also a hint of an effect for those under five. And most
4 studies in the United States have not really had enough
5 population to look at. But since we looked at nine
6 counties, we're actually able to see effects in infants
7 and children relating to temperature.

8 --o0o--

9 DR. OSTRO: We also looked at race and ethnicity
10 to see if there was susceptibility for those groups. And
11 in fact, we saw effects in whites, blacks, and hispanics
12 an accelerated risk in all those groups with a much higher
13 risk. And I don't know if you can see it on the screens,
14 but a much higher risk among the black population in our
15 study about doubling the risk of the overall population.
16 So that looks like a particular group that are effected by
17 the increases in average temperature, which is what we're
18 talking about here now.

19 --o0o--

20 DR. OSTRO: So onto our heat wave analysis. For
21 the heat wave analysis, we wanted to ask first how does
22 the mortality risk per degree change at higher
23 temperatures. Second, to what extent do the coronary
24 reports that came out after the heat wave underestimate
25 the total effect. We know it's going to be an

1 underestimate based on the coronary reports for several
2 reasons. One, the coroner can't get to all the cases.
3 Second, there's no consistent case definition for
4 heat-related death. It's usually based on observations.
5 And also of course death is multi-factorial. There's a
6 lot of things that relate to it. If someone dies of a
7 heart attack, for example, heat wave could be an
8 underlying stressor. It might not be the primary cause.
9 And it might not be noted by a coroner as the cause of
10 death.

11 --o0o--

12 DR. OSTRO: What I tried to do here is indicate
13 what we're looking at.

14 First, we've already indicated in our current
15 analysis a slope based on non-heat wave years. That's the
16 dark red line. And that's that 2.3 that we found was
17 basically the slope that indicates the relationship
18 between excess mortality and temperature. Then we have
19 the heat wave at the higher temperature. And you can see
20 we now expect a slope that's going to be increasing at
21 higher temperatures. And many other studies throughout
22 the world, mostly in Europe, have shown this shape of
23 curve that when you get to the higher temperatures, you
24 actually get a higher slope than the effects per degree
25 get much higher than during the low temperatures.

1 So that's what we estimated is that higher slope
2 relating to the July 2006 heat wave. So that's what I'm
3 going to be reporting on now. And specifically we want to
4 see if the effects got even higher during that heat wave.

5 --o0o--

6 DR. OSTRO: So how did we do it? We estimated
7 the quantitative relationship between daily mortality
8 similar to what we've already done and apparent
9 temperature for nine counties that had five or more
10 coronary reported deaths. So the coroner indicated there
11 are nine counties -- which are not the same nine counties
12 that we analyzed in our previous studies. There were nine
13 counties that had five or more coronary reports of death.
14 We took those nine counties and estimated a quantitative
15 relationship between mortality and temperature in those
16 counties.

17 So from that we get a county-specific slope per
18 degree. And then we use these functions and the changes
19 in heat wave, the actual heat wave temperatures that
20 occurred in each county, to estimate the expected
21 mortality that occurred in each of those counties.

22

23 --o0o--

24 DR. OSTRO: So our results showed using the data
25 from those counties that the period of time change in

1 mortality per degree was in fact that we expected two or
2 three times greater than during the non-heat-wave period,
3 that is the slope does get much higher. The effects per
4 degree are much greater when we get into those heat wave
5 periods. And also that the estimated mortality was about
6 one and a half to three times greater than what the
7 coroner reported, which was about 147 deaths for those
8 nine counties. So in fact the actual mortality could be
9 as much as three times greater in those counties. So
10 really quite a significant public health impact.

11 --o0o--

12 DR. OSTRO: So the summary of our findings to
13 date are first that overall the effects of climate change
14 I think have a very important direct effect on health of
15 the citizens of California. That temperatures during the
16 non-heat wave periods are associated with mortality.

17 Second, that there seems to be greater
18 susceptibility by age and by race. And this may be due to
19 co-morbidity, underlying disease of the population, health
20 access, poverty, diet, social isolation. All these
21 factors have been hypothesized to be related to increased
22 susceptibility by sub-groups of the population.

23 Third, the effects appear to be independent of
24 our air pollution effects that we've found.

25 Fourth, that the heat wave effects per degree are

1 much greater during the heat wave.

2 And finally, that the true mortality effects
3 during the July 2006 heat wave may be much larger than the
4 earlier coronary reports.

5 And I'll end with just an indication of some of
6 the future work that we would like to do should resources
7 be available.

8 First, we are planning to complete our analysis
9 of hospital admissions, the effects during both the heat
10 wave periods and during non-heat wave years. We also
11 wanted to look at emergency room visits. There's some
12 indication that birth outcomes might be effected. We
13 might see lower birth weights during heat wave periods.

14 We want to do some additional analysis of the
15 potential interactions of pollution and temperature during
16 heat wave.

17 And finally, we've begun working with the
18 National Weather Service in California to see if we can
19 help develop indicators for heat wave warnings, like what
20 are the best measures in terms of temperatures, humidity,
21 what kinds of lags are important and so on, so they can
22 use more effective warnings for the citizens of this
23 state.

24 So this ends my presentation. Thank you.

25 CHAIRPERSON NICHOLS: Thank you.

1 It's really a pleasure to note that OEHHA is a
2 sister department to Cal/EPA. So to have this level of
3 cooperation and support from another agency member is I
4 think a great thing as far as our ability to move forward
5 on this program.

6 I think just one or two really short
7 observations. I think I just want to make sure I'm
8 understanding what you're saying. There's an effect noted
9 with respect to change in temperature essentially
10 regardless of whether it's something that's called an
11 extreme heat condition. In other words, just the increase
12 in temperature in and of itself is associated with the
13 result that you're seeing; is that correct?

14 DR. OSTRO: That's right. Even if we go back to
15 years when there was no heat wave, in years we looked at,
16 '99 to '03, there was a couple of days that were high.
17 But generally no periods of heat wave similar to what was
18 in 2006 and this year. Just higher temperatures and
19 higher apparent temperatures do seem to be relating to
20 mortality and likely hospital admissions as well.

21 CHAIRPERSON NICHOLS: So one of the things that
22 we at ARB need to be thinking about as we're developing
23 our plans for mitigating emissions of greenhouse gases is
24 whether there are any kinds of special effects that we
25 need to be looking for in communities that are more likely

1 to be adversely effected by increases in temperature.

2 Any other comments, questions?

3 Dr. Balmes, welcome.

4 BOARD MEMBER BALMES: First of all, sorry I'm
5 late. But I think I caught the gist of Bart's
6 presentation. And I just wanted to highlight a couple of
7 things.

8 One is that follow-up your last observation.
9 It's not necessarily communities in the hottest parts of
10 California that are most at risk. I would venture to say
11 that if the climate model predictions come true that San
12 Francisco and other areas on the coast that are
13 traditionally thought to be cooler may have the most
14 immediate impact in that air conditioning didn't have a
15 very high penetration. So especially for lower
16 socio-economic status individuals in those communities,
17 there's going to be a more immediate impact.

18 And then I guess the second point is that another
19 State agency has recently completed a study of emergency
20 room visits during the 2006 heat wave, the California
21 Department of Public Health in collaboration with the
22 Natural Resources Defense Counsel, and I think they just
23 got word the paper was accepted to environmental health
24 perspectives. But they documented a huge increase in
25 emergency room visits as a result of the 2006 heat wave.

1 CHAIRPERSON NICHOLS: Thank you.

2 Mr. Telles.

3 BOARD MEMBER TELLES: Just a couple comments.

4 I'm a cardiologist and I very much appreciate this study,
5 because I've been looking for this study for a long time.

6 And it's been my personal observation that
7 temperature is directly related to hospital admissions.
8 My office is -- I'm going to give a little personal note
9 on this. My office is right over the emergency room at a
10 500-bed hospital. And I can tell the temperature by how
11 many ambulances are in front of the emergency room. I
12 don't need a thermometer.

13 And the community-wide impact of this already is
14 quite significant in my town of Fresno. On hot days in
15 the summer, our emergency room fills up, our hospitals
16 fill up. And then there's a little thing that happens
17 which probably most of the people in the audience aren't
18 aware of, but it happens here in Sacramento and other
19 areas which have high exposure to heat and air pollution.
20 Is that when the hospital fills up and the emergency room
21 fills up, the ambulances can't leave their patients. They
22 can't just dump the patient off in the hospital. They
23 have to stay with the person, because there's nobody else
24 taking care of the patient except for the ambulance crew.

25 And what happens in Fresno and Modesto, Visalia

1 and some of the other cities is what can happen is the
2 city may have only one functional ambulance because
3 they're all tied up at the gates of the emergency rooms.
4 In our area, that becomes a major health hazard because
5 somebody has a heart attack, there's now no ambulance
6 available for him to get to the hospital quickly.

7 I thank you very much for this. And can you send
8 me your slides?

9 DR. OSTRO: Certainly. I'd like to just mention
10 one thing Dr. Balmes indicated. I didn't get into it, but
11 in our first paper that was published in epidemiology, we
12 did look at coastal versus non-coastal communities during
13 non-heat wave and your hypothesis is totally borne out.

14 We did see enhanced risks in some of the coastal
15 communities for exactly -- we think what you said, lack of
16 air conditioning and also probably lack of the body being
17 able, ready, or trained to deal with climatization.

18 BOARD MEMBER BALMES: I think the Health
19 Department/NRDC study showed increase risk on the coastal
20 communities compared to central valley.

21 CHAIRPERSON NICHOLS: Well, thank you for that.
22 Thank you for joining us and for getting us started this
23 morning.

24 If there are no additional comments, I think we
25 will move on to the next item then.

1 Our second item this morning relates to ARB's
2 innovative clean air technologies grants program. Through
3 this ICAT program, ARB supports demonstrations of
4 technologies that have high potential for providing
5 emissions reductions.

6 Today before us we have a proposal that's being
7 recommended for funding. So we want to take action on
8 this today. And we'll begin with you, Mr. Goldstene.

9 EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman
10 Nichols.

11 The ICAT grant program co-funds projects that
12 move promising technologies from the research and
13 development phase into practical demonstrations. This
14 spring, we received a request to support a project with
15 potentially high value in our mobile source program. Our
16 regulations for the 2013 model year and later require
17 heavy-duty diesel vehicles to utilize on-board diagnostic
18 systems. These systems must be able to detect particulate
19 matter emissions down closer to the current and future
20 emission standards. However, current sensor technology
21 cannot measure such low levels.

22 This ICAT project would support further
23 development and demonstration of this important research
24 into new sensor technology. I'll now turn the
25 presentation over to Steve Church of our Research

1 Division.

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

4 MR. CHURCH: Thank you, Mr. Goldstene. Good
5 morning, Chair Nichols and members of the Board.

6 Today I will discuss the innovative clean air
7 technologies program, known as ICAT, and the new ICAT
8 project for which we recommend funding.

9 --o0o--

10 MR. CHURCH: Briefly, the purpose of ICAT is to
11 support demonstrations of technical innovations that will
12 help control air pollution, support ARB's clean air
13 objectives, or otherwise beneficially impact public
14 health. The program co-funds projects to facilitate the
15 commercialization of the technologies by demonstrating
16 their viability in use.

17 ICAT's history is extensive. Since the early
18 1990s, the Board has approved funding for 59 projects with
19 28 completed successfully, 16 currently in progress, and
20 15 incomplete.

21 --o0o--

22 MR. CHURCH: ICAT has received a proposal
23 regarding an innovative on-board diagnostic particulate
24 matter sensor technology that has the potential to support
25 a major need seen resulting from ARB's heavy-duty diesel

1 PM emissions regulations for the 2013 model year and
2 later.

3 Staff believes that support for testing and
4 demonstration of this technology would in turn support an
5 important ARB program, and therefore is worthy of the
6 Board's consideration.

7 --o0o--

8 MR. CHURCH: Future aftertreatment for
9 controlling heavy-duty diesel particulate matter emissions
10 will rely increasing on diesel particulate filters due to
11 ever-more stringent PM emission standards. When filters
12 are working properly, they are highly effective in
13 controlling PM emissions. However, should such a filter
14 fail, for example, through development of a crack in the
15 substrate, PM emission can rapidly increase. Regulations
16 require that 2013 and subsequent model year heavy-duty OBD
17 systems be able to detect when PM levels down stream of a
18 diesel particulate filter reach levels exceeding
19 requirements and notify the operator to take corrective
20 action.

21 Currently available technologies for monitoring
22 PM filters rely primarily on differential pressure
23 measurement between upstream and downstream of the filter.
24 Unfortunately, this approach is not sufficiently sensitive
25 to detect failures at the low PM levels to be required in

1 the near future.

2 --o0o--

3 MR. CHURCH: The project being considered here
4 today is for a demonstration of a new type of particulate
5 matter sensor being developed by Honeywell Laboratories.
6 This sensor measures the charge present on particles in
7 the exhaust stream of the diesel engine. The total charge
8 measured can be correlated to the PM level in the exhaust.

9 This project will test the new sensor
10 technologies potential to detect filter failures at the
11 low levels required in the near future by the OBD
12 regulations. This will ensure that the capability exists
13 to identify filter failures and effect repairs before
14 significant amounts of PM have been released into the
15 ambient area. The ICAT demonstration project is scheduled
16 to take 12 months and the requested ICAT support is just
17 under \$200,000, which would leverage a total project cost
18 of about \$400,000.

19 --o0o--

20 MR. CHURCH: The OBD requirement that would be
21 support by the new sensor is phased in beginning with 10
22 percent of new heavy-duty vehicles sold in California in
23 the 2013 model year or about 7500 vehicles. This would
24 increase to 100 percent of vehicles sold in 2016 or about
25 75,000 vehicles.

1 Honeywell Laboratories estimates the incremental
2 new vehicle cost would be approximately 50 to \$75 helping
3 enable a statewide particulate matter emission reduction
4 of about .6 tons per day by the year 2020.

5 For each vehicle, the lifetime particulate matter
6 emission reductions will be about 24 pounds.

7 This technology could be also applicable to OBD
8 applications in other types of vehicles as well, including
9 light-duty diesel vehicles and diesel locomotives.

10 --o0o--

11 MR. CHURCH: In summary, the ICAT program has
12 been in place since the early '90s and over the years has
13 funded many innovative technologies to advance air
14 pollution emission controls.

15 Continuing the ICAT tradition, this project
16 provides an opportunity to support demonstration of a PM
17 sensor technology that can help the heavy-duty diesel
18 industry meet ARB emission control requirements.

19 Thank you for your consideration of staff's
20 recommendation to support this project. We would be happy
21 to address any questions.

22 CHAIRPERSON NICHOLS: I want to make sure I
23 understand the structure of the grant. Are we making it
24 to the University of Minnesota or to Honeywell?

25 MR. CHURCH: To Honeywell. And the University of

1 Minnesota is a subcontract for Honeywell.

2 CHAIRPERSON NICHOLS: I see. Okay. And we will
3 be privy to all the results then of the testing along the
4 way. Is that how that works?

5 MR. CHURCH: Yes.

6 CHAIRPERSON NICHOLS: I'm a little concerned,
7 because I know these are grants that are made for the
8 development of technologies. But Honeywell is a very
9 large company, and I expect this product will have
10 widespread application well beyond anything the ARB might
11 be requiring of it. And I just want to make sure that we
12 are equally privileged to anyone else who might be
13 interested in this information.

14 MR. CHURCH: Yes. That's correct.

15 CHAIRPERSON NICHOLS: Other questions? Comments?

16 BOARD MEMBER KENNARD: Very much related, and I
17 think this issue came up in our funding with some other
18 technologies. And the question was posed is there a
19 scenario under which we can get a return of our grant
20 moneys? Again, Honeywell is a very substantial private
21 entity that could very easily commercialize this product.
22 And I'm assuming that's their intent. Is there a
23 mechanism whereby we can be paid or have some earnings on
24 our investment?

25 AIR QUALITY FIELD STUDIES AND ADMINISTRATION

1 BRANCH CHIEF FITZGIBBON: I would be happy to address
2 that. Mike FitzGibbon from the Research Division.

3 As Steve indicated, the Board approved this
4 program in 1994 as a grant program. We feel for the
5 relatively small investment, which is during the
6 underfunded demonstration phase of a development program,
7 we get concurrent emission reduction benefits in the
8 improved health of Californians.

9 And we feel that, you know, the sales and jobs
10 could be benefited in California. So we haven't typically
11 had companies pay us back for this. And we've had this
12 question come up a number of times. And we feel that were
13 we to include that provision, we would have a lot of
14 companies that would not apply to our program. So we feel
15 as it is structured and as the Board has approved these 59
16 projects over the past 14 years, this is the best way for
17 us to go.

18 BOARD MEMBER TELLES: Could I ask a question?
19 I'm kind of new at this. If I look at this, in the
20 lifetime of an engine, you reduce the particulate matter
21 by 24 pounds?

22 MR. CHURCH: Yeah. That's the estimate.

23 BOARD MEMBER TELLES: So that would cost about
24 two dollars a pound, if these devices cost \$50. And is
25 two dollars a pound, is that cost effective as far as

1 control measures go?

2 MANAGER MCCARTHY: Yeah. In HC and CO and NOx,
3 we typically shoot for less than five dollars a pound, but
4 have had some measures approach more than that, up to \$10
5 a pound. But on PM -- because PM is a stronger air
6 contaminant, we have a much higher cost threshold, almost
7 ten times that limit. Two dollars per pound is quite
8 cheap.

9 BOARD MEMBER TELLES: And in some way do these
10 devices be able to monitor trucks to make sure they're not
11 turning off their air pollution control devices during
12 travel?

13 MANAGER MCCARTHY: Yeah. That is one role of the
14 OBD system there. It's there to monitor all the emission
15 controls on the vehicle and make sure they're working.
16 And they also facilitate roadside inspection. We have OBD
17 on light-duty vehicles. That's the primary mechanism we
18 use in smog check right now to fail cars. The whole
19 premise of OBD, it's mostly software running in the
20 background while the vehicle is being operated that
21 monitor the health of all the emission controls and can
22 detect when something has been tampered or disabled or
23 more likely deteriorated or malfunctioned over time.

24 BOARD MEMBER TELLES: Thank you.

25 CHAIRPERSON NICHOLS: Thank you.

1 BOARD MEMBER SPERLING: I'd like to follow up
2 Member Kennard's comment. You know, I brought it up in
3 discussions with the staff. It just seems to me this ICAT
4 program is really a good program. And it seems like we
5 could expand it. But if we did it in a way where some
6 funds are returned, such as in a case like this, we could
7 expand it. And I think there's going to be more
8 opportunities.

9 And I understand the Legislature has to approve
10 any mechanism like that. But I guess I'd like to suggest
11 that there actually be a serious effort to explore
12 expanding the program in such a way that, you know, funds
13 are returned to the state. It just seems like -- I mean,
14 I know we've brought this up every time --

15 CHAIRPERSON NICHOLS: Every time this program
16 comes back again, we all want to get a handle on it.

17 BOARD MEMBER SPERLING: But it just seems like
18 the right thing.

19 BOARD MEMBER HILL: I would agree also. It seems
20 Honeywell is in -- their core business is measuring
21 devices and that type of industry. And if this product
22 proves to be commercially successful, which I have no
23 reason to believe it won't, I think those resources should
24 come back to the ARB for further use. Perhaps that policy
25 can be revisited.

1 CHAIRPERSON NICHOLS: Well, especially since in
2 this case really what we're paying for is an opportunity
3 to see how it works, get a firsthand glimpse at it
4 ourselves. And if we agree it does work, and we hope it
5 will, our regulatory program is likely to create a vast
6 market for this product. And hopefully there would be
7 competition, but they would be the first ones in the door
8 as far as we know.

9 So it really raises some very interesting
10 questions I think about how the State might be able to not
11 only encourage these kinds of developments, but help to
12 share in some of the benefits in addition to the air
13 quality benefits that will be accruing here.

14 I think it raises a number of issues in legal and
15 policy questions, and I am hoping the Board can move
16 forward with some of that.

17 BOARD MEMBER KENNARD: I have a suggestion. What
18 I understand from legal is we're prohibited from
19 requesting a repayment because it is "a grant."

20 In this particular context, I fully agree with my
21 fellow Board members I think we need to revisit this going
22 forward and create some kind of mechanism so that our
23 grants can be -- the moneys that we put forward, whether
24 it's a grant or whatever, can be returned in some way
25 should the product become commercially successful.

1 But in this case, we could as an option encourage
2 Honeywell should they make a profit off this product to
3 make a charitable contribution to the University of
4 Minnesota or some other worthy research entity that would
5 further the mission of the Air Resources Board. So I
6 don't think that's out of the realm of possibility.

7 CHAIRPERSON NICHOLS: Okay. I think this is an
8 area where the staff is going to hopefully take a look and
9 perhaps present something for our consideration as part of
10 the legislative agenda also.

11 EXECUTIVE OFFICER GOLDSTENE: We'll do that.

12 I think what we'd like to do also is maybe do a
13 retrospective of all the projects that have been funded to
14 this point, how they've been used, have they been
15 successful and not successful so we get some context and
16 also look at the other issues how to recycle the moneys.

17 CHAIRPERSON NICHOLS: That would be very helpful.

18 Do we have a motion on this particular grant
19 request?

20 BOARD MEMBER SPERLING: So moved.

21 BOARD MEMBER BERG: Second.

22 CHAIRPERSON NICHOLS: All in favor say aye.

23 (Ayes)

24 CHAIRPERSON NICHOLS: Any opposition?

25 It's carried then. Thank you.

1 We'll move next to another climate related item.
2 This is the fourth in a series of semi-annual updates to
3 the Board on recent significant findings in climate change
4 science research. In addition to the six greenhouse gases
5 identified in the Kyoto Protocol, several other man-made
6 pollutants can alter climate due to their significant
7 global warming potential. These include stratospheric
8 ozone-depleting substances, carbon monoxide, nitrogen
9 oxides, and particulate matter which consists
10 substantially of black carbon.

11 To share with us some of the recent scientific
12 findings on such substances and their impacts on climate
13 change, I've invited one of the world's foremost experts
14 in global climate change, Professor Michael Prather, of
15 the University of California, Irvine to join us. Hi. And
16 this presentation obviously is very timely as we're
17 unveiling our draft Scoping Plan. And we want to
18 understand the impacts of our longstanding air pollution
19 control programs, particularly our diesel particulate
20 control programs on climate change and whether there are
21 ways we could further optimize these benefits.

22 Mr. Goldstene, do you to want anything before we
23 let Dr. Prather --

24 EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman
25 Nichols.

1 Just to let people know a little more about
2 Professor Prather's background, he's the Fred Kavli
3 Endowed Chair at the Department of Earth System Science at
4 the University of California, Irvine, and one of the
5 world's leading researchers on the topic of climate change
6 and the impact of greenhouse gases. His work has been
7 very influential throughout the world. And he's the lead
8 author on over a half a dozen UN assessments and shares
9 the Nobel Peace prize for his work with the
10 Intergovernmental Panel on Climate Change in 2007. And of
11 course, many of us know him because he's served as a
12 member of our Research Screening Committee. I just
13 thought it would be important to provide you more
14 background. And now Professor Prather.

15 CHAIRPERSON NICHOLS: Welcome.

16 (Thereupon an overhead presentation was
17 presented as follows.)

18 PROFESSOR PRATHER: Thank you very much. Thank
19 you, Chairman Nichols, members of the Board.

20 I've been asked to brief you on non-Kyoto
21 greenhouse gases.

22 --o0o--

23 PROFESSOR PRATHER: We'll begin with a reminder
24 that the two conventions and protocols that govern climate
25 change are the framework convention which was begun in

1 1992, basically went into effect in 1994, and the Kyoto
2 Protocols which finally went into effect in 2005.

3 --o0o--

4 PROFESSOR PRATHER: The greenhouse gases are
5 listed under the Kyoto Protocols, which is why they call
6 them Kyoto gases. This is the page from annex A, reminds
7 you about the six gases. And even more important and
8 intriguing of course is the source of sectors that went
9 through an endless list of everything that had to be
10 reported on and inventoried for emissions. And my
11 favorite is when you get down that long list at the end it
12 says "other." Just in case they missed something.

13 Next.

14 --o0o--

15 PROFESSOR PRATHER: This is a slide we made up at
16 the end of the 2001 assessment, a bar chart of the
17 different greenhouse gas forcings. And it was mixed into
18 the left-hand side which were generally large and global
19 scale impacts. The right-hand side which tend to be the
20 pollutants. That included tropospheric ozone and aerosols
21 on the right hand side. And this is again a measure in
22 terms of climate forcing bar chart of the different levels
23 of what has changed in the atmosphere since 1750.

24 Next.

25 --o0o--

1 PROFESSOR PRATHER: If we look at what gases are
2 Kyoto, we're really limited to that left-hand edge. It's
3 CO2, methane, nitrous oxide. And I crossed out the CFCs
4 because really there's very few HFCs in the atmosphere now
5 compared to the chlorafloracarbons since they aren't
6 really listed under Kyoto.

7 Next.

8 --o0o--

9 PROFESSOR PRATHER: What happens in 2100, in 100
10 years? This is what the bar chart is going to look like
11 under a moderately large scenario. A2 a typically fairly
12 business-as-usual, no climate intervention. And you see
13 CO2 dominates off the top. But you still have
14 tropospheric ozone and aerosols growing, predicted to
15 grow. Large components of what's forcing climate.

16 Next.

17 --o0o--

18 PROFESSOR PRATHER: This is a summary of
19 several -- that was put together trying to analyze -- just
20 put together from the UN inventory reporting, the National
21 Greenhouse Gas Inventory Program. We went through the
22 global numbers from various reports. Went through the
23 Annex 1 reporting countries. And then California on the
24 right. And you can see US and Europe are comparable in
25 terms of CO2, methane, nitrous oxide, slightly different

1 mix.

2 And then we have California which is much less
3 than ten percent of the US in spite of the economy and
4 other issues. As you know that California emissions per
5 capita and GDP are lower than most other states.

6 So again for perspective, most of it's CO2. Most
7 of it's fossil fuel. Land use is a sink. Methane and
8 nitrous oxide are about equal emissions in terms of
9 greenhouse warming potentially, the GWP weighted. And
10 then the fluorocarbons, the high GWP classes are the bottom
11 three. Fairly small still in total at present.

12 Next.

13 --o0o--

14 PROFESSOR PRATHER: However, if you look at the
15 Framework Convention, there's this issue why do we have
16 the Kyoto gases. The framework convention is actually a
17 lot more broad. It really recognizes greenhouse gases in
18 aerosols or precursors of greenhouse gas under the Article
19 1 as being issues that are important. And eventually even
20 in Article 33 it says cover all relevant sources and sinks
21 of greenhouse gases, but doesn't say which ones

22 That said, the Kyoto Protocol does not mention
23 aerosol anywhere in. And it does not mention all
24 greenhouse gases. So we've gone from a fairly broad
25 framework convention via what is important in controlling

1 climate to a fairly restricted implementation of the
2 protocol.

3 Next.

4 --o0o--

5 PROFESSOR PRATHER: This is my quick list of
6 what's not in Kyoto. The top ones are red, they're
7 warming. The bottom ones are blue, generally cooling.

8 And so what do we have? The chlorafloracarbon
9 CFCs, hydro chlorafloracarbon; these are the chlorinated
10 compounds. They are ozone depleting substances. They are
11 basically under control in the Montreal Protocol. And
12 they're under phase out mode already. They're not all
13 gone, however. We'll look at that.

14 Tropospheric ozone precursors. Emissions of Nox,
15 carbon monoxide, volatile organic compounds, and methane
16 itself basically build up tropospheric ozone. It's a
17 fairly large chunk of the forcing. It is the secondary
18 product. It's not a direct emitter.

19 Black or elemental carbon aerosols are generally
20 warming, but there is a problem with them. There is no
21 such thing as a pure black carbon aerosol. If you just
22 had pure black carbon aerosols, they are indeed warming.

23 Then we go to the bottom, organic carbon and
24 other monkey aerosols generally cool the climate, almost
25 all conditions. Sulfate nitrate aerosols, we have a fair

1 amount of nitrate aerosols because of cars and the ammonia
2 mixed together make ammonia nitrate. They're a cooling
3 agent. And dust, enhanced dust due to land use change,
4 agriculture, and construction also tend to cool.

5 So these are all the sort of major
6 climate-forcing components that are not considered under
7 Kyoto.

8 Next.

9 --oOo--

10 PROFESSOR PRATHER: So if we now circle and look
11 at all the non-Kyoto ones, now we have them all
12 highlighted, the chlorofluorocarbons up on the left are
13 already under Montreal Protocol under phase out. They
14 still exist in the land bank.

15 And then we get to the other ones which are the
16 aerosols. The aerosols, if you'll note, it's hard to see
17 on this one, you have a mixture. Let's look at the fossil
18 fuel and sulfate. There is a black part at the top that's
19 warming and a gray part underneath that's cooling. That's
20 because most fossil fuel aerosols have a mixed component.
21 A lot of the cools, the black part absorbs. The point is
22 it's mixed.

23 The other thing is those aerosols also control
24 the aerosols indirect effect on clouds. The aerosol
25 indirects are probably twice the aerosol effect itself.

1 It increases cloud cover. It increases the whiteness of
2 clouds. It makes the planet cooler.

3 Next.

4 --o0o--

5 PROFESSOR PRATHER: Chemistry, this is my
6 favorite. The driving force in sort of the global
7 atmospheric chemistry is the hydroxyl and peroxy radical,
8 OH and HO₂. These are the ones out there. Sunlight makes
9 them. They cycle back and forth. Okay.

10 And now if we look at criteria pollutants in red,
11 we have carbon monoxide, volatile organic carbons, nitric
12 oxide, and aerosol sort of underlying it. They all
13 interfere with the cycling.

14 So what these compounds do is they're not direct
15 greenhouse gases, but they muck up the chemistry of the
16 atmosphere one way or another. And that chemistry
17 controls the abundance of methane, the hydrofluorocarbons,
18 and even generates ozone on a large scale. This is like
19 continental and basically over the Pacific Ocean. This is
20 a large scale production.

21 So we have our little square boxes of greenhouse
22 gases that are basically controlled in one way or another
23 by what's happening with this vast tropospheric chemistry.

24 --o0o--

25 PROFESSOR PRATHER: So what happens when we emit

1 carbon monoxide in the atmosphere? If we emit carbon
2 monoxide in the atmosphere, it becomes the sink for
3 hydroxyl radical. It also pumps up the HO2 radical.

4 When OH goes down, methane goes up. Also ozone
5 goes up. So when we put carbon monoxide out in the
6 atmosphere, indirectly we pump up the -- increase methane
7 and increase tropospheric ozone both. Those are the
8 greenhouse gases. CO is a very weak if anything rather
9 unimportant in terms of direct greenhouse.

10 So these are results which are not color coded
11 properly. CO is not green. We Ran three-dimensional
12 calculations. That was done for the last assessment in
13 2001 where we pumped in CO in the atmosphere. We watched
14 it decay. After the CO decayed out of the atmosphere,
15 which decayed in the order of months because it's short
16 lived gas, we were left with methane that lasted
17 20-something years. We're also left with a shorter term
18 increase in ozone at the bottom. So when we put CO in the
19 atmosphere, we pump up ozone and we also pump up methane.
20 These are the indirect effects.

21 Next.

22 --o0o--

23 PROFESSOR PRATHER: This is the chapter I wrote
24 in 2001.

25 --o0o--

1 PROFESSOR PRATHER: In 2007, the most recent IPCC
2 report actually quantified the methane and gave it a
3 global warming potential for carbon monoxide which was
4 1.9. Not a big GWP, but a quantifiable one. And if you
5 consider the number of tons of CO that we inadvertently or
6 advertently admit into the atmosphere, it's a fairly
7 powerful leverage in terms of controlling global warming.

8 Next step.

9 --o0o--

10 PROFESSOR PRATHER: Carbon monoxide and the VOCs
11 are easy. Why are they easy? Because in most cases
12 although there's some propylene here, we won't worry
13 about. In most cases, the impacts are all positive.
14 They're all in one direction. These gases basically build
15 up methane and build up ozone. When you add the two
16 together, you end up with two positives make a positive.
17 And air analysis and uncertainty works pretty well. These
18 gases are fairly straight forward. Most models get about
19 the same answer. There's some variable scientific
20 uncertainty still, but not so much that it would disturb
21 you about using a GWP for them.

22 Next.

23 --o0o--

24 PROFESSOR PRATHER: A minor offset, our hydrogen
25 economy is similar to CO. If hydrogen leaks into the

1 atmosphere, it does the same thing as carbon monoxide.
2 Some of it goes into the ground, but the rest does the
3 same thing CO does. It literally drives up methane and
4 ozone. So you have a GWP for molecular hydrogen release
5 into the atmosphere that's about six to nine. It's larger
6 than CO because the molecular weight of hydrogen is less
7 than CO. So per molecule basis it's actually a little
8 less.

9 Next.

10 --o0o--

11 PROFESSOR PRATHER: NOx is troublesome. And NOx,
12 aerosols, all the difficult ones. We emit nitrogen
13 oxides, NO and NO2. First thing they do is tend to
14 increase hydroxyl radical. They make more ozone. But
15 that means methane goes down. So now with NOx, we end up
16 with a weird system whereby we have a large positive boost
17 with ozone and a negative boost to the methane.

18 Next.

19 --o0o--

20 PROFESSOR PRATHER: And the pattern of behaviors
21 is also worrisome for people who worry about climate
22 change because the ozone is fairly instantaneous. This is
23 a one year 3D run of the model in the atmosphere which we
24 raised NOx levels for a year. We got regional increases
25 in ozone over those emissions periods. We enhance the

1 ozone levels. And globally we started reducing methane
2 during that one year. After we stopped the enhanced NOx
3 emissions, the ozone disappeared in again a month or two.
4 That's about the lifetime of these gases. But the methane
5 was there for another 20 years as a depressed signal.

6 So what you have is a short response of a
7 positive greenhouse gas and a long-term response
8 negatively reducing methane.

9 Next.

10 --o0o--

11 PROFESSOR PRATHER: So this is a sort of a
12 complex curve. We tried to integrate what that's doing to
13 climate. This is the integral of what we're forcing.

14 We get a fast rise. We're forcing climate. And
15 the methane lives forever and ever. So you end up with a
16 cancellation. And in this case, the model case we
17 studied, we end up with cooling. However, it warms for
18 the first 20 years and then you end up with a cooling at
19 the end. Different models have the cross over occur at
20 different places, and some of it have it be at net
21 warming, some have it be a net cooling.

22 Next.

23 --o0o--

24 PROFESSOR PRATHER: So that here's a classic
25 slide from the 2007 IPCC. The problem with NOx is that

1 there is a negative and a positive. They're almost equal
2 in almost all cases. Probably within a factor of two of
3 each other. When we subtract them, we end up with large
4 uncertainty on the product. We're getting to the noise
5 level and uncertainty level. When we add the two
6 together, they cancel and we're not happy with them.

7 The other thing that counts is it's location,
8 location, location. Surface impacts in Asia are much
9 bigger per NOx emission than they are in northern Europe.
10 The US is somewhere in the middle. And southern
11 California is probably much more towards Asia. Depends on
12 sunlight. Depends on boundary layer mixing.

13 And basically the amplification of NOx between
14 northern Europe and southeast Asia the impacts on the
15 atmosphere is probably a factor of five or more. So huge
16 effect with latitude with season. It's summertime this
17 all works. In wintertime, it does very little. So once
18 again, how would you implement this and what's the
19 strategy when it really depends on the time of day and the
20 season?

21 Next.

22 --o0o--

23 PROFESSOR PRATHER: Aerosols are even more
24 difficult. The IPCC does not give a GWP for aerosols.
25 They're cautious about it. They know they influence

1 climate, but they don't attempt to do a GWP which
2 effectively a climate forcing per unit weight of
3 emissions. They are even more time space variable than
4 NOx emissions. They are trapped in the boundary layer.
5 They can be scoured in clouds and fog or even be projected
6 in the upper atmosphere where they could have bigger
7 effects if they get out of the boundary layer. All of
8 this makes it difficult.

9 Black carbon, which has been highlighted recently
10 by many, is a very clear climate warmer. There's a little
11 pieces of soot in the atmosphere. It tends to warm.
12 However, if you get it way up in the atmosphere, you can
13 cool the surface. If you put on snow and ice, it can
14 accelerate the melting of snow and ice, which is nice
15 positive feedback, but it's never really emitted by
16 itself. And when you mix black carbon and organic carbon
17 and put them in the atmosphere, you tend to have a mixture
18 of cooling because all the organic stuff basically
19 reflects sunlight and enhances clouds reflects the
20 sunlight. So there is no real easy picture to single out.

21 Next.

22 --o0o--

23 PROFESSOR PRATHER: So if we look at the
24 aerosols, the big play is what they're doing to the
25 indirect effect. You can try to isolate what the aerosol

1 does, but we know they're influencing clouds. And the
2 latest efforts and studies show the cloud effects is
3 probably as large or equal to large cooling on top of the
4 radiated force of the aerosols.

5 Next.

6 --o0o--

7 PROFESSOR PRATHER: And with black carbon, again
8 you have a whole range. It's not clear that the published
9 GWPs that I know about do not really effect the aerosol
10 indirect effect of clouds. Most of them tend to refer to
11 pure black carbon, which doesn't exist in the atmosphere.
12 It's really coated by other things.

13 So some people made an effort. You see various
14 testimony which generally has been advocacy or viewpoints.
15 The one on the lower left you see greenhouse gas and then
16 you say fossil fuel black carbon, diesel soot particles.
17 But then you see cooling particles. Those two are
18 combined, okay. And you can't really necessarily separate
19 out the one from the other easily. If you could, it would
20 be really great. If you can use tweezers in the
21 atmosphere and pull out the black carbon, that would be
22 fantastic. But it's not that easy.

23 And again other indirect effects on the right
24 from Hanson's Modeling Group, you can play it up and get
25 bigger effects, but it's still -- I would say the

1 community has not yet assessed the universalness -- the
2 numbers that come out. We know it's important. We know
3 it's pushing the climate. But quantifiable and how
4 separatable it is from the other aerosols is not clear.

5 Next.

6 --o0o--

7 PROFESSOR PRATHER: The ozone depleting
8 substances, they're the chloroflorocarbons. They are
9 halons. They are the contained bromine or chlorine. This
10 is a list of their use. They're already being phased out.
11 The red ones are the ones that have fairly high levels in
12 the banks existing today. And the stars that I put are
13 Hydrachlorofloracarbon two and chlorofloracarbon 11, are
14 the two big ones that are sitting out there in the banks.

15 --o0o--

16 PROFESSOR PRATHER: Worldwide banks are estimated
17 again CFC 11 and 22 are the big ones. That's an estimate
18 globally. The figure on the right is the recent IPCC
19 assessment on how these gases are going to be forcing
20 climate through the next century. And because they are
21 long lived and eventually decay from the atmosphere,
22 there's still stuff coming out of these banks, which are
23 left in old pieces of equipment and whatever not being
24 recycled. There's still a forcing of about .3 watts
25 squared down to about .1 by the end of the century.

1 So they're still an important thing, but are
2 decaying. They're not the most important thing compared
3 to CO2, but still an important part of climate forcing
4 today.

5 Next.

6 --o0o--

7 PROFESSOR PRATHER: California banks. The next
8 several slides are borrowed from your research group here.
9 Thank you.

10 This is the California banks. They're about 600,
11 700 million metric tons of CO2 equivalent. Most of it is
12 existing in foams either in landfills or buildings or
13 refrigerators that have not -- these are closed cell
14 foams. They have a lifetime of 20 or 30 years before the
15 stuff leaks out, the CFCs leak out from the foam. And
16 that's probably the primary bank that's sitting out there.
17 It may still be in buildings and even in landfills. It's
18 all over. But 700 million metric tons of CO2 equivalent
19 is a lot for California. Still a fairly potent amount
20 left in terms of our greenhouse gas budget for the state.

21 Next.

22 --o0o--

23 PROFESSOR PRATHER: So this is my summary, taking
24 some numbers from your Board and putting mine in, changing
25 a few here and there.

1 One of the non-Kyoto climate forces in
2 California. Carbon monoxide, if we consider the emissions
3 and whatever, we're looking at five to 15 million metric
4 tons equivalent. Remember, CO2 is five hundred. So CO2
5 emissions and the other methane and N2O are from
6 California are about 500 million metric tons. I should
7 put that for perspective. So think of these relative to
8 the primary gases which are about 500.

9 Five to 15 for CO. Not insignificant. This is
10 an estimated reduction that can be achieved in the 2005 to
11 2020 time period.

12 Volatile organic carbons or reactive organic
13 gases, one to five, smaller than CO.

14 NOx emissions, I have zero to 20. Some estimates
15 of negative. It's a pretty small number. It's dicey.
16 Could be important, but that's a high uncertainty on this
17 one. I would say California's emissions of NOx have not
18 been evaluated seriously. They could be done so, but
19 nobody has focused on what emissions from this region are
20 doing for global ozone. Could be done.

21 Diesel particulate matter, the global warming
22 potential, again individual people have published them.
23 It's not clear whether they include the indirect effects.
24 Most do not. And so the answer for diesel particulate
25 matter is some ranges would add up to be 15 to 35 million

1 metric tons equivalent. Others might have it -- I might
2 argue might get down to zero or negative because of
3 indirect effect on clouds. It's a tough call.

4 Other particulate matter are almost always
5 negative. There's no GWP. But other particulate matter
6 tends to cool that we know of. That's the only one that
7 has soot that would be warming.

8 And we get to the ozone-depleting substances.
9 The chlorine-containing compounds, we have about 40
10 million metric tons equivalent being emitted every year.
11 The minus 50 percent on that is the decay due to the bank
12 itself. There could be more active measures taking
13 conceivably that might reduce the 40. But that's an
14 estimate of what will happen naturally if we do nothing.
15 That emission will drop in about 10, 20 years.

16 Next.

17 --o0o--

18 PROFESSOR PRATHER: So this is sort of the final
19 conclusions is how much can you get out of non-Kyoto gases
20 and aerosols and what can you be certain about. Again,
21 the ozone precursor is zero to 40. It's a net benefit.
22 You're probably doing it anyhow. Those controls are
23 clearly beneficial.

24 The diesel particulate matter could be beneficial
25 for climate or could be near neutral, depending on what

1 you control in particulate matter.

2 The other PM, again from a climate-forcing point
3 of view, we're very happy to have sulfate-emitting
4 coal-fired power plants in China because actually for the
5 first ten years they cooled the planet because they put
6 out so much sulfur. That's not what you want to know.
7 There's some desire level where the --

8 CHAIRPERSON NICHOLS: It just exposes the problem
9 of atmospheric chemistry.

10 PROFESSOR PRATHER: It's pretty bad. And the
11 ODSs, again, 40, a significant amount of emissions now for
12 California, it's not easy to get that. It's floating
13 around buildings everywhere in building insulation or
14 whatever. That's such a disbursed source.

15 Thank you.

16 CHAIRPERSON NICHOLS: Thank you. Obviously, this
17 presents a complicated picture. And I'm not sure it gives
18 us any clear direction other than to be weary of all of
19 the mixed impacts of everything that we do.

20 We have no choice either legally or I think
21 morally other than to try to move ahead with programs that
22 benefit people who breathe here on earth and try to do it
23 in a way that's also good to the atmosphere. And if I may
24 summarize a very detailed presentation, there's nothing
25 we're doing currently that you think is creating problems

1 with respect to our air pollution programs.

2 I think the question though is -- and where we
3 hear quite a bit of suggestion that we should do things
4 differently is whether we should be treating the black
5 carbon from diesel particulate as more seriously as a
6 ozone climate gas than we do, whether we should be placing
7 even greater weight on it. And as I understand the thrust
8 of your presentation is that at this point at least you
9 don't think that is a reasonable thing to do.

10 PROFESSOR PRATHER: Well, as I said, there are --
11 I've seen many testimonies here and elsewhere arguing for
12 black carbon. But I know many other atmospheric people
13 who work on all these substances and find differing
14 effects depending on where they put it, how it impacts
15 clouds.

16 That said, if you could actually take tweezers
17 and pull the black carbon out of everything, that would
18 probably be beneficial without a doubt for climate. Right
19 now given what's co-emitted and given that you don't
20 control black carbon, you control particulate emissions by
21 changing the way something operates. Those emissions have
22 other emissions besides elemental carbon coming out. That
23 makes it even harder to try to infer what the net impacts
24 will be from the climate side. From the climate side,
25 there more other things you put out that get emitted or

1 mixed with it, it's much more difficult to determine the
2 climate effect.

3 CHAIRPERSON NICHOLS: Dr. Balmes.

4 BOARD MEMBER BALMES: I guess first all of thank
5 you for the presentation.

6 I guess my point would be that we again can't
7 think about controlling greenhouse gas emissions for
8 climate change alone without considering the health
9 effects of the pollutants that are also emitted. So even
10 if we're unclear where we could get climate change
11 benefits from controlling particulate emissions from
12 diesel, other sources, we still have to be concerned about
13 the basic air pollutant health effects. And this
14 presentation just reaffirms something I've grown to
15 appreciate over the last couple of months, we just can't
16 have greenhouse gas emissions being controlled in a
17 separate silo from the regular pollutants that we deal
18 with.

19 CHAIRPERSON NICHOLS: That's a good morale.

20 Thank you.

21 Any other comments or questions? Dr. Sperling.

22 BOARD MEMBER SPERLING: You know this diesel
23 issue is a very important one. Professor Prather, you
24 probably don't know the answer. But if you do, it would
25 be great.

1 When we do a life cycle analysis for diesel
2 versus gasoline with just CO2, we come up with it looking
3 like about 20 percent better than a comparable gasoline
4 engine or so. But now if we throw in the black carbon and
5 the NOx, I guess, you know, the question would be with
6 advanced emission controls, do you have a sense of how
7 that number percentage would change? It looks like from
8 what you said it would knock a few more percents off the
9 advantage of the diesel engines.

10 PROFESSOR PRATHER: I'll evade your question by
11 saying that fortunately having grown up in atmospheric
12 chemistry and learning that what controls local air
13 quality also controls global air quality and global
14 climate forcing, we have been fortunate enough that most
15 all of these generally are co-benefits or neutral. So
16 there's a chance that the soot might be as high as people
17 say, but there's also a chance it's null.

18 If you want to view that as the uncertainty
19 removing the soot is always helpful and you might get not
20 much for it or you might get a reasonable amount. But so
21 several percentage points to dull, but there seems to be
22 no downside.

23 CHAIRPERSON NICHOLS: Okay. Thank you very much.
24 Adding to our important science information that's the
25 backdrop of what we're doing next here.

1 I think we need to shift of characters here to
2 move on to the Draft Scoping Plan presentation.

3 This item comes before us today for information
4 purposes. The staff has completed the next important step
5 in implementation of California's global climate
6 legislation. And it's really a great pleasure to be here
7 to be part of this presentation today.

8 I just got the news that Dr. Balmes and I were
9 both confirmed this morning in the Senate. It's nice to
10 know that

11 (Applause)

12 CHAIRPERSON NICHOLS: Thank you.

13 And when I got here, almost a year ago today, the
14 work on this Scoping Plan was already in progress. Since
15 I've been here, we've taken action a couple of times to
16 approve the emissions inventory, to set the targets that
17 were called for under the statute. But this is by far the
18 most significant step yet in California's effort to fill
19 the void that's left by the absence of a national climate
20 policy and to carry out the commitment that has been made
21 by our Governor and Legislature for California to lead the
22 way to being part of the solution to the worldwide problem
23 of climate change.

24 This is a plan that is sweeping and I believe
25 unprecedented in its scope and in its reach. And it is a

1 tight and very substantive document. But it also leaves
2 many questions left to be answered. Many of the details
3 of how the Scoping Plan will be implemented are to be
4 filled in between now and the time the plan comes to us in
5 a final version for adoption in November. And once we
6 have adopted a Scoping Plan, we'll still have more work to
7 do in the years that follow that in order to actually take
8 the steps that we agreed to that need to be made.

9 But this is an important point I think in our
10 history as a Board, because it really represents the first
11 time that the Air Resources Board has ventured forward
12 with a plan to deal with greenhouse gases and add that to
13 our already major list of innovative programs and
14 technology forcing and economically beneficial programs to
15 cleanup problems of health, problems of pollution that
16 threaten public health.

17 We believe that this Scoping Plan is going to be
18 an important milestone and important framework for
19 California, for other states that are interested in
20 joining. And we know that we can't do this alone. It's
21 not possible for California on its own to do more than its
22 share of reduction. But by doing our share, we will be
23 making a significant dent. And we will also be I think
24 inviting others in the world to act boldly and follow our
25 lead in combating global climate change.

1 We're certainly not the first governmental entity
2 to develop a plan or to start to make steps in this
3 direction. But I think given the size and complexity of
4 the California economy and the scope of the program that
5 we are discussing here today we truly can claim to be in a
6 leadership role here with this plan.

7 In order to make the kind of transition to a
8 clean energy economy, we're going to be doing important
9 things like reducing our dependence on fossil fuels. We
10 also are going to be taking steps to attract new
11 investment to our state and to create new kinds of jobs in
12 California as well.

13 We know based on our experience of the past
14 couple of decades that energy efficiency measures save
15 California consumers and businesses money and make our
16 state relatively resilient when shocks come in the form of
17 increases in energy crisis. AB 32, by setting California
18 ahead of the curve on climate change, we believe will give
19 our state a competitive advantage in the investment in and
20 creation of clean technology innovations and job growth
21 that will be created by this new clean energy economy.
22 And I think we're very excited about being a part of that.

23 I think the Scoping Plan also compliments the
24 ARB's historic mission in the area of public health
25 protection. Because as we heard this morning and as we'll

1 be hearing more in the hours and weeks to come, reducing
2 greenhouse gases, if we do it right, also brings with it
3 co-benefits in the form of cleaning up our air as well as
4 protecting our natural resources.

5 The reality of our situation is there is no
6 single, simple answer. We need everyone to be part of the
7 solution. And we're going to need to use every policy
8 tool in our toolbox to achieve the goals of AB 32. We
9 know the Scoping Plan only takes us to the 2020 time
10 frame, roughly 30 percent reduction over expected growth
11 in emissions over that period of time. And that we will
12 need to go further and that we will we need to take steps
13 that will help us to not only get to the 2020 goal, but to
14 pave the way for the much more ambitious goals that will
15 be ahead of us. There is a lot of work left to be done.
16 But I do think we're starting out on a very good path here
17 with this Draft Plan.

18 I want to particularly acknowledge the staff
19 members who have worked on developing it. Several of them
20 are in front of us right now. They represent a much
21 larger team of people that helped them develop all the
22 measures that are in the Draft Plan. But I'd like to just
23 particularly acknowledge Chuck Shulock and his team, Kevin
24 Kennedy and Edie Chang, John Costantino, and also the
25 deputies, Lynn Terry, Tom Cackette, and Mike Scheible and

1 of course our Executive Officer, James Goldstene.

2 These people didn't just receive and file or edit
3 things. They were in the office nights and weekends
4 writing, editing, perfecting the document to make sure
5 that we had something that not only I think reflects the
6 best thinking of the organization but also I think you
7 will agree is actually pretty well written. It actually
8 is a document that we believe will enable people to look
9 at what we think and to evaluate it.

10 And that's really what we need them to do,
11 because I think it's critical that we recognize that as a
12 draft this document will be subject to change. It will be
13 subject to criticism, certainly. We hope to get some
14 praise also. But mainly what we're hoping for is input
15 and suggestions and ideas and refinements. Clearly, there
16 are places here where we may have underestimated the kinds
17 of emissions reductions that could be achieved from some
18 measures. There are other places where we think perhaps
19 we have not been correct in assessing what could be done
20 in certain areas. So we will learn more in the months to
21 come.

22 But I think the overarching principles that are
23 presented here in terms of economy wide view of reliance
24 on flexible market-based mechanisms to achieve results in
25 every area built on a base of strong technology

1 regulations, accountability, and good accounting standards
2 are the principles that are going to stand us in good step
3 as we move forward to turn this plan into a reality.

4 So I'm delighted to introduce this item and to
5 turn it over to the staff to make the presentation.

6 EXECUTIVE OFFICER GOLDSTONE: Thank you, Chairman
7 Nichols, members of the Board.

8 Today, we will present to the Board staff's Draft
9 Scoping Plan. This draft represents an unprecedented
10 level of collaboration not only across ARB divisions, but
11 across many State agencies and in consultation with our
12 advisory committees and many, many stakeholders, some of
13 whom are here today and certainly watching on the web
14 cast.

15 The existing Climate Action Team structure
16 provided ARB with a strong starting point for this effort.
17 The Climate Action Team sector sub-groups provided
18 technical analysis that helped form the underpinnings of
19 many of the measures presented in the Draft Plan. The
20 Environmental Justice Advisory Committee, the Economic and
21 Technology Advancement Advisory Committee, the Market
22 Advisory Committee all have provided outside expertise and
23 fresh perspectives that added to the Draft Plan.

24 In addition, information from and feedback from
25 academia, the business community, environment, and

1 environmental justice organizations and other stakeholders
2 has been extremely useful. We look forward to continuing
3 these dialogues and initiating new ones in the coming
4 months.

5 In today's presentation, we will provide you with
6 an overview of the plan's concepts, preliminary staff
7 recommendations, and a process for moving forward with the
8 Draft Plan. We will also discuss the criteria that are
9 being used to evaluate the options.

10 The Draft Plan is designed not only to meet the
11 2020 goal, but to put California on a path to a clean
12 energy, low-carbon future.

13 The Draft Plan's available outside this room and
14 also posted on the ARB web page. During and after the
15 presentation, we will have an opportunity for Board member
16 questions and comment. And we've allocated ample time for
17 public comment today if people so desire.

18 Once again, I emphasize that this is only a
19 draft, as the Chairman indicated, and the Board will not
20 be making any decisions today. There's much more work to
21 be done. Even after the Scoping Plan is adopted,
22 individual measures will undergo regulatory proceedings
23 which will include additional opportunities for public
24 input.

25 Finally, I'd like to thank the staff for their

1 accomplishments and the leadership of Chairman Nichols and
2 the other Board members on helping us pull this together.

3 We're very proud of this draft, the product of
4 countless hours of many people's hard work. And we're
5 excited now to share it with you and the world.

6 With that, I'd like to ask Ms. Edie Chang from
7 our Office of Climate Change to begin the staff
8 presentation.

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

11 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

12 CHANG: Thank you, Mr. Goldstene. Good morning, Chairman
13 Nichols, members of the Board.

14 Today I'm here to give you an update on the Draft
15 Scoping Plan which we are releasing today for public
16 comment. We do not normally brief the Board on the
17 release of a draft document, but given the breath and
18 scope of our climate change efforts and the significant
19 public interest in the AB 32 program, we wanted to provide
20 you with a report on the draft and receive your input,
21 feedback, and suggestions.

22 --o0o--

23 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

24 CHANG: Climate change is one of the most serious
25 environmental threats facing the world today. And

1 California is already feeling the effects of global
2 warming.

3 In the face of a shrinking sierra snow pack and
4 rising sea levels, in 2005, the Governor set bold climate
5 change goals for California: To reduce our State's
6 greenhouse gas emissions by 1990 levels by 2020, and to
7 achieve an 80 percent reduction by 2050.

8 This commitment was strengthened with the passage
9 of AB 32, the Global Warming Solutions Act of 2006, which
10 puts California at the forefront of addressing climate
11 change. Today marks a key milestone as we present our
12 comprehensive recommendation for reducing greenhouse gas
13 emissions and moving California toward a clean energy
14 future.

15 --o0o--

16 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

17 CHANG: My presentation today will provide an overview of
18 the Draft Scoping Plan and then walk through our
19 preliminary recommendation.

20 I will also discuss measures that we are still
21 considering and the evaluations that are in progress.

22 I will finish with the next steps as we continue
23 to refine the plan into the proposal that you will
24 consider in November.

25 --o0o--

1 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

2 CHANG: The heart of AB 32 is the requirement is to reduce
3 California's greenhouse gas emissions to 1990 levels by
4 2020. AB 32 directs ARB to develop a Scoping Plan
5 describing how California will meet this goal.

6 California's climate change program is designed
7 to help California make the transition away from fossil
8 fuels, advancing ARB's mission to protect and improve
9 public health.

10 As a first mover state, California will promote
11 the development of clean energy sources, fostering
12 opportunities for economic development, and transitioning
13 our economy.

14 And as with smog programs, our technical work and
15 policy direction will provide leadership regionally,
16 federally, and internationally.

17 Perhaps most importantly, the Draft Scoping Plan
18 will set California on a firm path that sets the state on
19 a trajectory past 2020 goal to the 2050 goal of 80 percent
20 reductions.

21 --o0o--

22 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

23 CHANG: The Board has seen pie charts of emission sources
24 like this many times with respect to criteria pollutants
25 like NOx and ROG. For greenhouse gases, you can see the

1 largest emission sources from the smog world are also
2 significant contributors to the climate change problem.

3 Transportation, the cars we drive, and the fuel
4 they burn, are the largest contributor at 40 percent.

5 Electricity is the next largest source of
6 greenhouse gas emissions. As you heard in our AB 32
7 update in April, although electricity imports from out of
8 state accounts for roughly one quarter of electricity use
9 in California, they account for over half of the
10 greenhouse gas emission from electricity.

11 AB 32 specifically requires ARB to address the
12 greenhouse gas emissions from imported electricity. The
13 industrial sector is responsible for about 20 percent of
14 California's greenhouse gas emissions with agriculture and
15 commercial and residential fuel combustion also notable
16 contributors.

17 One category that you may not be as familiar with
18 is high global warming potential gases, such as
19 refrigerants and propellants. In some cases, these gases
20 are thousands of times more potent than carbon dioxide in
21 terms of the impact they have on climate change.

22 --o0o--

23 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

24 CHANG: As you can see, California's greenhouse gas
25 emissions are increasing. Our challenge under AB 32 is to

1 reverse this trend in order to achieve about a 30 percent
2 reduction from business as usual emissions in 2020.

3 Our current forecast for the 2020 greenhouse gas
4 emissions is 596 million metric tons of CO2 equivalents.
5 So in order to meet the target of 427 million metric ton
6 base line the Board set last December, we must identify
7 and achieve 169 million metric tons of greenhouse gas
8 emission reductions.

9 The last bar on the graph shows how much further
10 we must go in order to meet the Governor's goal of an 80
11 percent reduction by 2050, a reduction that many climate
12 scientists believe is necessary worldwide in order to
13 stabilize the levels of greenhouse gases in the atmosphere
14 and prevent the most dire impacts of climate change.

15 As we crafted the Draft Scoping Plan, one
16 important factor was ensuring that the recommended
17 measures help set the stage for the next generation to
18 carry on our work over the next 40 years.

19 --o0o--

20 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF
21 CHANG: I'd like to talk now about the way we developed
22 this plan. Over the last several months, ARB has worked
23 with other agencies and a wide range of stakeholders on a
24 regular basis.

25 The Climate Action Team, which consists of State

1 agencies with responsibilities related to climate change,
2 formed sector-specific sub-groups to help develop
3 strategies for the Draft Scoping Plan. ARB also
4 considered input and recommendations from the
5 Environmental Justice Advisory Committee, the Economic and
6 Technology Advancement Advisory Committee, and the Market
7 Advisory Committee.

8 We held three formal workshops throughout the
9 state, as well as 12 stakeholder work group meetings
10 focusing on economic modeling and program design issues.

11 We also held scores of sector-specific workshops
12 to discuss potential Scoping Plan measures and considered
13 input received from a public solicitation last fall.

14 Air Resources Board members and staff have
15 participated in numerous meetings, conferences, and other
16 events to discuss AB 32 and the development of the Scoping
17 Plan and to listen to ideas from the public.

18 --o0o--

19 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF
20 CHANG: The suggestions and recommendations we received
21 were vetted and evaluated by ARB staff as we developed the
22 Draft Scoping Plan.

23 I want to remind the Board that the document we
24 are releasing today is a draft. Today we kick off the
25 next phase of our stakeholder process. We are soliciting

1 comment on both the technical aspects of the draft and the
2 policy recommendations and we are requesting comment by
3 August 1st.

4 The release of this draft inaugurates a
5 three-year long process of continuous evaluation,
6 analysis, and refinement of measures and regulations with
7 full public involvement at every step.

8 At our May workshop, we presented the framework
9 for our economic, environmental, and public health
10 evaluations. Those of you who have closely followed our
11 development of this draft may recall that at that time we
12 outlined a set of core measures plus three options to
13 achieve the additional needed reductions.

14 As we've continued to talk with stakeholders
15 since then, it became increasingly evident that this
16 format presented more problems in presentation than it
17 solved.

18 For clarity, in the Draft Scoping Plan, we have
19 opted to focus on our preliminary recommendation in terms
20 of a single comprehensive approach. However, as you will
21 hear later, we are continuing to evaluate additional
22 measures that, depending upon our analysis, could still
23 become part of the proposed Scoping Plan that we will
24 release in October for your consideration in November.

25 --o0o--

1 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

2 CHANG: Our preliminary recommendation is to pursue a
3 mixed approach that incorporates market-based compliance
4 mechanisms, regulations, voluntary reductions, and fees.

5 Some of the key elements of this recommendation
6 are shown here. The first is to greatly expand on the
7 State's longstanding success with energy efficiency. The
8 Governor has called for a 33 percent renewables portfolio
9 standard, and the Draft Scoping Plan counts on emission
10 reductions from this strategy.

11 The recommendation also relies on existing state
12 laws and policy, such as the Pavley standards for cars and
13 new ones such as regulations for high global warming
14 potential gases.

15 The preliminary recommendation builds on these
16 programs with a California cap and trade program for most
17 sources of greenhouse gas emissions. This cap and trade
18 program would link with the Western Climate Initiative to
19 create a regional market. In addition, we propose to fund
20 the implementation of AB 32 through a small fee. We will
21 launch the regulatory process to establish this fee this
22 summer.

23 --o0o--

24 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

25 CHANG: This slide helps to illustrate the structure of

1 the Draft Scoping Plan. The red line shows the 2020
2 forecast for California's greenhouse gas emissions, 596
3 million metric tons.

4 When we look at only sectors that are proposed to
5 be included in the cap and trade program, we anticipate
6 512 million metric tons of emissions in 2020. The 74
7 million metric tons between the two lines are from
8 uncapped sectors, like agriculture, waste, and forests.
9 The Draft Scoping Plan recommends reductions in those
10 sectors, but not as part of a cap and trade program.

11 In order to meet our 2020 goal, emissions from
12 capped sectors can be no greater than 365 million metric
13 tons.

14 The draft plan recommends sector-specific
15 measures that would achieve a significant portion of those
16 reductions.

17 The remaining reductions would be achieved
18 through the cap and trade program.

19 Thus, sector-specific measures and the cap and
20 trade program work together to ensure that emissions in
21 the capped sectors will not be more than 365 million
22 metric tons in 2020.

23 --o0o--

24 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

25 CHANG: This table summarizes the recommended measures in

1 the Draft Scoping Plan. There is a larger and more
2 complete version of this table on page 11 of the Draft
3 Plan. This table provides the measures and the expected
4 greenhouse gas emission reductions from the recommended
5 measures, which I will discuss in more detail in the next
6 part of this presentation.

7 On this table, the emission reductions from
8 specific measures for sectors that are included in the cap
9 and trade program are shaded. As you can see, many
10 sectors are covered by both sector-specific measures and
11 the cap and trade program.

12 In the transportation sector, sector-specific
13 measures, many of which include market-based compliance
14 mechanisms, will achieve most of the emission reductions.
15 The cap and trade program provides insurance and sets the
16 stage for post 2020 reductions.

17 In the industrial sector, we propose to rely on
18 the cap and trade system for the majority of the emission
19 reductions, while ensuring that cost effective greenhouse
20 gas reductions that also achieve co-benefits are made.

21 I want to point out that we are not recommending
22 that local governments be included in the cap and trade
23 program. The emissions reductions for local government
24 are shaded because many of the emissions under their
25 jurisdiction, such as transportation and energy use, would

1 eventually be included in the cap.

2 --o0o--

3 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

4 CHANG: I will now discuss the specific measures
5 recommended in the Draft Scoping Plan. I should note more
6 detailed appendices describing these measures will be
7 available next week.

8 The Scoping Plan recognizes the important role
9 that State government must play, not simply as a
10 regulator, but as a contributor to the solution. The
11 State of California must walk the walk, and the Draft
12 Scoping Plan sets out a target for State government to
13 reduce our emissions by a minimum of 30 percent by 2020,
14 the same target called for in AB 32.

15 As an owner/operator of buildings and facilities,
16 as a purchaser with significant market power, and as an
17 employer, State government can and must lead by example.

18 State government must also identify and evaluate
19 our climate shadow, the potential climate change impacts
20 that result from government policies and decisions,
21 including our investments and long-term planning.

22 --o0o--

23 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

24 CHANG: ARB is recommending the development of a
25 California cap and trade program that links with other

1 western climate initiative partner programs to create a
2 regional market. It is important to point out that any
3 California climate change program, including cap and
4 trade, must meet all the requirements of AB 32. Under
5 this recommendation, the cap and trade program would begin
6 with large industrial sources and the electricity sector
7 in 2012, expanding to include transportation fuels and
8 commercial and residential natural gas use by 2020.

9 --o0o--

10 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

11 CHANG: The cap and trade system would impose an
12 enforceable cap beginning in 2012. The cap would decline
13 from 2012 through 2020. Beyond 2020, the decline would
14 continue to help move toward our 2050 target.

15 The State would distribute allowances, which are
16 in effect tradable permits equal to the cap. And sources
17 under the cap would need to hold allowances equal to their
18 emissions.

19 Sources that aggressively reduce their emissions
20 could trade their surplus greenhouse gas allowances to
21 firms who find it more expensive to reduce greenhouse
22 gases. But the overall cap could never be exceeded.

23 We do not have a specific recommendation yet on
24 how allowances would be distributed. In the early stage
25 of the program, it is likely that we would distribute some

1 allowances for free, but expect to transition to largely
2 auctioned allowances by 2020.

3 Offsets are surplus emission reductions from
4 uncapped or unregulated sources. To provide additional
5 flexibility, we recommend including offsets within the cap
6 and trade program, but we recommend that their use be
7 limited to ensure that significant reductions happen
8 within California. We are continuing to evaluate many
9 issues related to offsets, and I will discuss them further
10 later in this presentation.

11 As with any regulation, implementation and
12 enforcement of the cap and trade program will be key.
13 There will be strict rules for reporting emissions and
14 trades, with stiff penalties for violations. Transparency
15 in the trading process will be important to avoid market
16 volatility and manipulation. And any market-based
17 compliance system, whether as part of a more traditional
18 regulation or as part of the cap and trade system, must
19 include safe guards to prevent increases in emissions of
20 criteria or toxic air pollutants.

21 --o0o--

22 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF
23 CHANG: As I mentioned earlier, the transportation sector
24 is the largest contributor to greenhouse gas emissions.
25 And we recommend a series of sector-specific measures as

1 well as the eventual inclusion of transportation fuels in
2 the cap and trade program.

3 The largest emission reductions in this sector
4 are expected to come from the implementation of the Pavley
5 greenhouse gas standards for cars and the low-carbon fuel
6 standard. As you know, ARB is currently prevented from
7 implementing the Pavley standards. We believe that ARB
8 will ultimately be permitted to implement these
9 regulations. And the Draft Scoping Plan also relies on
10 Pavley II, the next phase of the Pavley standards.

11 If ARB is prevented from implementing the Pavley
12 standards, AB 32 requires that we achieve at least an
13 equal amount of reductions from mobile sources through an
14 alternative approach.

15 In Executive Order S-1-07, the Governor called
16 for the deployment of a low-carbon fuel standard that
17 would reduce the carbon intensity of gasoline by at least
18 ten percent. ARB is currently developing a regulation to
19 implement the low-carbon fuel standard. As part of the
20 regulatory development process, ARB is examining the full
21 fuel cycle impacts of transportation fuels.

22 The Draft Scoping Plan also identifies emission
23 reduction opportunities from additional efficiency
24 improvements for cars, aerodynamic drive train and engine
25 efficiency improvements for trucks, and goods movement

1 strategies. These programs will also provide co-benefits
2 by reducing the use of diesel and bunker fuels.

3 The Draft Plan also calls for the deployment of a
4 high speed rail system that would displace long distance
5 car and airplane trips.

6 --o0o--

7 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

8 CHANG: ARB has worked closely with the California Energy
9 Commission and the California Public Utilities Commission
10 to identify greenhouse gas reduction opportunities in the
11 energy sector.

12 The two Commissions have been conducting a joint
13 proceeding to provide recommendations to ARB on
14 implementation of AB 32 in this sector. ARB staff has
15 been working closely with the Commissions as the joint
16 proceeding has gone forward, and we will consider the
17 further recommendations that are expected later this
18 summer as we develop the proposed plan.

19 Reductions in the electricity sector rely not
20 only on the cap and trade system, but also on the
21 improvements to existing building and appliance efficiency
22 standards as well as implementation of the million solar
23 roofs program and the solar hot water heater program.

24 The Draft Scoping Plan encourages combined heat
25 and power systems that make use of both the heat and

1 electricity generated to maximize efficiency. Based on
2 the Governor's call for a 33 percent renewables portfolio
3 standard, the draft plan includes emission reductions
4 based on achieving this standard.

5 --o0o--

6 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

7 CHANG: Local governments and regional government agencies
8 are essential partners in California's climate change
9 program. The actions that local governments take
10 individually and through local and regional planning
11 agencies can reduce GHG emissions associated with
12 transportation, energy, waste, and recycling and water
13 use.

14 ARB will work collaboratively with other State
15 agencies and regional and local governments to develop
16 transportation-related greenhouse gas targets. In
17 addition, many local governments have already adopted
18 climate change plans.

19 ARB encourages all local governments to develop
20 local climate action plans and to set local goals to
21 reduce greenhouse gas emissions.

22 --o0o--

23 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

24 CHANG: Under the preliminary recommendation, industrial
25 sources are primarily regulated via the cap and trade

1 program. However, ARB is proposing to require the largest
2 stationary sources undergo audits to evaluate whether
3 these facilities can cost effectively reduce greenhouse
4 gas emissions while also providing other air pollution
5 benefits. If there are cost effective greenhouse gas
6 reductions that also provide needed reductions in criteria
7 pollutants or air toxics, ARB would be pursue regulations
8 or permit conditions to ensure the best combination of air
9 pollution reduction.

10 --o0o--

11 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

12 CHANG: A number of sectors are not recommended for
13 inclusion in the cap and trade program. For these
14 sectors, we recommend a series of sector-specific
15 measures.

16 The Draft Plan lays out a number of approaches to
17 reduce emissions of the high global warming potential
18 gases used in refrigerators, air conditioners, fire
19 extinguishers, and insulating foam. Because high GWP
20 gases have been used for years, older refrigerators and
21 foam insulation represent banks of high GWP gases yet to
22 be released. These banks are released either through
23 leakage or during the disposal process.

24 The proposed measures seek to discourage leakage
25 from new equipment and to address banks of already

1 existing equipment. ARB is pursuing regulatory
2 development for four discrete early action measures
3 addressing high GWP gases. In fact, the Board will
4 consider one of these measures limiting high GWP use in
5 consumer products later today.

6 --o0o--

7 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

8 CHANG: In the recycling and waste sector, ARB is working
9 closely with the Integrated Waste Management Board to
10 develop a landfill methane capture regulation and the
11 Waste Board's programs to encourage commercial recycling,
12 composting, and moving toward zero waste will all help
13 reduce greenhouse gas emissions.

14 Forests are unique in that they can absorb and
15 hold or sequester carbon. We must preserve forest
16 sequestration, and we propose to work with the Department
17 of Forestry and Fire Production and the Board of Forestry
18 to determine what actions will be needed to maintain the
19 current sequestration level.

20 Water use requires significant amounts of energy,
21 so more efficient use of water and water recycling can
22 help reduce energy use and greenhouse gases. The
23 Department of Water Resources is developing a plan to
24 reduce per capita water use by 20 percent by 2020. We
25 recommend establishing a public goods charge on water to

1 help fund water efficiency and recycling projects.

2 In the agricultural sector, we encourage
3 efficiency measures and the use of agricultural biomass
4 for sustainable energy production. We also encourage
5 investment in manure digesters to capture methane
6 emissions from dairies and propose to evaluate whether
7 that program should be made mandatory when we re-visit the
8 Scoping Plan in five years.

9 --o0o--

10 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

11 CHANG: As I noted at the beginning, ARB is continuing to
12 evaluate additional measures for possible inclusion in the
13 proposed Scoping Plan either in addition to or instead of
14 the recommended measures.

15 --o0o--

16 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

17 CHANG: We are continuing to evaluate a number of
18 sector-specific measures in the transportation, energy,
19 and industry sectors. These ranges from market-based
20 measures such as feebates on new cars, to even more
21 aggressive building efficiency standards that would
22 require upgrades at the time of sale, to measures to
23 reduce the amount of coal-fired electricity used in
24 California.

25 We are also considering efficiency improvements

1 at industrial sources like refineries, glass manufacturing
2 plants, and general combustion sources like boilers as
3 well as improved methane capture and carbon intensity
4 standards for cement and concrete that would apply to both
5 domestic and imported products.

6 --o0o--

7 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

8 CHANG: As I mentioned earlier, we recommend limited use
9 of offsets in a cap and trade system. However, there are
10 many aspects to offsets that ARB is continuing to explore.
11 Offsets are surplus reductions from unregulated or
12 uncapped sources. They provide an opportunity to get
13 emission reductions from activities that are not easy to
14 regulate or include in a cap and trade system. These
15 reductions must be real, additional, and verifiable. They
16 provide a mechanism for businesses and consumers who want
17 to reduce their carbon footprint.

18 Offsets can also be used to meet regulatory
19 obligations, either in a cap and trade program or in a
20 more traditional direct regulation. Before any offsets
21 can be used for compliance in the AB 32 program, ARB must
22 adopt methodologies and a regulation to verify and enforce
23 these reductions.

24 Compliance offsets can provide lower cost
25 emission reductions, which can help control the cost of

1 complying with regulations. An offset program can also
2 encourage emission reduction from unregulated sources,
3 spurring deployment of existing technology or innovative
4 new technologies.

5 The location of compliance offsets is an
6 important consideration. Allowing offsets from outside
7 California may allow more compliance costs while reducing
8 greenhouse gases and co-pollutants in areas that might not
9 otherwise experience these emission reductions.

10 However, out-of-state offsets would reduce the
11 California environmental and public health co-benefits of
12 the greenhouse gas reductions and could be harder to
13 enforce.

14 --o0o--

15 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF
16 CHANG: Carbon fees can mean two different things. One
17 would be targeted use of relatively small fees to help pay
18 for emission reduction programs, similar to the public
19 goods charges now applied to electricity.

20 ARB is also evaluating the second approach: A
21 broad based carbon fee to incent emission reductions. By
22 making low carbon fuels and low greenhouse gas products
23 cheaper than carbon-intensive fuels and greenhouse gas
24 intensive products, carbon fees can effect the choices
25 that businesses and individuals make.

1 Economic models would be used to determine the
2 appropriate fee to meet the 2020 target. But because it
3 is impossible to predict how producers and consumers would
4 react to a carbon fee, this approach provides less
5 certainty about meeting the 2020 goal.

6 --o0o--

7 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

8 CHANG: Some of the Draft Scoping Plan components I have
9 discussed today such as auction of allowances in a cap and
10 trade program, a carbon fee, or a public goods charge on
11 water, would generate revenue.

12 The Economic and Technology Advancement Advisory
13 Committee recommended the creation of a California carbon
14 trust modeled on the United Kingdom's carbon trust. The
15 UK program was established with public funding but now
16 functions as a stand-alone corporation providing
17 management and advising services to corporations and
18 businesses on reducing greenhouse gas emissions and
19 funding innovations in carbon reduction technologies.

20 The ETAAC recommended that a California carbon
21 trust should focus on funding research, development, and
22 demonstration projects, assisting promising technologies
23 to reach the market, participating in an early carbon
24 market to mitigate price volatility, dedicating resources
25 to meet the AB 32 environmental justice goals, and

1 supporting a green technology workforce training program.

2 There are myriad potential uses of revenue. This
3 slide lists several additional concepts, including
4 implementing the community benefits requirements of AB 32.
5 ARB is seeking comments on how any revenue could be best
6 be used.

7 --o0o--

8 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

9 CHANG: In developing the Draft Scoping Plan, ARB is
10 evaluating the effect of the proposed measures on
11 California's economy, environment, and public health.

12 --o0o--

13 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

14 CHANG: Based on our initial evaluation, ARB believes the
15 over all savings from improved efficiency and developing
16 alternatives to petroleum will, on the whole, outweigh the
17 costs of the plan, especially given today's high energy
18 prices.

19 The Draft Plan's emphasis on energy efficiency
20 will help mitigate any moderate increases in energy prices
21 that might result from putting a price on greenhouse gas
22 pollution.

23 More efficient homes will require less energy to
24 heat and cool, and more efficient cars will use less
25 gasoline. As an example, ARB estimates that based on

1 current fuel prices, the average new car buyer who buys a
2 car meeting the Pavley standards will save \$30 a month,
3 even accounting for the fact that the car will be
4 marginally more expensive at the time of purchase.

5 ARB is continuing to evaluate the economic
6 impacts of the Draft Plan, including economic modeling
7 that will provide more detailed information about the
8 potential impacts. The results of this modeling will be
9 released later this summer in a supplemental evaluation.

10 ARB is also evaluating the potential
11 environmental and public health impacts of the Draft
12 Scoping Plan. As a first cut at evaluating these effects,
13 we have estimated the projected reductions in gasoline,
14 diesel, and fossil-fired electricity that would result
15 from implementation of the recommended measures other than
16 cap and trade. Based on this estimate, public health
17 benefits would be on the order of \$2 billion in 2020.

18 --o0o--

19 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF
20 CHANG: ARB is continuing to evaluate the environment and
21 public health impacts of the Draft Plan and will provide
22 more detailed information this summer in a supplemental
23 evaluation.

24 --o0o--

25 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

1 CHANG: Placing a cap on carbon emissions and placing a
2 value on carbon sends a strong price signal to the market,
3 drives innovation, and provides a strong incentive for
4 investment in California's clean energy sector.

5 Our leadership in environmental and energy
6 efficiency policy has already helped attract a growing
7 share of venture capital investment in green technologies.
8 And green technology companies are already contributing to
9 California's economy.

10 Between 1990 and 2006, green tech businesses in
11 California grew by over 80 percent. And in 2006,
12 approximately 40 percent of all clean tech venture capital
13 investment was made in California, just over one billion
14 dollars. We believe that this investment will grow as the
15 need for new technology to address all elements of this
16 Draft Plan grows.

17 --o0o--

18 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

19 CHANG: As I have mentioned, ARB is still in the process
20 of completing some of the economic, environmental, and
21 public health analyses of the Draft Scoping Plan. These
22 analyses will be available over the summer. And ARB will
23 hold an additional workshop after the release of the
24 evaluation supplement to take public comment on the
25 analyses.

1 --o0o--

2 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

3 CHANG: Although the 2020 goal is ambitious, it is only a
4 weigh station on the path to 2050 and the Governor's goal
5 of an 80 percent reduction from 1990 levels.

6 The Draft Scoping Plan is designed to lay the
7 groundwork to move California to a future driven by clean
8 and secure energy sources and built around sustainable,
9 safe, and clean communities.

10 Over the next 12 years and on into the
11 foreseeable future, California will need to expand its
12 renowned research facilities to address technological
13 change.

14 We will also need to develop unprecedented public
15 outreach programs to ensure that individuals and
16 households are all given the information they need to make
17 intelligent decisions about reducing their carbon
18 footprint.

19 --o0o--

20 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

21 CHANG: Climate change is a global problem. And if we are
22 to be successful in reaching our goal of climate
23 stabilization, it will require active participation from
24 the rest of the world. California is one of the world's
25 largest economies and has always been at the forefront of

1 environmental regulation. Now we have both an opportunity
2 and the responsibility to lead.

3 California's innovative programs, such as our
4 Pavley clean car standards, have already inspired other
5 states to join our effort. As one of the founding members
6 of the Western Climate Initiative, our participation will
7 ensure a reliable, effective, and environmentally sound
8 program that achieves greater reductions than we could
9 achieve alone.

10 We are working with the federal government to
11 develop a comprehensive climate policy while ensuring that
12 we preserve our ability to innovate climate policy into
13 the future to the betterment of the country.

14 And internationally, we have co-founded the
15 international Carbon Action Partnership, where we work
16 with countries to share lessons learned, strengthening
17 both our and their programs.

18 AB 32 provides us with an historic opportunity to
19 join with other states and countries to jointly address
20 the critical challenge of climate change, and the Draft
21 Scoping Plan is designed to take advantage of this.

22 --o0o--

23 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF
24 CHANG: Over the summer we will hold a number of workshops
25 and community meetings to solicit input on the Draft

1 Scoping Plan and the supplemental evaluation starting with
2 workshops in Diamond Bar, Fresno, and here in Sacramento
3 in July. Information on these workshops is available on
4 our website.

5 We will also initiate a regulatory proceeding to
6 establish a small fee to fund our implementation of AB 32.
7 In early October, we will release the proposed Scoping
8 Plan for your consideration at the November Board meeting.

9 --o0o--

10 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

11 CHANG: The end of this year will mark the end of the
12 Scoping Plan process, but there will still be a great deal
13 of work ahead of us. AB 32 provides just two years, until
14 January 2007, for the State to complete rulemakings to
15 implement the recommendations contained in the Scoping
16 Plan.

17 Of course, we will follow our normal process in
18 developing these regulations, including extensive
19 stakeholder outreach and involvement. And as with all
20 regulatory programs, successful implementation and
21 enforcement are the key to achieving environmental
22 results.

23 ARB must continue to monitor implementation of
24 the plan. Our experience with past clean air plans has
25 proven that we will need to be flexible, innovative, and

1 creative as some technologies surplus our expectations and
2 others barely make it out of the starting gate. The law
3 recognizes that this feedback is critical and requires ARB
4 to re-visit the plan every five years.

5 --o0o--

6 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF

7 CHANG: Californians have already responded to the climate
8 change challenge. Over 10 California cities and counties
9 have signed onto the US Conference of Mayors' Climate
10 Protection Agreement, and well over 300 companies,
11 municipalities, and organizations are members of the
12 California Climate Action Registry. Many other businesses
13 are making climate change part of their fiscal and
14 strategic planning. AB 32 and the Draft Scoping Plan
15 build on these efforts.

16 We must develop a climate change program that is
17 durable and flexible. Ultimately, we must spark the
18 imagination and creativity of the next generation to make
19 California a cleaner and healthier place to live.

20 This plan is California's plan, and we encourage
21 all Californians to work with us to make it as effective
22 as it can possibly be in providing California with a
23 healthy environment, cleaner, and a chance to influence
24 the kind of world our children and their children will
25 inherit.

1 CHAIRPERSON NICHOLS: Thank you very much. That
2 was a terrific presentation, and I think it quite
3 adequately reflects the report as well.

4 I just want to add a couple of words. I
5 understand people are having trouble hearing me. Can you
6 hear me in the back of the room now? Yes. You can.
7 Great. If you missed my opening presentation, you really
8 didn't miss anything.

9 But for now I want to emphasize a point or two as
10 we transition to hearing from the people that commented
11 and also from the Board, because this is really the
12 Board's opportunity to ask some questions as this document
13 makes its way out in the world. And I know every one of
14 my fellow Board members is going to be engaged over the
15 course of the next few months. And we'll be hearing from
16 their colleagues and reaching out to constituencies in
17 their various areas as well.

18 But I just would like to add one additional
19 point. This may seem like inside baseball, but I think
20 it's important to note.

21 AB 32 assigned the task of doing this Scoping
22 Plan to the Air Resources Board. And I think the
23 Legislature in doing so did so because they believed that
24 the ARB had the technical capacity, the expertise, and the
25 history in having developed complicated programs that

1 mixed together markets and regulatory mechanisms in a
2 comprehensive way and taking on really daunting
3 challenges. And I'm very proud that we were given the
4 assignment, and I'm proud of the job that the staff has
5 done.

6 But I also wanted to note that we did this in
7 conjunction with a Climate Action Team which existed at
8 the very beginning that did some of the initial reporting
9 work that paved the way for AB 32 to be passed in the
10 first place. And that was very energetically and capably
11 led by Cal/EPA, our Secretary, Linda Adams, and her staff
12 who've also been supporting us in a variety of ways in
13 reaching out to other State agencies who are going to have
14 to be involved in the implementation of this plan.

15 This is truly an effort that's going to require
16 not only engagement from our public, but also from the
17 various branches of State and local government as well.

18 We know that not only do we need to do a better
19 job of modeling environmentally correct behavior and
20 energy efficiency at the State level, but also sometimes
21 we can be our own worst enemy when it comes to not working
22 together and sometimes in the pursuit of our individual
23 missions seemingly stepping on our own policy agendas.

24 The Governor has made it very clear that he wants
25 to see us working together to achieve the goals of AB 32,

1 that this is high priority him for, and certainly he has
2 demonstrated that up until now by giving us resources and
3 support for what we are doing here today, which has been
4 just terrific.

5 But I would be remiss if I also didn't
6 acknowledge that many other agencies including the Energy
7 Agencies, Resources Agency, the Commerce, the State and
8 Consumer Services Agency, Energy Commission, of course and
9 PUC, Board of Forestry. People have and will be
10 contributing in various ways to the implementation of this
11 program. And it's really been a remarkable team effort
12 that has led to many of the measures that are described
13 here in this plan.

14 It is ultimately the Air Resources Board's
15 responsibility. It was our task to develop the plan. But
16 many of the measures in it won't be able to be implemented
17 without action by other branches of State government. And
18 I just want to acknowledge our appreciation for the level
19 of effort that they've put into this as well.

20 So with that, I think it's probably time for any
21 initial questions or comments from Board members before we
22 go to the public. Ms. Riordan.

23 BOARD MEMBER RIORDAN: Yes. Thank you, Madam
24 Chairman.

25 And my congratulations to staff. I would like to

1 say I think you've done a wonderful job of bringing a very
2 comprehensive Draft Plan to us. And I'm very pleased to
3 say that I think it's very well done.

4 I am, as you know, concerned about our success
5 with local and regional governments, having come from that
6 sector. And I think and know that your initial workshops
7 are going to include, I'm sure, invitations to the local
8 and regional governments to participate.

9 What I am more concerned about is the future.
10 Because what occurs, Madam Chair, in local and regional
11 governments, we cycle through. Many of those people who
12 will be commenting initially for this Draft Plan may or
13 may not be on those boards later as we implement. And it
14 occurred to me through the process of the required
15 re-visiting of the Scoping Plan every five years, I am
16 encouraging you to get the commitment of those local and
17 regional governments to come back and to re-visit it.

18 I think it's a time then when you can re-educate
19 the local council members, the local boards of supervisors
20 who then make up the regional governments in large part.
21 And I just think that's very important to highlight in
22 your minds. And maybe you can get them to commit early on
23 in these initial workshops to that effort. Because I
24 think it's so very important. Because a lot of what we
25 are going to be asking them to do is significant to the

1 overall success of this plan.

2 And I just can tell you right now in five years
3 many of those people won't be present. So we've got to
4 work on a system that keeps working towards information,
5 education, and participation on the part of those new
6 local government people.

7 EXECUTIVE OFFICER GOLDSTONE: That's an excellent
8 idea. We'll make sure we build that into the plan.

9 CHAIRPERSON NICHOLS: I think as you've pointed
10 out, the amount of tons that we attribute to actions by
11 local and regional governments in the first years of the
12 program are not so large. But the plan makes it very
13 clear that we can't get to where we need to go unless we
14 start now. And these are actions that are going to have
15 to be sustained over a very long period of time. And
16 given the fact that people do come and go, that's going to
17 require constant interaction between us.

18 I think it's also worth pointing out, and I think
19 the plan does note this, that we have many local
20 government jurisdictions in California that have really
21 stepped out and done some very bold and innovative things
22 in pursuit of greener communities and energy efficiency
23 programs. And so it's going to be a new opportunity I
24 think for us to partner with some of these very creative
25 local government entities as well. It's going to be a

1 nice chance to reconnect I think around this program.

2 Other initial comments, Mr. hill.

3 BOARD MEMBER HILL: Thank you, Madam Chair.

4 I, too, want to add my congratulations and thanks
5 for the presentation and a very thorough analysis at least
6 to me, the first blush of seeing this in the Scoping Plan.

7 And I think just looking at the list of witnesses
8 today and seeing all on one side of in favor of groups and
9 speakers who I don't think have ever spoken in favor of
10 the same thing at least in my tenure here, I think that's
11 exciting to see as well.

12 One of the areas that someone coming from a local
13 air district and a concern that I have -- and I also want
14 to thank Board Member Riordan for her comments related to
15 local government. I think there's a great potential there
16 and a lot of excitement in certain areas of the state
17 related to that.

18 But in looking at the plan -- here again coming
19 from a local air district and some of the cumulative and
20 localized impacts. And I see it mentioned here in a
21 couple of areas where at least in the presentation on some
22 of the slides talking about local effects and community
23 impacts and especially with cap and trade must include
24 safe guards for regional and local co-pollutants. And as
25 we look at some of the revenue industrial sources,

1 evaluate potential to reduce greenhouse gas criteria
2 pollutants and air toxics, looking from those sources that
3 are near those communities that are mostly impacted, and
4 then looking at the potential use of revenues, I see
5 community benefits in there as well.

6 I was just wondering how much time has been spent
7 in looking at those cumulative and localized impacts in
8 the context of those neighborhoods and communities that
9 will be impacted and how we can look at some future
10 perhaps the funding source or the funding that will be
11 generated from those areas can remain in those areas
12 perhaps. And looking at placing some restrictions on
13 those facilities in the impacted areas especially related
14 to their use of cap and trade so we do get the benefits in
15 those communities that are mostly impacted from those
16 emissions. I don't know how far that has gone in the
17 development. But I certainly want to encourage and hope
18 that there is a real strong effort related to that.

19 OFFICE OF CLIMATE CHANGE CHIEF SHULOCK: And
20 we're carefully looking at all those issues. They're
21 difficult issues certainly.

22 But in the evaluation section of the plan, we
23 outline a series of activities that are underway. One
24 specifically looks at this issue of what's happening at
25 the community level. So we're committed to go forward on

1 that, and that will be part of the supplemental evaluation
2 that we're presenting. And we're getting feedback from
3 the Environmental Justice Advisory Committee on how best
4 to do that. And we'll continue to work with them as that
5 goes forward.

6 On the issue of the use of the revenues and the
7 use of the funding, we're less far along on that aspect I
8 would say, being honest. It's I think one of the big
9 issues that needs to be thought through. Between now and
10 October in this document, we tee up a number of
11 possibilities, but we're basically silent as to
12 recommending among them. And that's part of what we need
13 to do as we go forward.

14 And there are a number of proposals that are out
15 there from stakeholders as to what might be done. And
16 we've received and we are evaluating those. So there's
17 raw material to sort through. And that's part of what
18 needs to be put on the page as we go forward.

19 BOARD MEMBER HILL: I'm really encouraged by the
20 slide that discussed the health benefits or what we'll see
21 in the future. Thank you for the work in that direction.

22 CHAIRPERSON NICHOLS: Dr. Balmes.

23 BOARD MEMBER BALMES: I would just like to follow
24 up on that line of discussion.

25 I really was pleased to see slide 18, a

1 preliminary recommendation to do an audit with regard to
2 industrial sources with regard to cost effective
3 greenhouse gas reductions and that also reduce criteria
4 toxic pollutants and consider co-benefits to nearby
5 residents. I think that's very important.

6 I guess the devil is in the details about how
7 that audit is done and how the most environmentally
8 impacted communities are identified. I think there are
9 ways to do it. And at the May meeting we had here, we
10 heard one presentation from a group that's been funded by
11 the Air Resources Board to look at this.

12 But I guess I strongly encourage staff to not
13 just do audits from Sacramento, but to also engage the
14 communities about how best to identify co-benefits. I
15 think it's vital for the success of this program, which I
16 very much want to succeed, that we have that kind of
17 community support.

18 And I think staff is engaged in a process to talk
19 with communities. But it's important that the
20 communication go both ways.

21 And that slide is entitled, "Industrial Sources."
22 And I think power plants also should be audited, in my
23 opinion. I think some of the worst greenhouse gas
24 emitters in terms of power plants are also older natural
25 gas-fired power plants that probably produce a lot of

1 criteria pollutants as well. So I would encourage staff
2 to include power plants in the audit process.

3 OFFICE OF CLIMATE CHANGE CHIEF SHULOCK: The
4 industrial sort of shorthand, the actual definition is a
5 stationary facility over half a million metric tons. And
6 that actually would include power plants in the way that
7 we're envisioning this. So thank you for your comment.

8 CHAIRPERSON NICHOLS: Any other initial -- yes.

9 BOARD MEMBER SPERLING: I'd like to say I really
10 feel proud to be a Californian sitting here today and
11 seeing this. The leadership that the Legislature and
12 Governor have shown and the competence of ARB working with
13 all the other agencies and putting together a plan.

14 And I want to say that I think, you know, people
15 have said this it is well done and so on. But I think
16 it's much more than that. It's sophisticated in terms of
17 thinking through strategically where are the
18 opportunities, how to go about it in a way that will be
19 most cost effective, learning from the past.

20 And it has some key features that I applaud. It
21 really relies a lot on developing durable frameworks. And
22 this means setting in place processes that are going to
23 last beyond this weight station -- I like that term -- of
24 2020. But into the future. And that's important because
25 it sends a signal to everyone, individuals, to businesses,

1 to local government about what this path is and what needs
2 to be done to move into this future, this low-carbon more
3 energy-efficient future that we're envisioning and
4 planning for. And so there is a lot of learning.

5 This is, you know, coming from the academic world
6 where we study policy analysis from the past, there's a
7 lot built into this, a lot of learning from the past. And
8 the use of durable framework, use of performance
9 standards, we've learned that government is not -- we
10 don't know exactly how to do everything, how exactly
11 everything should be done. And so the idea of creating
12 these frameworks and these performance standards is really
13 something that is very important and a very important part
14 of this whole plan.

15 And so when I look at, for instance, the
16 transportation sector that I know best, the Pavley program
17 which really is based upon performance standards and the
18 idea of adding even more to it, the idea of feebates which
19 I'm a very strong supporter of because it provides -- it
20 aligns the market forces better with these regulations
21 that we're talking about. The regulations are flexible to
22 start with. But adding the feebates aligns it even better
23 with the market forces.

24 The low-carbon fee standard, which is not -- you
25 know, there is this whole debate about using commands and

1 control or regulations versus market. But in fact most of
2 what's here is hybrids of all of this. In many ways, it
3 is a false dichotomy. And the low-carbon fuel standard
4 would be an example. It is a performance standard, but it
5 allows some trading. So it's using market forces and
6 built upon regulations.

7 Now, the one part where I personally think, you
8 know, the plan could be a little more assertive -- many of
9 you already know what I'm going to say -- is following up
10 with what Ms. Riordan said. But I would take it further.
11 And that is with the local government and vehicle travel
12 and land use. Clearly, there is -- land use especially is
13 a prerogative of local governments and we can't be and
14 shouldn't be telling them how to do it following the same
15 idea that we don't know what the best way to do it is.
16 Local governments need to be taking a leadership on that.

17 But what we haven't done here and what I would
18 encourage us to be thinking about in the coming months is
19 how to create some of this durable framework I've been
20 talking about that does send signals to local governments
21 and regional governments and, you know, using incentives,
22 you know, being flexible, but really providing hard
23 targets that they can and will be responding to. And this
24 is going to take time. You know, this is not a plan for
25 2012 in this case. This is something that is for the long

1 term. But you have to start putting it in place soon if
2 you want the changes later.

3 So I just want to add my compliments to the staff
4 really for a superb effort. And part of that is the
5 partnerships also, as Chairman Nichols mentioned and
6 others. The plan of course represents a partnership of
7 working with other agencies and a lot of consultation.
8 But in fact the implementation is going to require much
9 more so of these partnerships. It's only going to work if
10 individuals understand it, buy into it. If businesses
11 understand it and buy into it.

12 We can do this in a very cost effective way. And
13 I am also convinced we can do this in a way that is
14 economically beneficial to the state as well as
15 environmentally. But that won't be easy and it will
16 require a lot of engagement and a lot of working together
17 because what we're really talking about is innovation. If
18 that's one word we should take away that's really the key
19 to this it's innovation. And it's innovation not only in
20 terms of making new gizmos but also in terms of behaviors
21 and institutions. So congratulations.

22 CHAIRPERSON NICHOLS: Thank you.

23 Dr. Telles.

24 BOARD MEMBER TELLES: I just had a question on
25 public health benefits, slide 28. Are those estimates --

1 is that a yearly estimate? Once you get up to 2020, is
2 that 345 say per year?

3 PROGRAM PLANNING AND MANAGEMENT BRANCH CHIEF
4 CHANG: Those are estimates for the year 2020 based on
5 emission reductions in that year.

6 BOARD MEMBER TELLES: And my comment is that's a
7 very significant public health benefit. The reduction of
8 morbidity and mortality as well as a reduction of the
9 health care cost.

10 I have one question in regards to the
11 coordination with -- I represent San Joaquin Air Pollution
12 Control District. And the coordination with the pollution
13 control districts is there -- what is going on there? And
14 one of the concerns I have there is I see a potential for
15 duplication of effort, whereas some of the air pollution
16 control districts maybe like in our area the district
17 wants to develop a carbon bank. And I just don't see how
18 that can be done without a serious coordinated effort with
19 the CARB.

20 CHAIRPERSON NICHOLS: Well, let me start, because
21 Mr. Goldstene and I met actually with the Air Pollution
22 Control Officers Association yesterday to brief them as
23 part of the release of this report. And we have had some
24 conversations about this issue.

25 There's obviously a lot of desire on the part of

1 the districts to participate in this program. I think
2 there's clearly work that needs to be done by both sets of
3 agencies. The districts are significant repositories of
4 information, data about the sources within their own
5 regions, the stationary sources. They collect a lot of
6 emissions data. And I think it's important that we
7 utilize that capacity and build on what's out there.

8 There's also a lot of creativity and desire to be
9 pioneers as well because we are on the brink of a new way
10 of thinking about air pollution that really encompasses
11 greenhouse gases and efficiency concepts in ways that the
12 traditional air programs of the past did not. So we need
13 to be in close collaboration as we do it.

14 I am concerned, as you've indicated, about the
15 possibility for confusion, duplication or even undermining
16 to some extent our ability to work effectively if we have
17 a patchwork of different programs around the state. We do
18 need a coordinated state program. But even as a said that
19 word patchwork, I'm thinking to myself we often suffered
20 from the same kind of apprehensions when we're dealing
21 with the federal government and the federal government
22 would like to see all the states lining up and doing
23 things exactly the same way.

24 So clearly there are going to be areas where
25 locals and regional entities are going to want to take

1 different approaches based on their unique geographical
2 demographics, socioeconomic concerns and interests. Local
3 land use is a sacred prerogative here in California. And
4 no matter what the State does to set standards, goals,
5 targets or whatever we call them, I don't think we're
6 going to do much to interfere with that.

7 So we have to kind of strike a balance here
8 between encouraging innovation that will bring forward the
9 best ideas and not stepping on it, yet at the same time
10 not sending so much confusion particularly in areas of
11 basic services, the infrastructure of our state, which
12 would certainly include electric power and fuels and so
13 forth that we end up not being able to get the benefits
14 that we all see coming from this plan. So that is going
15 to be one of the areas that we're going to have to work
16 very hard I think in the coming months to really get right
17 as we develop the final plan.

18 Did you want to add anything, Mr. Goldstene.

19 EXECUTIVE OFFICER GOLDSTENE: We are at the staff
20 level working very closely with the air districts, their
21 association, their work groups to make sure that we do
22 avoid duplication or confusion.

23 BOARD MEMBER TELLES: Currently, the air
24 districts don't have any funding to do this. So one of my
25 concerns locally was whenever the air districts moves into

1 this area, which I think they should, they'll divert
2 resources to working on this and pay less attention
3 perhaps to some of their primary goals of reducing air
4 pollution.

5 EXECUTIVE OFFICER GOLDSTENE: We're aware of that
6 too. We want to make sure that doesn't happen as well.

7 CHAIRPERSON NICHOLS: If there are no one more --
8 okay.

9 BOARD MEMBER BALMES: Just one short comment. I
10 wanted to support Professor Sperling's comments about land
11 use and vehicle miles traveled, because there is a public
12 health benefits side as well as a climate change benefits
13 side to that. If we really want to make a difference for
14 the future in terms of air pollution and health effects,
15 we also have to change land use approaches.

16 CHAIRPERSON NICHOLS: Dually noted.

17 Okay. Let's hear now from people who have asked
18 to come and speak with us. We have about 20 speakers who
19 have signed up, and we'll just call them in order. We'll
20 give you each three minutes.

21 We'll start with the esteemed co-Chair of our
22 ETAAC Committee, Bob Epstein, of Environmental
23 Entrepreneurs, followed by Laurie Wayburn from Pacific
24 Forest Trust, and Chris Busch from the Union of Concerned
25 Scientists. If people would be ready to come forward when

1 it's your turn, we would appreciate it. Thank you.

2 MR. EPSTEIN: Thank you, Chairman Nichols and
3 members of the Board. I'm Bob Epstein, of E2 and Vice
4 Chair of the ETAAC Committee.

5 Want to say how pleased I am overall with the
6 report, but I want to take this opportunity to make three
7 points I'd like to.

8 One is the process. I think the report reflects
9 all of the public comment that occurred. And I just think
10 that's one of the strengths of this is that it reflected
11 so many people different opinions. And I would contrast
12 that with Congress, but won't go into details. And also
13 mention that the ETAAC Committee has scheduled a meeting
14 for the 31st to provide additional feed back.

15 Secondly, I do recommend the report when it talks
16 about fees, it doesn't really clarify how that relates to
17 auction income, whether this is a supplement or
18 additional. That was the only part of the report in the
19 first reading I couldn't follow. The rest of it was easy
20 to follow.

21 And lastly, I would like to make a general
22 comment that a number of members of the public and the
23 Legislature have expressed concerns that during a time of
24 economic stress this isn't the time to look at something
25 like this. I suppose they have a different time in mind.

1 I don't know when that would be. But I suggest this
2 report is actually a remedy to high energy prices as
3 opposed to something that would make it work.

4 So my congratulations to the. Staff and I look
5 forward to helping you complete the report.

6 CHAIRPERSON NICHOLS: Thank you very much.

7 Laurie Wayburn, then Chris Busch, and Patricia
8 Monohan.

9 MS. WAYBURN: Thank you, Chairman Nichols,
10 members of the Board.

11 I want to commend and you most particularly your
12 staff for producing a truly remarkable document. I
13 particularly also want to thank the staff and commend them
14 to you for the very honest respectful and thoughtful way
15 in which they have engaged in this process.

16 And I want to commend this report for taking such
17 critical steps in advancing the role that forests can
18 played in achieving the goals of AB 32. You've built in a
19 remarkable way on the decisions you made in October to
20 market the climates benefits of forests by including the
21 monitoring and the mitigation aspects for this sector.
22 Forest, as you know, cover roughly a third of the state
23 and they provide enormous climate benefits in addition to
24 their units of carbon. Those are in, for example, their
25 cooling impacts in cool weather, increasing of

1 precipitation through fog drip and cloud drip, retaining
2 snow pack as we worry about it diminishing.

3 And so in addition to the unitary benefits which
4 I think you've taken a cautious approach to estimating in
5 this plan, they also have these co-benefits. So the
6 mitigation impact of preventing emissions from conversion,
7 increasing sequestration through restoring our forests,
8 avoiding the use of fossil fuels by deploying alternative
9 energy sources of woody biomass as both biopower and
10 biofuels, and also in reducing energy costs by cooling
11 cities. These are all key elements forests can play. I
12 simply want to say we look forward very much to working
13 with you in this next period of time to finalize the plan.

14 And finally just in the roll of adaptation, this
15 has been an area of significant discussion around AB 32,
16 how will this state adapt to climate change, which many of
17 you believe has already started. And we know that the
18 more natural and robust our natural systems are, the more
19 they will be resistant to climate change.

20 As such, I want to particularly your flagging of
21 the role of the Resources Agency in addition to that of
22 the Board of Forestry in working to develop the monitoring
23 and helping shape the implementation of AB 32. Because
24 what we do know is that the more natural and robust our
25 forests are, the more they can sustain us in climate

1 change and be effective forces in mitigating climate
2 change.

3 Overall, I'm just enormously impressed at this
4 effort as we work at various state and regional and
5 federal levels. I can say the broad acknowledgement of
6 the role of ARB as being a superb agency is only affirmed
7 but what you've done today. Thank you.

8 CHAIRPERSON NICHOLS: Thank you very much.

9 Next, Chris Busch, Patricia Monahan, and Susie
10 Berlin will be after that.

11 MR. BUSCH: Hi. I'm Chris Busch with the Union
12 of Concerned Scientists.

13 Chairman Nichols, esteemed Board and staff,
14 thanks for your hard work on this draft. And it's an
15 exceptional step forward in our view.

16 Clearly, the message is that the time for delay
17 is long past and now is the time for California
18 leadership. And California has shown time and again that
19 we can clean up our air and grow our economy at the same
20 time. And that's I think top line message that we see in
21 this draft as well and we wholeheartedly agree.

22 California attracted \$1.8 billion in clean energy
23 and venture capital investment in 2007, more than all of
24 Europe combined. I think in the draft I saw the 2006
25 number of one billion, but the growth from 2006 to 2007 is

1 remarkable and notable.

2 By rising to the challenge, we feel that
3 California can gain an advantage in these rapidly growing
4 global energy markets, clean energy markets, and we can
5 also help the rest of the world by providing the global
6 warming solutions that the world needs.

7 My colleague, Patricia Monohan, will talk about
8 our unreserved enthusiasm for the regulatory -- some of
9 the other regulatory aspects of the plan. I'm going to
10 make a few specific comments on the cap and trade
11 component, which we feel is a step in the right direction.

12 Clearly, one element of getting that right will
13 be continued leadership by California to ensure that the
14 result is a strong western climate initiative.

15 Few specific design elements. On offsets, we
16 urge an abundance of caution. These are difficult to
17 quantify and clearly meeting the requirements of AB 32
18 that they be real, enforceable by CARB, verifiable, et
19 cetera, is going to be challenging. And also the issue of
20 what exactly the limit is going to be will be important in
21 terms of ensuring the innovation and co-benefits capture
22 that we hope will be the end result.

23 On the issue of auctioning, it looked to me like
24 the recommendation, if I read it correctly, was to start
25 with less than 50 percent auctioning because there was a

1 reference to transitioning to a majority auctioning. If
2 that's so, we think that will be important. We think
3 auctioning is a key element of a plan that maximizes the
4 public interest in this program.

5 We are encouraged by the broad scope that's
6 mentioned in the program, 85 percent coverage. We hope
7 that can be achieved as soon as possible if not at the
8 outset.

9 One clarifying question I have is on the page 19,
10 there is a reference to a limit on offsets such as 10
11 percent of the compliance obligation for an individual
12 firm. I'm wondering is that ten percent -- I understand
13 that's illustrative, not decided. Is that ten percent of
14 emissions or ten percent of the reductions? I'm trying
15 to -- because those are very different numbers.

16 CHAIRPERSON NICHOLS: I'll ask the staff to
17 respond. Your time is up. I'm not sure who should take
18 that.

19 OFFICE OF CLIMATE CHANGE CHIEF SHULOCK: Ten
20 percent of the allowances. Ten percent of the emissions.

21 MR. BUSCH: Okay. That would be in our view
22 fairly expansive and more than we would hope to see.

23 CHAIRPERSON NICHOLS: Okay. Thank you.

24 Ms. Monahan and then Susie Berlin and Derek
25 Walker.

1 MS. MONAHAN: Good morning and thank you. My
2 name is Patricia Monahan. I'm the director of the
3 California office of Union of Concerned Scientists.

4 And as Chris said, we're doing a little bit of
5 the bad cop, good cop here.

6 I'd like to express my unreserved applause to the
7 California Air Resources Board for stepping up to the
8 plate and really providing leadership on global warming.
9 The science on global warming is clear, and now is the
10 time for solutions. This is the most ambitious and
11 visionary plan any state has produced thus far in the
12 fight against global warming. As energy prices skyrocket,
13 consumers need real alternatives that sip rather than
14 guzzle and are homegrown rather than imported. We can't
15 drill our way out of this crisis. We need investment in
16 the future.

17 Now I'd like to discuss two specific elements of
18 the Scoping Plan, the 33 percent renewable portfolio
19 standard and feebates. We strongly support increasing our
20 renewable energy supply to 33 percent demand by 2020.
21 More renewable energy is going to lead to more green jobs
22 and more greenbacks for Californians. Diversifying the
23 state energy supply will protect against rising and
24 volatile fuel prices and help consumers save money.

25 Now a few words about feebates, which we like to

1 call the California clean car discount. It's a little bit
2 more of an optimistic way to characterize it. This
3 program would create one-time rebates and surcharges on
4 new passenger vehicles and trucks based on their emissions
5 of global warming pollution. This is a no regrets policy
6 that will put cleaner cars in the hands of consumers and
7 cut emissions. Consumers will save thousands of dollars
8 in operating costs over the lifetime of the vehicle.

9 Research by the University of Michigan shows that
10 in conjunction with California's current vehicle
11 greenhouse gas standards, a fully implemented clean car
12 discount program can reduce global warming pollution from
13 the tailpipe of new vehicles by an additional 21 percent.

14 In conclusion, I'd like to voice our support for
15 regulations like the renewable portfolio standard and the
16 clean car discount that can dramatically cut emissions
17 from electricity and transport. California has learned a
18 lesson or two from Detroit. You can drag your feet and
19 fall behind like the big three auto makers, or you can
20 rise to the challenge and make money through green tech
21 solutions. Thank you.

22 CHAIRPERSON NICHOLS: Thank you.

23 Susie Berlin.

24 MS. BERLIN: Madam chair, members of the Board,
25 my name is Susie Berlin. And I'm speaking for the

1 Northern California Power Agency.

2 And we'd like to also echo our voice in support
3 of staff's proposal and the Herculean effort that went
4 into putting together this preliminary Scoping Plan. And
5 I did emphasize preliminary, because as everybody has
6 noted, there's still a lot of work we need to do
7 regardless of how much we've accomplished.

8 NCPA is very supportive of the recognition that
9 energy efficiency and renewable resources will play a
10 pivotal role in effecting the total statewide reduction.
11 And we continue to believe the majority of the reductions
12 can be achieved via a programmatic measures rather than
13 market-based mechanisms and that the programmatic measures
14 are the ones that are going to result in the most real and
15 permanent reductions that are going to be necessary to
16 achieve not just our 2020 goals, but the 2050 goal.

17 NCPA is also extremely supportive of the intent
18 to design a regional program for cap and trade. Failure
19 to design a forward-moving and forward-thinking California
20 program will only result in either needless delays in
21 transitioning to broader based emissions reduction
22 programs or a California-only program that is irrelevant
23 and ineffectual down the road.

24 NCPA believes the WCI is a good place to start
25 for the development of the cap and trade, but we think

1 it's imperative that we all take note of how far along the
2 CWI is in their process. The May 16th draft design
3 recommendations they're currently working on revising
4 based on stakeholder input is silent on a number of key
5 issues, including basis for the recommendation that there
6 should be 25 to 75 percent auction. There are no details
7 regarding how the auction will be structured, who will
8 have governance over the auction, how market manipulation
9 concerns will be addressed, and importantly how
10 distribution of the proceeds will be handled.

11 It's also completely silent on how allowances
12 will be allocated for that portion of the market that's
13 not included in the auction. These are all critical
14 issues that must be thoroughly addressed and resolved
15 before we can move forward with the implementation of AB
16 32.

17 We'd also like to stress the importance of the
18 process. This process has been wonderful. CARB staff has
19 been very open to stakeholder meetings. The outreach has
20 been great. And the draft report reflects a number of
21 stakeholder positions. However, we're working within a
22 constrained time line. And the closer we get to our 2011
23 deadline to have regulations in place and not just a
24 Scoping Plan, the less time we have to discuss and receive
25 stakeholder input.

1 And like I mentioned, there are certain key
2 issues that are still outstanding. Auction structure and
3 governance and manipulation are huge concerns to us as
4 well as the distribution of auction revenues and
5 allocation of allowances outside of the auction regime.
6 NCPA cautions a resolution of these matters must not be
7 pushed so far out into the future that the opportunities
8 for meaningful public participation is hampered or
9 minimized --

10 CHAIRPERSON NICHOLS: Thank you. Your time is
11 up.

12 MS. BERLIN: Thank you very much?

13 CHAIRPERSON NICHOLS: Derek Walker, Audrey Chang,
14 Diane Bailey.

15 MR. WALKER: Good morning. My name is Tim
16 O'Connor from the Environmental Defense Fund here
17 representing Derek Walker.

18 Madam Chair, members of the Board, CARB staff,
19 I'd like to stand before you today and issue a clear
20 statement of support for what you've released today. It's
21 truly a remarkable endeavor, and we look forward to
22 working with the staff as you develop the suggested
23 solutions further, including as Dr. Sperling recommended,
24 further development of measures regarding land use and
25 transportation demand reduction.

1 This plan has indeed highlighted a wide array of
2 tools available to us now as well as incorporating
3 market-based mechanisms to drive the innovation needed to
4 bring California to 2020 and beyond toward climate
5 stabilization.

6 As I attempt to channel Derek Walker today, I'd
7 like to issue a quote from him.

8 "The nations of the world will gather in
9 Copenhagen in less than 18 months and endeavor to
10 finalize a global climate treaty. All parties
11 are intently focused on the United States.
12 California is at the epicenter of domestic
13 climate action now that the federal climate
14 legislation is on hold. We have seized the
15 opportunity for leadership on the issue of global
16 warming and committed to historic action to
17 combat its harmful impacts with the plan you've
18 released today. The world is watching, and we
19 cannot delay implementation of AB 32."

20 Thank you.

21 CHAIRPERSON NICHOLS: Thank you.

22 Audrey Chang, Diane Bailey, and Bruce McClaughlin
23 after that.

24 MS. CHANG: Good morning, Madam Chair and members
25 of the Board. I'm Audrey Chang with NRDC.

1 We really commend CARB on a great start for
2 laying out the blueprint for implementing AB 32 and really
3 developing the first ever comprehensive binding statewide
4 plan to limit global warming pollution.

5 In this hot and smokey summer, the need to act is
6 even more apparent, and we can't afford to waste any time.
7 California really does need to keep racing to beat the
8 clock, because scientists do say we have a limited window
9 of opportunity.

10 We support the approach of the Draft Scoping
11 Plan's package of complementary cost effective policies to
12 reduce global warming pollution throughout all the state's
13 sectors. As a Draft Plan indicates, there is no one
14 silver bullet policy tool to achieve AB 32's goals. We
15 need a mix of regulations and incentives, markets, and
16 fees, basically a comprehensive package of policies that
17 take advantages of the strengths of each individual tool.

18 The final Scoping Plan must include aggressive
19 action now to put the State on a path to meet the deep
20 emission cuts necessary by 2050 and put California well on
21 the path to clean energy economy.

22 We appreciate CARB's careful and thoughtful
23 approach and open public process to date. We will review
24 the Draft Scoping Plan more closely and look forward to
25 the release of the detailed appendices. We look forward

1 to working with other CARB and other stakeholders in the
2 coming months to further strengthen and finalize the
3 Scoping Plan as well as the years ahead to actually put it
4 into action.

5 With the continued vacuum in Washington, D.C.,
6 California's leadership continues to be urgently needed to
7 provide a model for other states and nations. We are
8 confident that we'll be able to strengthen our economy
9 while combating global warming, improving public health,
10 and improving air quality in low-income communities.

11 To talk more about that, let me introduce my
12 colleague Diane Bailey who will talk about a report
13 recently released this week hot off the presses about the
14 opportunities we have to improve public health along with
15 combating global warming.

16 CHAIRPERSON NICHOLS: Thank you very much.

17 Ms. Bailey.

18 MS. BAILEY: Thanks. Good morning, madam chair,
19 members of the Board and staff. My name is Diane Bailey.
20 I'm a scientist with the Natural Resources Defense
21 Counsel.

22 As my colleague Audrey stated, we're here today
23 in very strong support of this draft plan and very much
24 appreciate all the hard work that went into this plan.

25 I want to note we're particularly appreciative of

1 some of the measures that have been more recently included
2 and highlighted, including goods movement, efficiency
3 improvements, and some of the industrial measures covering
4 cement and concrete, refineries, oil and gas extraction,
5 glass plants, and industrial boilers. These are very
6 important, because as you know, many of these sources are
7 currently concentrated in low income areas and communities
8 of color and also contributing to high health risks in
9 those areas. So it's really critical to include direct
10 regulations on these facilities to ensure health
11 protections in those areas.

12 And as my colleague noted, we recently released a
13 paper outlining some of the health benefits of these
14 measures entitled, "Boosting the Benefits." And we're
15 very appreciative of the inclusion in this Draft Plan of
16 estimates on the health benefits from this plan. However,
17 we believe the health benefits may be double what was
18 included in this draft. And that's up to 700 premature
19 deaths avoided by 2020 -- or in the year 2020 alone and up
20 to 20,000 cases of asthma and respiratory illnesses. And
21 that amounts to up to five billion in health cost benefits
22 in 2020. And we hope that these cost benefits from
23 avoided health impacts will be accounted for in all the
24 measures. We think that's really key to incorporate.

25 I very much appreciate some of the comments from

1 Board Members Dr. Balmes and Supervisor Hill and Dr.
2 Telles about the importance of maximizing health benefits
3 and ensuring equal health protections in currently impacts
4 communities. And we look forward to working with staff to
5 ensure that in the coming months and strengthening
6 measures.

7 I also wanted to note that there are strong
8 public support for these concepts as noted in the recent
9 California survey that about 80 percent of people rank
10 reducing air pollution as a very important or extremely
11 important benefit tied to this plan and expect to see
12 those improvements.

13 And so just want to thank you once again for your
14 hard work on this plan as you embark on this important
15 work. Thank you.

16 CHAIRPERSON NICHOLS: Thank you very much.

17 Bruce McCloughlin, followed by Bud Beebe and
18 Bonnie Holmes-Gen.

19 MR. MCCLAUGHLIN: Good morning, Madam Chair and
20 members of the Board. My name is Bruce McCloughlin. I
21 represent the California Municipal Utilities Association.
22 And I have three points I want to state this morning:
23 Unity, diversity, and collaboration.

24 On the point of unity, the public power sector
25 which we represent is highly supportive of the goals of AB

1 32. We are highly supportive of the programmatic approach
2 on energy efficiency and renewable power and increasing
3 both of those. And we are highly supportive of the
4 regional or national approach if in fact some sort of
5 market-based system is implemented.

6 As far as diversity, we are incredibly diverse.
7 We have everything from the large LA DWP to the very small
8 utilities. Some of them are powered by 100 percent
9 electric power.

10 So as far as diversity, we believe that this plan
11 should be able to incorporate that diversity and drive
12 decision making down to allow these utilities to make the
13 best decisions for their rate payers and low income
14 customers and et cetera. We believe they have the
15 knowledge to do that and that auction revenues which are
16 very scary thing for us should be left as much as
17 possible. We prefer 100 percent in the hands of those
18 utilities to make cost-effective achievements and achieve
19 those AB 32 reductions.

20 And lastly, collaboration. Through the mandatory
21 reporting process, your staff has been fantastic. Every
22 single staff member that I've met, and there have been
23 dozens, all the way to the top has been professional.
24 They have opened up their time and offices to us. We have
25 had many meetings. They have incorporated the reasoned

1 information that we've given them, put it into mandatory
2 reporting, and we expect that's going to happen going
3 forward here. This seems to be a evidence-based Board and
4 we're looking forward to collaborating with you fully.
5 Thank you very much.

6 CHAIRPERSON NICHOLS: Thank you for that.

7 Bud Beebe followed by Bonnie Holmes-Gen

8 MR. BEEBE: Good morning. My name is Bud Beebe.
9 I'm with the Sacramento Municipal Utility District. SMUD
10 is the publicly-owned electric utility for supplying
11 electricity to Sacramento, and we certainly congratulate
12 the Air Resources Board and the staff for an on-time
13 delivery of what is really an important milestone in the
14 long march to fight global warming.

15 Electricity will play a pivotal role in this
16 fight, because it offers society an energy resource that
17 by its nature is compatible with the low-carbon goals of
18 AB 32 and critically the near-zero carbon vision of
19 California's future.

20 Currently, the production of electricity causes
21 less than a quarter of California's greenhouse gas
22 emissions. But as a percentage of total emissions, this
23 is really much lower than almost all the other parts of
24 the country, but is still a substantial opportunity to
25 reduce emissions from greenhouse gases and one that SMUD

1 has been working on for some time. One that the core
2 programmatic elements that are written into the plan will
3 amply target.

4 SMUD and electricity are available to supply
5 energy for the future. Energy that is compatible with the
6 future. Energy that is compatible not only with the
7 short-term goals of 2020 -- that sounds strange, doesn't
8 it -- but for the electric utility industry in which we
9 deal in decades worth of infrastructure change. The
10 short-term goals of 2020 can be met with this plan. And
11 electricity will be a partner in that. And certainly
12 electricity will be a partner and SMUD will be a partner
13 in reaching the goals for California's very low carbon
14 future. Thank you very much.

15 CHAIRPERSON NICHOLS: Thank you. Appreciate your
16 comments.

17 Bonnie Holmes-Gen followed by Shankar Prasad and
18 Cathy Reheis.

19 MS. HOLMES-GEN: Madam Chair, Board members,
20 Bonnie Holmes-Gen with the American Lung Association of
21 California.

22 And the American Lung Association applauds the
23 California Air Resources Board today for your tremendous
24 dedication and effort to bring this Draft Scoping Plan to
25 the Board. The Scoping Plan is the first key step toward

1 moving our society toward a clean and sustainable energy
2 economy and making much needed progress towards clean and
3 health air.

4 We strongly oppose any calls for delay in our
5 mission to reach our AB 32 goals. Without dramatic
6 changes in our society and economy to reduce global
7 warming, California's already severe pollution problems
8 will only get worse and health costs will continue to
9 mount as you have indicated with your preliminary estimate
10 in your report. With asthma at epidemic levels and
11 thousands of premature deaths and hospitalizations and
12 illnesses caused by pollution each year, we must move
13 forward quickly.

14 The American Lung Association appreciates that
15 the Draft Scoping Plan incorporates many strong and
16 forward-looking elements and we are especially pleased to
17 see the significant commitment to renewable power
18 production with 33 percent RPS goal.

19 As the Board moves forward towards public
20 discussion and further refinement of the Draft Scoping
21 Plan, we urge the Board to ensure that the plan is solidly
22 based on the premise of public health protection. We
23 believe that protection of public health should be the key
24 test that's applied to all the various policy tools and
25 strategies that are part of the Scoping Plan, and we look

1 forward to the additional work you'll be doing to better
2 evaluate and quantify the public health benefit.

3 We'll be looking at three key elements with
4 regard to public health. We'll be looking to see that
5 you're ensuring the plan is continuing to move towards
6 faster progress of our state's clean air commitments, our
7 smog and partical pollution, looking to see that the plan
8 maximizes the air quality and public health co-benefits of
9 all the regulations and strategies, and to see that the
10 plan pays particular attention to measures that can
11 achieve early reductions and improve air quality in
12 communities that are suffering the most.

13 I would like to note that we believe a strong
14 emphasis on public health protection also calls for a very
15 cautious approach to include any market-based measures.
16 We believe these measures should be limited in scope,
17 carefully designed to provide real quantifiable
18 reductions, maximize criteria pollutant benefits, provide
19 near-term benefits to communities, strong enforcement
20 program. And we believe emissions should not be allocated
21 for free.

22 Finally, I'd like to comment. We believe the
23 Board should commit to stronger measures in the
24 transportation sector. We look forward to working with
25 you on those. And we support strong regional greenhouse

1 gas reduction targets to ensure that regional and local
2 governments step up their efforts to change land use
3 patterns, support transportation alternatives, reduce
4 vehicle miles traveled. And we appreciate the Board's
5 comments on those key areas.

6 Thank you for the opportunity to comment.

7 CHAIRPERSON NICHOLS: Thanks.

8 Shankar Prasad and then Cathy Reheis and Stuart
9 Cohen.

10 MR. PRASAD: Good morning, Madam Chair and
11 members of the Board. It's a pleasure to be here and see
12 the successful plan which is drafted by the staff.

13 Having followed and been association with the
14 ARB's actions for over 20 years, I'm impressed the plan
15 includes an element to reduce vehicle miles traveled and
16 recognizing that technology alone will not be enough to
17 meet the greenhouse gas reduction goals. I urge the Board
18 to strengthen this element and also applaud the Chair for
19 bringing about this shift.

20 Similar kudos for the support towards the high
21 speed rate and evaluation of fees both in the context of
22 supporting the program and in the context of apprising for
23 carbon.

24 I want to leave you with a reminder that this
25 Board must fulfill the intent and the requirement of the

1 law, which specifically calls for protecting and
2 benefiting most impacted communities. And I want to thank
3 Supervisor Hill and Dr. Balmes to raise that issue during
4 their discussion.

5 To achieve this goal, it is very critical to
6 identify the areas that currently have a higher pollution
7 burden and are more prone for impacts both in the context
8 of air pollution and in the context of climate change
9 impacts. The ARB and CEC had foresight three years ago to
10 fund cumulative impacts assessment method has actually
11 resulted in a tool that can really be applied to date.
12 Placing restrictions on facilities located in these areas
13 to participate in a market-based mechanism ensures
14 protection for people living in those areas and is
15 actually the right thing to do.

16 In California, for example, during the heat
17 episode of 2006, in a span of 18 days, there were 140 heat
18 related deaths instead of the typical 10 to 12 number.
19 And there were over 2500 heat-related emergency room
20 visits instead of the 400 typically seen. Such episodes
21 will continue until the global warming trend shifts.

22 Hence, it's also important to dedicate the funds
23 towards application mechanisms at the local level as it is
24 important to reduce emissions in these areas.

25 Our organization with support from the Latino

1 Issues Forum and American Lung Association of California,
2 Oxfam America, and two major air districts in the Central
3 Valley and Bay Area have proposed a concept that details
4 these elements, and we have submitted it to the staff.
5 And I have also shared with many of the members of the
6 Board.

7 I urge the Board to direct the staff to include
8 those elements in the final version that will be coming up
9 to you in November. And thank you.

10 And also I just want to alert actually appreciate
11 the land use guidance document that was actually done in
12 2005 April which has been praised and acknowledged all
13 over the state. But also it was also at the time the
14 Chair and the Board had directed the staff to come back
15 with an updated version for the other sectors that were
16 not covered. So I think it is time to revamp that effort.
17 Thank you.

18 BOARD MEMBER RIORDAN: Thank you, Dr. Prasad.

19 Cathy Reheis-Boyd followed by Stuart Cohen and
20 Tim Frank.

21 MS. REHEIS-BOYD: Good morning, members of the
22 Board. Cathy Reheis-Boyd, Chief Operating Officer of the
23 Western States Petroleum Association.

24 And I would like to support the road map theme.
25 And as Dr. Sperling said, the durable framework which

1 we've shared in previous presentations we've made
2 together.

3 But I'd really like to recognize it because I
4 think it points to the complexity of this regulation. And
5 that there is a lot of work that still needs to be done.
6 It's important, and we all know we have to get it right
7 because there's too much at stake not to get it right.
8 And I think we all understand and appreciate that.

9 But I do want to compliment the hard work that
10 the staff has done. I can tell you I think I've lived
11 with them more through this regulation than any, and it's
12 been a lot of brutal hours, and we'll all be talking about
13 what we did over our summer vacation together.

14 But we have been positively engaged with you. We
15 have hosted three collaboratives with your staff where we
16 brought in NGOs and industry and academia. We've spent
17 several days on key topics to advance our collective
18 thinking, and that's been in land use change areas.
19 That's been in how crude flows through the economy and
20 what impact this could have on energy costs.

21 We've dealt with other issues and we have
22 co-generation coming up. Glad to see you embrace that as
23 a really good technology for us to look at as well as
24 energy efficiency.

25 We'd still like to see a lot more work done in

1 carbon capture and storage for our industry because we
2 think that's core to be able to actually achieve these
3 reductions.

4 But I think if we stick to the key principles as
5 we go forward that we will increase our chance of actually
6 being able to try to accomplish these goals. And those
7 are things you've already heard of, but certainly include
8 the harmonization concept, technological feasibility.
9 Innovation, we agree is absolutely key. Cost
10 effectiveness, which we have a lot to do in the summer as
11 has been pointed out. That will be in my opinion the
12 biggest challenge that we have. We have to demonstrate
13 that the program can be cost effective so that we can
14 sustain it into the future, and that includes the 2050
15 goal. And we're very interested in engaging in that
16 activity.

17 But having the cap and trade program, that
18 certainly helps minimize the cost. We're glad to see it
19 included. A lot of work to do on the fuel side, certainly
20 in the land use change area. We have lots of pathways to
21 still explore and compare against current gasoline and
22 diesel intensities. And again I think diesel is going to
23 be an issue we'll need to spend a collaborative on and dig
24 in deeper into the issue of how diesel plays here.

25 And lastly milestones. Remember that we are not

1 all perfect wisdom as at this point this time and that
2 we're going to learn things. I learn things every day as
3 I read the massive amount of information out there.

4 As we go down the road together, let's just
5 remember to check in with the plan. And if we need to
6 adapt it, we should. And we shouldn't apologize for that.
7 We should be smart about it and realize that's a good
8 thing.

9 So I think one of our biggest challenges,
10 transportation fuels. We have a low-carbon fuel standard.
11 Now we also have an idea to include transportation fuels
12 within the cap and trade. So we have two policies that
13 need to be intertwined. We're not sure what you mean by
14 that or how we're going to do it, but we want to work hard
15 on that particular piece. Because we all know that's a --

16 CHAIRPERSON NICHOLS: Thank you. We'll continue
17 the conversation later if we can, but your time is up.

18 MS. REHEIS-BOYD: I agree this is a shared
19 challenge the last slide said.

20 CHAIRPERSON NICHOLS: Thank you.

21 Stuart Cohen, Tim Frank, Bill McGavern.

22 MR. COHEN: Good morning. Stuart Cohen with the
23 Transportation and Land Use Coalition as well as with
24 Climate Plan.

25 We applaud CARB for including smart land use and

1 regional targets, also known as reducing vehicle travel,
2 in the plan. There's obviously huge co-benefits for these
3 measures. And it was an excellent stakeholder process
4 that we had with LUSCAT.

5 We do believe that the projected VMT decrease,
6 which is about 1.5 percent, is really too low. Some of
7 that may be because it's not fully quantified yet. For
8 example, in the local government actions it says these
9 areas are not quantified yet. Maybe there are additional
10 numbers that are not listed yet.

11 But I think there is a few reasons this number
12 could be increased as we move towards the final plan.

13 The first one is really that regions want this
14 number to be higher. The regions that have done
15 blueprints, which now will soon be the five major regions
16 in the state, have numbers that are way beyond this. In
17 the bay area, our regional transportation plan is now
18 trying to achieve a 10 percent reduction from today, which
19 is a 20 percent reduction from where we would be with the
20 status quo. But we don't have the implementation measures
21 to get us there really. And we need CARB's help in
22 getting some more enabling legislation and regulations.

23 The second reason is that the LUSCAT process
24 really looked at land use. Land use shows more benefit
25 over a longer term time. There was no similar transcat

1 that looked at transportation efficiency and
2 transportation pricing. And I think that's a large part
3 of the reason that this number is so low.

4 We've seen nationally over the last year a 1.7 to
5 4.3 percent drop in vehicle miles traveled according to
6 the US DOT simply because of one factor: Gas prices. And
7 so we should look at, as Professor Sperling said, those
8 remaining transportation measures need to be evaluated
9 which include the pay-as-you-drive insurance, congestion
10 pricing. And even if some of these, like indirect source
11 rules as well, aren't required by CARB, some of them like
12 congestion pricing should at least be more enabled so
13 regions can unleash the power of them.

14 Finally, I'd just like to end by saying that, you
15 know, road builders in this state have \$100 billion plus
16 wish list they every year give to our Legislature.
17 Assuming very cheap gasoline and endless sprawl is what
18 the future of this state is, we can save the State an
19 incredible amounts of money plus consumers if we take on
20 more of these measures that you have the power to take on
21 as part of the final Scoping Plan. So we strongly
22 encourage you to set up a transcat for the remaining
23 six months before the adoption. Thank you.

24 CHAIRPERSON NICHOLS: Thank you.

25 I understand from the Board clerk that people are

1 continuing to come in and sign up to speak. And I'd
2 really like to encourage you if you're planning to speak
3 to let us know now, because we need to schedule a break.
4 We have both a need I think on the part of our reporter
5 and the Board members to get a lunch break. We have
6 reporters that I think are waiting for a media
7 availability that's been scheduled for the press. And so
8 we need to do some planning here. I'd appreciate it if
9 everybody who intends to speak would let the clerk know.

10 We don't want to cut off the conversation, but I
11 do want to remind people that particularly for substantive
12 comments which many of you have had imbedded in your
13 remarks, we really want you to continue to work on those
14 and to give us as much specific input as you can over the
15 course of the summer as we're working to finalize the
16 plan. Thanks.

17 MR. MCGAVERN: We're going to flip if that's
18 okay, and Tim will follow me. I'm Bill McGavern, director
19 of Sierra Club California.

20 And I certainly join in the praise of the staff
21 both for the high quality of work in the draft and also
22 for the open and inclusive process that they conducted.

23 There are those that will say that California
24 cannot afford the measures included in this plan. I would
25 say actually we cannot afford not to adopt these measures.

1 And we cannot afford to delay for the sake of both our
2 environment and our economy. We need to not only meet the
3 2020 requirement that's in the law, but also continue
4 driving emissions downward to the 2050 goal that the
5 Governor has set and which scientists are now telling us
6 is really the minimum of what we need to do actually to
7 stabilize our climate.

8 Unfortunately, some of the measures in this plan,
9 like the renewable energy standard and energy efficiency
10 standards and reducing the high global warming potential
11 gases, will really drive innovation and help to green our
12 economy. And others like the provisions for heavy duty
13 vehicles and goods movement will not only reduce
14 greenhouse gases, but also help to enhance our air
15 quality, which is still unhealthy in most of the state as
16 you well know.

17 Since this is a draft, there are some areas where
18 we think there needs to be some strengthening and more
19 specifics before the plan is finalized.

20 In the area of recycling, we need to see some
21 hard numbers and deadlines there for getting organics out
22 of our landfills, for commercial recycling, and for
23 driving up the State's overall rate of recycling. And I
24 would say that like the rest of us, the Waste Board works
25 best when it has deadlines. So I hope the final plan will

1 have deadlines for adopting those measures.

2 Very pleased you're addressing the area of
3 sustainable forestry and certainly using CEQA in
4 addressing the area of conversions is an excellent tool.
5 We are concerned that if this is left too much to the
6 Board of Forestry, that's a body that actually -- their
7 track record does not inspire confidence they could be
8 able to accomplish all of these reductions. So we
9 encourage the Air Board staff to work closely on this to
10 make sure we reach the ambitious goal there.

11 We also want to see more on zero emission
12 vehicles to push the auto industry to bring those to
13 market. And speaking of markets, if California does join
14 a regional initiative, we would like to see all allowances
15 auctioned and not given away. We agree offsets should be
16 strictly limited, and we appreciate the fact that you are
17 analyzing emission fees as well as the market trading
18 program. We would like to see the analysis of both of
19 those go forward so that we can see whether we want to
20 adopt one or the other or maybe a combination of the two
21 for a complimentary system.

22 So great work, and we look forward to working
23 with you as the plan is finalized.

24 CHAIRPERSON NICHOLS: Right on time. Thank you.
25 Tim Frank followed by Elliot Hoffman and Julia May.

1 MR. FRANK: Thank you. I'm Tim Frank
2 representing Sierra Club, California. Also pleased with
3 the plan. I think almost every witness would be remiss
4 not to congratulate you for the fine work you've done.

5 In the interest of commenting on ways to improve
6 the plan, I'd like to embrace the comments of the Board
7 members who noted that there really is an opportunity in
8 the area particularly of the land use and local government
9 and regional targets to adopt a more assertive approach.

10 I think it's important to note this is an area
11 where there are lots of co-benefits, and hence the
12 economic, social, and environmental benefits to a more
13 assertive approach.

14 To begin with, I'd note on the public health
15 realm, this isn't just about reducing emissions, but
16 changing behavior and encouraging greater activity. The
17 way you reduce the greenhouse emissions from land use and
18 transportation connection is by building more walkable
19 communities and providing the opportunity for mode
20 changes.

21 But the same changes lead not just to reduced
22 emissions, but also more walking. And we know that
23 obesity and diabetes and other public health effects that
24 are associated with inactivity are also at a national
25 crisis, just as we have huge problems with asthma. So I

1 think it's important when we're looking at the public
2 health benefits to look at the full range of public health
3 benefits we can get from improved performance in this
4 area.

5 I think it's important to note that the framework
6 you established here is good. We'd like to focus on the
7 blueprint. We like the use of CEQA as a tool. We would
8 like to see some of the additional measures that you've
9 identified for analysis, like indirect source review,
10 implemented as well. We think that has a lot of
11 potential. And we'd like to see it used.

12 Finally, I'd like to build on a comment that Bill
13 made regarding the forestry sector noting that there is an
14 analogue between forestry and agriculture. There is a
15 potential and a number of kinds of farmland to actually
16 sequester carbon as well. And protecting against the
17 conversion of farmland is also something that should be
18 considered in the context of this plan.

19 Using CEQA as a tool to analyze and require
20 mitigation for those impacts is something that would be
21 appropriate. We'd like to see that considered in the
22 plan. So with that, thank you very much.

23 CHAIRPERSON NICHOLS: Okay. Thank you.

24 Elliot Hoffman and Julia May.

25 MR. HOFFMAN: Madam Chair, Board members, thanks

1 for the opportunity to talk to you today a little bit. My
2 name is Elliot Hoffman. I'm co-founder and CEO of New
3 Voice of Business. We are an organization of business
4 people with current membership of about 1,000 and soon to
5 be 5,000.

6 We played a major roll in the passage of
7 California's million solar roofs and then worked closely
8 with Bob Epstein and the passage of AB 32.

9 I want to echo something that I guess Dr.
10 Sperling said a little bit earlier. And that this makes
11 me proud to be a Californian. And this is big, bold, and
12 it's really what we need. So thank you all for a job
13 really well done.

14 I want to briefly tell you about a story, about a
15 conversation I had just last night with a retiring
16 San Francisco police officer. He asked me what New Voice
17 does. And I told him that we're focused new on climate
18 change and transitioning to the new energy economy. He
19 said, "You know, I agree with you on the energy side. But
20 global warming is just a hoax. The heating is just part
21 of the normal cycle and it's actually colder than normal."
22 And I said, "Don, where do you hear this stuff?"

23 And I really wish it were true, because I'm very
24 concerned about my children's future.

25 So it probably goes with a few others in this

1 room. There's obviously been a deliberate effort on the
2 part of some companies and individuals to create enough
3 doubt to prevent action in California and in the
4 United States. However, as the Governor said when he
5 signed AB 32, "The debate is over."

6 There are those who want to continue dragging
7 their feet. They want to slow down AB 32's implementation
8 by claiming it will hurt the economy. Most of us in this
9 room know that the opposite is the truth. Most of us know
10 that AB 32 and moving on climate change and the new energy
11 future are exactly where the future lies for a healthy
12 economy, new good-paying jobs and healthy businesses.

13 And as we say at New Voice of Business, "Healthy
14 business needs a healthy society." The opportunity to
15 create good new jobs and new businesses in California are
16 vast. The investment opportunities for California are
17 huge. We all know the statistics about venture capital
18 pouring into California into the clean energy economy.
19 And why on earth would anyone want to slow this down?

20 There are business interests that don't seem to
21 understand that the time for business as usual is over.
22 Frankly, it's a business-as-usual mindset that's
23 destroying our economy and the environment. Mother nature
24 has no interest in waiting, stalling, or compromising. We
25 either get on with her program and clean up our act now or

1 she'll deal with us in a way in her own way and on her
2 schedule, not ours.

3 You have to decide, do you listen to old, tired
4 industrial era of thinking and voices or to new innovative
5 and future-looking business thinking and voices?

6 We certainly appreciate the complexity of these
7 issues and the need for thoughtful and thorough analysis.
8 And like anything in life, we must start somewhere and
9 through an iterative process continue to improve and
10 refine --

11 CHAIRPERSON NICHOLS: Mr. Hoffman, your time is
12 up.

13 MR. HOFFMAN: About ten seconds? No.

14 CHAIRPERSON NICHOLS: We appreciate it. You can
15 leave your testimony behind if you have it written. Thank
16 you very much. We appreciate your support and your words
17 of wisdom.

18 Julia May, Matt Vander Sluis, Tim Carmichael.

19 MS. MAY: Hi. I'm Julie May from Communities for
20 a Better Environment.

21 And like everybody else, I want to thank you all
22 for the massive effort. You're trying to get us off the
23 fossil fuel treadmill through innovation and through
24 reducing demand, which is what we need to do.

25 But we also wanted to bring your attention to

1 some old, outdated facilities that are still in the dark
2 ages in California. It's not just innovation we need. We
3 also need to bring old facilities up to standard. And I'm
4 talking about oil refineries. Oil refineries in
5 California are the largest industrial source of greenhouse
6 gases. They're the most energy intensive source in the
7 country. And unfortunately, they're going the wrong way.
8 They are getting bigger. Contrary to the methodology out
9 there, oil refineries are expanding massively in
10 California and in the country. They're switching to
11 dirtier higher carbon crude oil that requires more
12 cracking, more coking, more sulfur treatment. So
13 unfortunately we're going to wrong way.

14 Also on the amount of energy that we take to make
15 gallon of gasoline.

16 Also there's parts of a lot of the refineries in
17 California that are very old, boilers and heaters. And we
18 really appreciate the staff for including the boilers. We
19 proposed that, and we proposed energy efficiency audits.
20 And thank you so much for including those.

21 But going beyond just doing audits, we already
22 know it's not just a matter of innovation. We already
23 know what to do about these facilities. We have to do it
24 anyway for smog. A lot of these facilities have boilers
25 that were built in the '30s that have escaped smog

1 regulation because of grandfathering exemption in the smog
2 regs. They're the same combustion sources that cause smog
3 and toxics and the same sources that the oil refineries
4 that hurt people, communities of color and low-income
5 people who live around the refineries. They want direct
6 control. They don't want the pollution to be traded away
7 to other regions.

8 So for health benefits, we urge you to direct
9 your staff to make sure that the direct controls for
10 refineries are of the highest priority in the plan for
11 health benefits and also because there's such a huge
12 source in the state of greenhouse gases. So we have to do
13 it for all these reasons.

14 This is a model not only -- it's not only
15 important for California, but it's an important model for
16 the country. If you saw some of the refineries out there
17 in other parts of the country that are also expanding like
18 crazy, but also who have neighbors who are asking us in
19 California about what we are doing here. They want to see
20 strong regulation here so that they can also be exported
21 to other parts. So it has a benefit all over the place.

22 So thanks again. And we look forward to great --
23 much more detail on refinery reduction measures. Thanks

24 CHAIRPERSON NICHOLS: Thank you.

25 MS. MAY: Thank you for the Board members

1 comments about co-pollutant and cumulative impacts.

2 CHAIRPERSON NICHOLS: You're welcome.

3 It's obviously a big focus for us.

4 Matt Vander Sluis, Tim Carmichael, and Michelle
5 Passero.

6 MR. VANDER SLUIS: Good afternoon. My name is
7 Matt Vander Sluis. I'm the Global Warming Program Manager
8 for the Planning and Conservation League. And we
9 frequently work closely with the National Wildlife
10 Federation.

11 I wanted to say that I thank you all for this
12 important step forward on California's path to fighting
13 global warming. We clearly can't delay. James Hanson was
14 just talking to Congress this week and said we have one
15 year for governments around the world to take major
16 action.

17 Also I'm constantly reminded about the closure of
18 the salmon season. There's no salmon fishing in all of
19 the California this year. The two reasons that have been
20 identified for that are mismanagement of California's
21 rivers and streams and abnormally warm ocean conditions.
22 So there wasn't food for those salmon to eat. This is a
23 problem that's here today already impacting us.

24 We are very glad to see the strong measures on
25 renewables, energy efficiency. We're very pleased to see

1 an increase in the goals that we're setting for water use
2 efficiency and water management in California. It's very
3 good to see the numbers have expanded from what we were
4 talking about several months ago.

5 We would also encourage you to prioritize public
6 health in the plan wherever possible, whenever possible.
7 We are in a public health crisis. And if a particular
8 measure doesn't help us achieve our public health goals,
9 we hope that you strongly consider whether that particular
10 measure should be in the plan or not.

11 And lastly, on land use, we are very concerned
12 about the lack of accountability on land use measures in
13 the plan. If we don't put land use on the front burner,
14 we're cooked.

15 That didn't go over. It was great when I wrote
16 it down.

17 The point is though we have attempted to
18 encourage responsible land use patterns in the past. And
19 encouragement has for the most part been ineffective. So
20 if we proceed with a plan that simply says we will
21 encourage action, we will be ineffective on that plan.

22 We need to achieve accountability because there
23 is tremendous, tremendous pressure on local governments to
24 make decisions that put us further on a car-centered
25 pathway further away from the goals we need to reach.

1 So I would encourage you to look deeply at those
2 measures and particularly look at the characterization of
3 CEQA and the role of CEQA in the plan. Right now it says
4 that you would encourage that you provide recognition of
5 projects that are consistent with general plans that are
6 consistent with regional blueprints that have greenhouse
7 gas emissions. It's a bit of a flip how CEQA works. CEQA
8 says if a project isn't in compliance with avoiding
9 significant impact, then you need to address the plans as
10 opposed to give recognition to good projects.

11 So lastly we look forward to working with you,
12 collaborating with you in the months ahead on all of these
13 issues. And as we think about how do we invest these
14 funds to protect wildfire and protect public health.

15 CHAIRPERSON NICHOLS: Thank you.

16 Tim Carmichael, Michelle Passero, Jason Barbose.

17 MR. CARMICHAEL: Good morning -- afternoon,
18 Chairman Nichols, members of the Board.

19 Let me start by saying I, too, appreciate all the
20 hard work that's gone into this. And I think it's a very
21 positive start.

22 It's interesting that I think I've grown to
23 believe or just expect California to lead on issues like
24 this. But I was inspired when I skimmed through the draft
25 because there is a whole bunch of entities around the

1 world this could be leading like this, and we're the ones
2 do it. And it feels good. And I think everybody that's
3 been part of it should feel pride about that. It's cool
4 and it's responsible. All of my critiques are under that
5 umbrella.

6 We're very pleased to see the 33 percent RPS.
7 We're very pleased to see the beyond Pavley component, the
8 expansion of energy efficiency programs. I hope that and
9 I believe that any entrepreneur that looks through this is
10 going to see opportunities all over it for California
11 businesses to lead in so many different sectors. It's not
12 up just one sector we're talking about. It's economy
13 wide. There's a lot of potential here.

14 We're pleased to see the attention on heavy-duty and
15 medium-duty vehicles, on freight transport. And we're
16 obviously pleased to see the synergy with our state's
17 petroleum reduction and criteria or smog and particulate
18 emission reduction goals. A couple of you have already
19 commented that we need to not silo those goals and keep
20 them in mind as we move these big programs forward. And I
21 very much appreciate that thinking.

22 Dr. Sperling mentioned a durable framework. And
23 I just want to touch on -- I'm one of the people that
24 believes in the potential of all of us to do great things.
25 But I'm worried, like Dr. Hanson and others, that the

1 deadlines that we've set for ourselves are too slow, too
2 far in the future. And so to the extent that we create
3 durable frameworks here, I hope that the staff and the
4 Board are thinking about are we setting it up so it can be
5 accelerated if we decide that's what we need to do. I
6 believe that's what we're going to find we need to do.
7 And we're going to we need to achieve more reductions
8 between now and 2020. Encourage you to think about that.

9 The talk about carbon fees is positive. We think
10 that needs to be evaluated and further pursued before we
11 go down the path of the trading. And we think that's a
12 very important mechanism or approach to it. To the extent
13 we use trading in California, we feel strongly it should
14 be 100 percent auction for all of the regulations and all
15 of the market mechanism approaches we need to do
16 cumulative impact and local impact assessment and ensure
17 that we are protecting the communities and providing
18 benefit for the most impacted communities.

19 Appreciate the comments of Supervisor Hill and
20 Dr. Balmes --

21 CHAIRPERSON NICHOLS: Your time is up.

22 MR. CARMICHAEL: Thank you very much. This is a
23 good start.

24 CHAIRPERSON NICHOLS: Michelle Passero, Jason
25 Barbose, Leilani Johnson Kowai.

1 MS. PASSERO: Michelle Passero with the Nature
2 Conservancy.

3 Like so many other folks who have been up here,
4 we really do want to commend the Air Resources Board and
5 the staff for just the tremendous amount of work you
6 invested in this comprehensive report and producing it
7 really under some tight deadlines.

8 California's showing great leadership for one of
9 the most pressing issues for our generation and for future
10 generations. And we need immediate action.

11 The release of this draft is a critical step for
12 such quick action that's necessary. Very recent polling
13 indicates that California voters strongly support state
14 action to reduce greenhouse gas emissions and address
15 global warming. They also support measures to protect our
16 forests, to maximize the positive contribution that
17 forests can do to reduce global warming.

18 We are pleased that the draft plan acknowledges a
19 role for forests in climate solutions as well as funding
20 for adaptation to help communities, fish, and wildlife
21 adapt to the negative impacts of climate change. There
22 are many critical issues to address within the plan. And
23 you certainly have addressed the ones that are certainly
24 near to us.

25 It does appear you're in line with voter

1 sentiment as well as what the Nature Conservancy supports.

2 We do look forward to working with the Air
3 Resources Board and other State agencies to implement this
4 plan and further refine it. Thank you.

5 CHAIRPERSON NICHOLS: Thank you.

6 Jason Barbose, Leilani Johnson Kowal, and Gary
7 Gero.

8 MR. BARBOSE: Madam Chair and Board members,
9 thanks. JASON Barbose with the Environment California.
10 We're a statewide citizen-based environmental advocacy
11 organization with about 70,000 members statewide.

12 And I just wanted to very briefly take the
13 opportunity to as a stakeholder in this process say it's
14 been a pleasure working with the Air Board staff on the
15 development of the Scoping Plan. And personally have been
16 very impressed with the staff's work ethic and personal
17 commitment to the cause.

18 And then a couple reactions to elements of the
19 plan.

20 One, first off, I just -- the plan's commitment
21 to expanding proven policies in renewable energy, energy
22 efficiency, clean car and fuels, and others is exactly the
23 right prescription in our view to make sure we prevent the
24 worst effects of global warming from ever taking place.
25 And really having that as the bedrock and foundation of

1 the State's climate plan.

2 And then the second thing is around one of the
3 areas that we're slightly disappointed in is the lack of a
4 clear commitment to auctioning in the cap and trade
5 program. You know, a fundamental problem with the status
6 quo is that polluting pays too well. If we want to solve
7 global warming, then it can't. And the dirty sources of
8 energy are costing Californians from the prices we pay at
9 the gas pump to health care expenses from breathing dirty
10 air and the damage caused by global warming including
11 increasing wild fires and snow pack. And in our view, any
12 cap and trade program must require polluters to pay for
13 the permit through an auction.

14 The Draft Scoping Plan supports the concept of
15 requiring polluters to pay but doesn't yet commit the
16 State to auctioning 100 percent of the permits from the
17 start or even by 2020. The language in there says quickly
18 transitioning to a majority auction.

19 And in our view, California cannot afford to
20 repeat the mistakes of the European Union which did hand
21 out permits for free and create windfall profits for some
22 of the largest polluters.

23 So in short, auctioning permits is a cleaner,
24 cheaper, smarter approach. And we hope the final plan in
25 October will take a clear stand on high percentage of

1 auctioning from day one and a quick transition to
2 100 percent. Thanks.

3 CHAIRPERSON NICHOLS: Thank you.

4 Gary Gero, Tim Papandreon, and Kevin Fay. Oh,
5 I'm sorry. Leilani.

6 MS. JOHNSON KOWAL: Thank you, Madam Chair and
7 Board members.

8 I want to congratulate the staff on the hard work
9 that you have done over the last few months and THE effort
10 to reach out to the stakeholders.

11 I'm Leilani Johnson with Los Angeles Department
12 of Water and Power. And I just want to indicate that Los
13 Angeles Department of Water and Power fully supports ARB's
14 efforts to reduce greenhouse gas emissions.

15 We are concerned about greenhouse gasses from two
16 perspectives. One is the impacts of emissions from our
17 power generation as well as impacts on our water resources
18 that we deliver to the customers that we serve. We are
19 fully committed to reducing emissions directly associated
20 with our electricity portfolio while keeping in mind grid
21 reliability and electricity rates.

22 L.A. DWP is continuing to undergo a massive
23 transformation in how we generate and consume electricity.
24 First, we have a very aggressive energy efficiency program
25 that we recently had implemented. But on top of that, we

1 also have our renewable goals in terms of 20 percent by
2 2010 which we are on track for, as well as our 35 percent
3 RPS by 2020.

4 Just to give you a sense of the progress that we
5 have made to date, we started out two years ago at only
6 three percent renewables. And in two short years, we have
7 moved to eight percent delivered today. And we have 13
8 percent under contract. To me, those are early actions
9 that are consistent with what the Board's goals are to
10 implement AB 32.

11 We are also supportive of cap and trade as a
12 secondary mechanism to the energy efficiency and renewable
13 mandates in the Scoping Plan. As you know, L.A. DWP has
14 been very concerned about the potential for an auction
15 under a cap and trade program to divert the rate dollars
16 away from long-term investments that are needed for direct
17 emission reduction associated with our carbon footprint.
18 Obviously, the Scoping Plan has not gone into detail about
19 allowance allocations. And those are going to be very
20 challenging discussions we're going to have over the
21 coming months.

22 We look forward to analyzing the Draft Plan and
23 reviewing the economic analysis when it comes out as well
24 as participating with other stakeholders in a very lively
25 discussion in upcoming workshops on those particular

1 issues.

2 We commend the ARB for undertaking this
3 tremendous challenge. And we look forward to working with
4 you in partnership and appreciate your leadership on
5 developing a workable plan in the months ahead. Thank
6 you.

7 CHAIRPERSON NICHOLS: Thank you very much.
8 Thanks for coming.

9 Gary Gero, Tim Papandreon, and Kevin Fay.

10 MR. GERO: Good afternoon, Chairman Nichols,
11 members of the Board. I will be brief. Not to test your
12 endurance. You've already been tested quite well.

13 Want to just again reiterate what a lot of people
14 have said, which is I want to commend the staff from the
15 top down. Everyone that we have worked with at the
16 California Climate Action Registry has been -- we have
17 been tremendously impressed in the intelligent and
18 understanding under a very short period of time and tight
19 deadlines.

20 I do want to also acknowledge that today is I
21 believe an historic pivot point generationally, because it
22 was some two generations ago that the current
23 environmental regulatory framework was put in place back
24 in the early 1970s and late 1960s. I think we are at
25 another point there where the framework that ARB under its

1 leadership today is putting in place is in fact going to
2 be the framework that's going to be there in 2050.

3 I do want to appreciate the acknowledgement of
4 the California Climate Action Registry that was included
5 in the Scoping Plan. We're very grateful for the
6 opportunities to observe the State. The State created us,
7 as you well know, with this day in mind. That knowing
8 that it was going to come to a point where it would
9 develop these regulatory mechanisms, but not quite ready
10 in 2000. So created the Registry.

11 I do want to specifically ask -- and I know this
12 is going to be the case -- but that the California Climate
13 Action Registry members, all of whom have shown tremendous
14 leadership in joining the Registry, conducting emission
15 inventories, registering and publicly disclosing their
16 emissions over the past several years, those emission
17 inventories need to be recognized, the early actions that
18 were taken and reflected in those inventory need to be
19 considered in the design of the cap and trade program. I
20 want to reiterate that point and know it's heard well at
21 the ARB already.

22 Finally, I want to say that the California
23 Climate Action Registry has launched a voluntary offsets
24 program that I believe is robust, that is regulatory
25 grade. And that I think conserve is the predicate or

1 perhaps the model for a compliance offsets program that
2 will test the infrastructure to provide some lessons
3 learned and actually help build a future compliance
4 program.

5 So I encourage the ARB to continue to work with
6 us as you have to see how the offset program that we have
7 developed and launched, which is a 50 state offset
8 program, but is near and dear here in California can
9 actually help inform a compliance offset program.

10 So we look forward to continuing to work with
11 you. I congratulate all of you and say thank you for the
12 opportunity.

13 CHAIRPERSON NICHOLS: Thank you for coming.

14 Tim Papandreon, Kevin Fay, Ann Chan, and Charles
15 Frazier will be our last speaker.

16 MR. PAPANDREON: Good afternoon, Chair Nichols
17 and Board. Thank you for bearing with us today.

18 My name is Tim Papandreon. I'm a planning
19 manager with the Los Angeles County Metropolitan
20 Transportation Authority. And we welcome the information
21 presented to us today.

22 Just a little bit about ourselves. We're the
23 transportation planner, designer, builder, and operator of
24 one of the largest transit and transportation systems in
25 the country. And we service the county of 10.3 million

1 people. So we have a big job ahead of us.

2 And we've been trying to do every single thing
3 that we can above and beyond what's been mention in this
4 drafting plan, and we realize we can't do it ourselves.
5 We have to work very closely with our 88 local cities that
6 have the road design and the land use controls that pretty
7 much dedicate how well our transit system is going to
8 function.

9 Just a quick comment on the Scoping Plan itself.
10 There is very little emphasis on the roll of transit and
11 the roll the transit is going to have to play when we talk
12 about VMT reductions and congestion and modal shift and
13 all the other things. When you have demand management
14 tools, people tend to shift towards the alternative modes.
15 And it creates a lot of demand for the transit system.
16 And we've noticed lately with five dollars a gallon in
17 some parts of Los Angeles, the transit ridership has
18 reached record levels. And that's a great problem to
19 have, but also creating a lot of stress on our system.
20 And we need to figure out how we're going to have
21 dedicated funding for transit so we can expand the capital
22 and operation side of it as well to maintain the
23 greenhouse gas emission targets that I'm sure are going to
24 come down our way very soon. And we'll work with them.

25 Just recently we did a sustainability survey for

1 all of our counties and we surveyed all the 88 cities. We
2 found some very interesting things that they're all doing
3 that are we best management practices that I recommend we
4 try to develop more of this information sharing, because
5 it really is an area where there is a lot of
6 opportunities.

7 But one of the things I stress the most and I'd
8 like the Board to hear is they stress they need a lot of
9 help and guidance. They concerned about the attorney
10 general and the various issues with greenhouse gas
11 emissions analysis with CEQA. A lot of issues with the
12 Institute of Transportation Engineers trip generation
13 model and methodology forced them to do land use.

14 A lot of issues with CEQA. It's used as a
15 traffic tool to figure out ways to work that in.

16 And frankly, transit is the mitigation. So we're
17 going to figure out ways to get that through the CEQA
18 process a little better.

19 And frankly, transit funding is in jeopardy. A
20 lot of the emphasize on greenhouse gas emissions from
21 around the world focus on more transit. And our state had
22 consistently been -- we need to figure out funding sources
23 to meet these demands.

24 And also one of the issues that you might not be
25 aware of is the transit industry in general might actually

1 have to increase its carbon footprint to reduce the
2 region's carbon footprint. Because buy more buses and
3 trains, build more, use more energy to reduce the region's
4 carbon footprint. So bear that in mind when you tell you
5 reduce your GHG.

6 CHAIRPERSON NICHOLS: I'm afraid your time has
7 expired.

8 MR. PAPANDREON: Thank you very much. Look
9 forward to working with you.

10 CHAIRPERSON NICHOLS: Thank you. You're part of
11 the solution.

12 Kevin Fay, Ann Chan.

13 MR. FAY: Thank you, Madam Chair, members of the
14 Board. My name is Kevin Fay I'm with the International
15 Climate Change Partnership, an industry manufacturing
16 coalition headquartered in Washington.

17 I'd like to commend you and the staff for the
18 hard work and excellent work you've done on producing the
19 Scoping Plan for consideration at this time. And also
20 would like to commend your incorporation of a significant
21 percentage of the activities under the plan to be pursued
22 through market-based mechanisms in cap and trade program.
23 We feel that that is particularly important.

24 We also hope that there's opportunity in the
25 future to expands the roll of the cap and trade program as

1 part of your goals and objectives in terms of the
2 percentages as part of your overall goals.

3 Many of our member companies and industries are
4 working with your staff currently on the discrete early
5 action measures, and we'll continue to do that. But we're
6 also most interested in your citation of your continued
7 role with the cap and trade program. And it's important
8 through the Western Climate Initiative and also the role
9 that it's going to further the role we play in how we
10 further the dialogue at the federal level. And we hope
11 that will also contemplate its incorporation and
12 participation in a federal program if such a program is
13 adopted.

14 So thank you. Commend you for the hard work. We
15 look forward to working with you. And we'll take a deep
16 breath as we look at it and try to understand all of the
17 intricacies of the program.

18 CHAIRPERSON NICHOLS: Good. Thank you.

19 Ann Chan and then Charles Frazier.

20 MS. CHAN: Good afternoon, Madam Chair, members
21 of the Board, and staff. My name is Ann Chan, and I'm the
22 California Policy Director for the Pacific Forest Trust.

23 I would like to thank you for your hard work on
24 the Draft Scoping Plan and its inclusion of the role for
25 forests. I want to underscore the tremendous capacity

1 that forests have for sequestering carbon from other
2 sectors and also point out forests have the potential to
3 meet and far exceed the five million metric targets set
4 out in the Draft Scoping Plan.

5 I also want to underscore the linkages between
6 reducing vehicle miles traveled, reducing lose of forests
7 to sprawl, and increasing forest sequestration and public
8 health benefits.

9 And as ARB continues to consider the costs and
10 benefits of implementing AB 32, I'd like to point out that
11 investments in advancing the climate benefits of forests
12 and sustainable biomass fuels have the potential for
13 revitalizing and bringing green jobs to some of the most
14 rural parts of California.

15 And, finally, I wanted to note as the world looks
16 forward to Copenhagen and is more critically examining the
17 role of forests in climate regulation, and especially in
18 light of the massive de-forestation in the developing
19 world, the world is looking to California. The forest
20 protocols, which were adopted as a voluntary measure in
21 California, are already being studied in Malaysia and
22 China as a world model. And I think the Board can take
23 some pride in its export of innovative policy instruments
24 around the world for addressing climate change.

25 Thank you.

1 CHAIRPERSON NICHOLS: Thank you.

2 Mr. Frazier. Better not say anything bad about
3 staff or the plan or you're going to destroy the entire
4 tone of this event.

5 MR. FRAZIER: No problem. Just got fear in my
6 heart.

7 Madam Chairman, and Board members, and with
8 respect to the staff, I kind of want to echo what
9 Professor Sperling mentioned. I'm proud to be a
10 Californian.

11 On a personal note, I was on vacation in the
12 Caribbean, and I was reading the newspaper in the
13 Dominican. And it read how the United States has not even
14 thought about passing legislation on the Global Warming
15 Act. And so it makes me proud to feel like California is
16 the first to do this.

17 And I forgot. I'm with the California State
18 Black Chamber of Commerce. And with respect to my
19 colleague who had to leave, Roy Perez with the California
20 Hispanic Chamber of Commerce.

21 We're just glad to see that with respect to the
22 great minds who put this Scoping Plan together that after
23 hearing all the economists and biochemists and all this
24 kind of stuff, things I didn't care about in college, that
25 we do have a small part when it comes to public education.

1 And that's what we support.

2 Please do not forget about our small businesses
3 and our low-income communities, particularly minority
4 small businesses and minority low-income communities.

5 We would like to be a supporter and collaborative
6 partner in the area of public education and outreach in
7 our expertise of minority businesses and low-income
8 communities.

9 And we feel like with this first draft of the
10 Scoping Plan, it is clear that the world is watching. And
11 that California is on its way to rebounding to become our
12 nation's economic power again.

13 So I want to say congratulations again. And
14 please do not forget about us, public outreach. With
15 great respect to the draft and everything that's been done
16 in here, this still has to be sold to the public. And
17 even though we are unrepresented here, through the town
18 hall meetings we have conducted so on so forth, they are
19 concerned. And we would like to be part of that
20 collaborative effort. Thank you.

21 CHAIRPERSON NICHOLS: Thank you for taking the
22 time to be with us.

23 I believe that concludes the list of people who
24 said they wanted to speak. I think it's time to wrap up
25 this item and take a break. But I would like to give any

1 Board members who want to add any comments an opportunity.

2 One more.

3 BOARD MEMBER HILL: Thank you, Madam Chair.

4 Would the staff be kind enough to e-mail us the
5 Power Point?

6 EXECUTIVE OFFICER GOLDSTONE: We'll send it to
7 all the Board members.

8 BOARD MEMBER HILL: Thank you very much. Use it
9 in outreach.

10 CHAIRPERSON NICHOLS: And given the interest that
11 we're experiencing here from all kind of groups and
12 constituencies, I'm hoping we can call on the Board
13 members to go out and do some speaking and listening on
14 this issue.

15 It's going to be a long summer. It's gone to be
16 a hot summer. There's also a lot of other items that are
17 going to be occupying the air waves over the summer. But
18 I think we're well launched here. And the fact that every
19 story I hear it seems on the radio or television or see in
20 the newspapers has some aspect of the price of energy, the
21 price of oil, the security issues associated with our
22 dependence on imports, what's happening to our global
23 climate and our environment here as well as our public
24 health. All rows point to this effort as being the place
25 where we have an opportunity to pull together the mix of

1 policies and measures and voluntary actions from all
2 sectors in California that really can demonstrate that we
3 can make a difference and change our economy.

4 I'm a great fan of the work of former colleague
5 of mine at UCLA, Jerry Diamond. And he has a book called
6 "Collapse," which I often give to people because it
7 contains some very sad and distressing stories about
8 civilizations that banished from the earth because of
9 environmental crises they couldn't manage as well as a few
10 inspiring stories of situations in which people were able
11 to come together to actually take collective action, even
12 when it was very difficult to see in the short run whether
13 it was actually going to be effective or not.

14 And there are some lessons there about what it
15 takes to involve everybody in those kinds of discussions
16 and to get people to put aside sometimes historical --
17 competition and rivalry are good things when it comes to
18 people competing to make inventions or find new ways to
19 make money and solve problems. But I think sometimes when
20 we see different groups kind of pointing to the other as
21 being the reason why nothing can get done, it can make the
22 public feel very discouraged about whether there really is
23 a possibility of change happening.

24 I just want to say that from what I've seen so
25 far, and it's not just the kind words that people have

1 said this morning, but really throughout the process of
2 putting this plan together, there's been an enormous
3 willingness on the part of businesses in California.
4 We've heard from some of them here, from some of the
5 utilities, from the oil industry and so forth, despite
6 their concerns about what this might do to them and
7 legitimate fears about problems, there is also a
8 recognition not only of the necessity but really of the
9 opportunity. If we can change ahead of the curve, ahead
10 of what's forced upon us, and find ways to innovate that
11 are in all of our best interests, California as a whole
12 will be a healthier and more prosperous state. And that's
13 really what we all want.

14 So this is a good start. And we'll look forward
15 to the appendices coming out next and the economic
16 analyses and health analyses and then to a final plan
17 coming later in the fall.

18 Thanks very much, everybody. And we will return
19 at 1:30 we'll get back here.

20 BOARD MEMBER HILL: Can I make one other final
21 comment? And Julie May mentioned this, the oil
22 refineries. And I just hope in the plan we really look
23 carefully at those and the impacts they generating. Thank
24 you.

25 CHAIRPERSON NICHOLS: Thank you.

1 (Thereupon a lunch recess was taken.)

2 CHAIRPERSON NICHOLS: Next will be Proposed
3 Amendments to the Consumer Products Regulation if we can
4 get folks into their seats.

5 It looks like we will be ready to go whenever you
6 are.

7 EXECUTIVE OFFICER GOLDSTENE: Chairman Nichols
8 and Board, staff is proposing amendments today that will
9 affect 19 consumer product categories and includes the
10 setting of the first consumer products global warming
11 potential limit. We are also proposing to prohibit the
12 use of certain chlorinated toxic air contaminants in seven
13 product categories.

14 The staff's proposal, if adopted, will achieve
15 emission reductions of about 5.8 tons of volatile organic
16 compounds per day and .22 tons of toxic air contaminants
17 per day and .2 million metric tons of CO2 equivalents per
18 year when all limits are in effect. The amendments would
19 go into effect between December 31st, 2010, and December
20 31st, 2015.

21 I'll now ask Mr. Femi Olaluwoye of our Stationary
22 Source Division to begin the staff presentation.

23 (Thereupon an overhead presentation was
24 presented as follows.)

25 MR. OLALUWOYE: Thank you, Mr. Goldstene.

1 Chairman Nichols and members of the Board, today
2 we are proposing for your consideration amendments to the
3 California Consumer Products Regulation.

4 --o0o--

5 MR. OLALUWOYE: My presentation will follow this
6 outline.

7 I'll begin with a brief background.

8 --o0o--

9 MR. OLALUWOYE: State law requires ARB to achieve
10 the maximum feasible reduction in volatile organic
11 compounds, or VOCs, from consumer products. The
12 regulations must be technologically and commercially
13 feasible and preserve product forms.

14 Aerosols, pump sprays, solids, and liquids are
15 some examples of product forms.

16 In the 2007 statewide strategy, or SIP, we
17 committed to a 30 to 40 ton the per day VOC reduction from
18 consumer products. This plan was approved by you last
19 fall.

20 --o0o--

21 MR. OLALUWOYE: Consumer products are defined in
22 state law as chemically formulated products used by
23 household and institutional consumers. Examples include
24 household cleaning and degreasing products, home and
25 garden pesticides, aerosol paints, personal care products,

1 and automotive maintenance products.

2 --o0o--

3 MR. OLALUWOYE: As you know, we also have a
4 mandate to reduce greenhouse gas emissions in accordance
5 with AB 32. Reducing compounds of high global warming
6 potentials, or GWP, that are used in consumer products has
7 been designated a discrete early action measure.

8 We are bringing for your consideration the first
9 consumer products GWP limit today. We are also continuing
10 to evaluate other categories where reductions are
11 feasible.

12 This concludes our discussion of background.
13 I'll now move on to the proposed amendments.

14 --o0o--

15 MR. OLALUWOYE: This slide summarizes our
16 proposal.

17 The amendments include new or lower VOC limits
18 from 19 categories and a proposal to prohibit toxics in
19 certain categories.

20 As mentioned earlier, we are proposing a limit to
21 reduce greenhouse gases in one category - pressurized gas
22 duster.

23 --o0o--

24 MR. OLALUWOYE: This slide, along with the
25 following three slides, is a summary of the categories for

1 which we are proposing VOC limits.

2 This slide deals with the air care and automotive
3 care market sectors. The proposed effective date for the
4 categories shown here is December 31st, 2010. The
5 reductions from categories on this slide are about 0.3
6 tons per day.

7 --oOo--

8 MR. OLALUWOYE: Continuing on, we have the
9 cleaners and degreasers and fabric care market sectors.
10 Note the proposal for a 1 percent VOC limit for
11 pressurized gas duster. I'll explain the rationale for
12 this later in the presentation.

13 All of these proposed limits would become
14 effective December 31st, 2010, except aerosol glass
15 cleaner, which we are proposing be given until December
16 31st, 2012. This extra time is necessary to address
17 reformulation challenges.

18 The reductions from categories on this slide are
19 about 0.4 tons per day.

20 --oOo--

21 MR. OLALUWOYE: Continuing on with fabric care,
22 notice that we are proposing a grams-per-use limit for the
23 fabric softener - single use dryer product, rather than a
24 percent by weight limit.

25 In the lubricants and penetrants market sector,

1 you'll notice that additional compliance time is proposed
2 for multipurpose lubricants and penetrants. We are
3 proposing a 25 percent VOC limit, effective December 31st,
4 2013, for these categories. A future effective limit of
5 10 percent by weight is also being proposed for
6 multipurpose lubricants. This allows time to develop
7 newer technologies that are being used in some industrial
8 applications and market them to household consumers. We
9 intend to monitor progress in this category by conducting
10 technical assessments in 2012 and 2014.

11 The reductions from categories on this slide are
12 just over four tons per day. One of the largest sources
13 of emission, and our largest VOC reduction for this
14 rulemaking, is from the multipurpose lubricant category.
15 This category will achieve over two tons per day of
16 reductions in 2013 and about another 1.4 ton per day
17 reduction in 2015.

18 --o0o--

19 MR. OLALUWOYE: This is the last slide on
20 proposed VOC limits.

21 For the personal fragrance product category, we
22 are proposing to remove existing grandfather clauses. Our
23 proposal would require all products to meet the current 75
24 percent limit. Because over 400 products would need to be
25 reformulated, staff is proposing to extend the effective

1 date to December 31st, 2014.

2 We are also proposing to bifurcate the sealant or
3 caulking compound category based on curing technology. We
4 believe extra time is warranted for chemically curing
5 products because reformulation requires further
6 development of new technology.

7 The reductions from categories on this slide are
8 about one ton per day.

9 --o0o--

10 MR. OLALUWOYE: Also included in our amendments
11 is a proposal to exclude hydrofluoroether 7200 from the
12 definition of VOC. We expect this compound to have
13 limited use in precision cleaning applications.

14 Following U.S. EPA action, and in response to
15 petitions, ARB staff, in consultation with other Cal/EPA
16 boards and departments, conducted an environmental impacts
17 analysis.

18 The analysis found that this compound is
19 negligibly reactive with respect to forming ground level
20 ozone and it has a low global warming potential. It is
21 purported as a replacement for compounds with higher
22 global warming potentials and/or stratospheric ozone
23 depleting compounds. Therefore, the exemption would have
24 overall air quality benefits.

25 --o0o--

1 MR. OLALUWOYE: The amendments also include a
2 prohibition on the use of the toxic air contaminants
3 perchloroethylene, methylene chloride, and
4 trichloroethylene in the six categories listed on this
5 slide.

6 Now, moving on to the greenhouse gas proposal.

7 --o0o--

8 MR. OLALUWOYE: We are proposing to add a global
9 warming potential definition that follows that of the
10 Intergovernmental Panel for Climate Change, or IPCC.
11 Generally, the second assessment report, 100-year values,
12 would be used.

13 Pressurized gas duster products now or in the
14 past have been formulated with hydrofluorocarbon 134a, a
15 global warming gas with a GWP of 1300. We are proposing
16 that these products use compounds with a global warming
17 potential of no more than 150, effective December 31st,
18 2010. The likely pathway to meeting this limit is by
19 switching from HFC 134a to HFC 152a, which has a GWP of
20 about 140. An exemption is proposed for products used
21 where flammability is a concern.

22 To ensure that products are not reformulated in a
23 way that would increase criteria pollutants, we are
24 proposing a VOC limit of 1 percent by weight for this
25 category. We are also proposing to prohibit the use of

1 methylene chloride and perchloroethylene to ensure that
2 these toxic air contaminants are not used in
3 reformulations.

4 This GWP limit would reduce 0.2 million metric
5 tons of carbon dioxide equivalents per year.

6 --o0o--

7 MR. OLALUWOYE: Other amendments are shown here.
8 Most of these are clarifications to existing provisions.
9 For example, we are proposing to simplify the date coding
10 language in several existing provisions in the regulation.
11 We are also proposing to use our existing VOC compliance
12 testing method, Method 310, to determine compliance with
13 the GWP limit.

14 This concludes the overview of our proposed
15 amendments. In the next two slides, I'll discuss the
16 economic and environmental impacts of our proposal.

17 --o0o--

18 MR. OLALUWOYE: The economic impacts of the
19 proposal are summarized here. Our analysis is
20 conservative in that it assumes no compliance costs are
21 passed on to the consumer.

22 The cost-effectiveness of the VOC measures is
23 slightly higher than most other consumer products
24 rulemakings. However, the return on owner's equity, a
25 measure of profitability, is comparable to other

1 rulemakings. Ten percent is considered the benchmark for
2 where potential economic impacts could result.

3 Next I'll discuss the environmental impacts.

4 --o0o--

5 MR. OLALUWOYE: The proposal would have overall
6 positive impacts on the environment. The proposal would
7 reduce about 5.8 tons of VOC emissions per day when all
8 the limits become effective in 2015.

9 The greenhouse gas measure would assist in
10 meeting our 2020 target for greenhouse gas reductions.
11 Prohibiting the use of chlorinated toxic air contaminants
12 will reduce exposure to the public.

13 This is the last slide on the staff's proposal
14 you have before you today. I'll now move on to the
15 proposed modifications.

16 --o0o--

17 MR. OLALUWOYE: We are proposing minor changes to
18 a few definitions to make refinements and clarifications.

19 We are also proposing to delete the definition of
20 "not for retail sale," which we had originally proposed.
21 We now believe it may be more appropriate to explain the
22 concept in one of our routine enforcement advisories.

23 We are also proposing to clarify, in the Table of
24 Standards, that the motor vehicle wash limit applies only
25 no non-aerosol product forms.

1 Lastly, we are proposing to add the effective
2 date for the new labeling requirement for sealant or
3 caulking compound.

4 There are several remaining issues which I'll
5 summarize next.

6 --o0o--

7 MR. OLALUWOYE: You may hear comments that some
8 of the proposed VOC limits should be higher. I'll
9 highlight a couple categories. For astringent/toner,
10 staff has proposed a 35 percent VOC limit. We believe the
11 limit accommodates the need for products containing
12 alcohol. We also note that at the proposed limit there is
13 over a 70 percent complying market share. We further note
14 that complying products are already available that claim
15 to be effective on all skin types. The proposed VOC limit
16 is for non-medicated astringents and toners. Medicated
17 astringents and toners, which include prescription and
18 over-the-counter drugs, contain ingredients such as
19 salicylic acid or benzoyl peroxide. They also display a
20 drug facts label, in accordance with federal law. These
21 products include brand names such as Clearasil and Oxy,
22 and are not affected by this proposal.

23 For fabric softener-single use dryer product, we
24 are proposing a mass limit rather than a weight percent
25 limit. Some stakeholders believe the category should not

1 be regulated. However, we believe the limit is feasible
2 and we note that of the 26 reported products, 20 already
3 comply.

4 Related to pressurized gas duster products, we
5 are proposing to provide a one-year sell through for
6 existing products on store shelves after the limit becomes
7 effective. We believe this is adequate time, and that it
8 is important to remove cans of products containing a high
9 global warming compound from store shelves as quickly as
10 possible.

11 You may also hear comments that the compliance
12 timelines provided are too long and that emission
13 reductions are needed sooner. Other commenters may say
14 the compliance dates are not adequate to develop
15 reformulated products. Staff has evaluated each category
16 and the technologies that are likely to be employed and
17 have proposed effective dates that are feasible.

18 Some stakeholders do not believe the proposal
19 regulates enough categories to provide needed emission
20 reductions. I'll provide a little more information on
21 this as I describe work that is ongoing.

22 --o0o--

23 MR. OLALUWOYE: This slide highlights ongoing
24 work that we will bring to you for regulatory action in
25 the future, if feasible. Some of these projects are

1 related to reducing VOC emissions and some are related to
2 reducing air toxic emissions. We are in the process of
3 evaluating VOC reduction strategies for cleaning products,
4 paint and lacquer thinners, and nail coatings. Our goal
5 is to propose additional VOC limits for various cleaners
6 at the November Board hearing. Limits for paint and
7 lacquer thinners and nail coatings will follow in 2009.

8 We also intend to evaluate toxic exposure from
9 use of nail coatings, certain spot removers, and paint
10 strippers.

11 And of course we have work ongoing to evaluate
12 other categories for VOC and greenhouse gas reductions.
13 Additional VOC reductions are necessary to fully meet the
14 consumer products SIP commitment by the end of 2014.

15 --o0o--

16 MR. OLALUWOYE: In conclusion, we recommend that
17 you adopt the proposed amendments with the modifications
18 described today.

19 We'd be happy to answer any questions you may
20 have.

21 CHAIRPERSON NICHOLS: Are there any questions
22 before we go to the public testimony?

23 All right. If not, then let's just go straight
24 to the witnesses ask. And we have 16 of you.

25 We'll start with Barry Wallerstein from the South

1 Coast, followed by Laura Rico and Solange Echeverria from
2 SEIU.

3 MR. WALLERSTEIN: Good afternoon. And let me
4 first say congratulations to the Board and the staff for
5 the release of your scoping plan.

6 I'm here today at the full direction of my
7 governing board, who has discussed this topic at length,
8 to support the staff recommendation on the proposed limits
9 that are before you; and then to ask that you move quickly
10 to regulate some other categories faster than actually
11 your staff has proposed and is staff recommendations.

12 We have provided a letter to the Board from the
13 Chairman of our governing board and an attached sheet that
14 we would request that you make some amendments to your
15 adopting resolution to direct staff to move forward in a
16 couple categories.

17 I'd like to just very quickly put this in
18 context. Last year we violated the federal 8-hour ozone
19 standard in South Coast nearly one-third of the days of
20 the year. Our problem is urgent and we need to make rapid
21 reductions in VOCs.

22 Consumer products is the largest VOC source
23 category in the South Coast Air Basin. The proposal
24 before you today will achieve roughly two and a half tons
25 reduction in South Coast. The 2007 AQMP that our agencies

1 approved last year will require an additional 30 tons of
2 VOC reductions from consumer products. And an additional
3 ten tons is to occur by no later than 2014.

4 So we're asking you cooperatively, we want to
5 work with you to move rapidly on a couple of categories.

6 The first category is the general purpose
7 cleaners, general purpose degreasers, and glass cleaners,
8 where we would propose 1 percent by weight. And that
9 would achieve almost two tons of reduction in South Coast.

10 And the second is multipurpose paint and lacquer
11 thinners that would be no more than 3 percent by weight.
12 And that would achieve roughly an additional six tons of
13 reduction in South Coast.

14 So we could make up the deficit that we need by
15 2014 in rapid fashion.

16 Let me just also mention that we've actually
17 provided your staff with an extensive amount of technical
18 information regarding the feasibility of these limits. We
19 did so last December. Your staff actually proposed the
20 lacquer thinner limits in its original proposal and then
21 pulled it back. The products are available. They're on
22 the market. We've looked at them. They're compliant.
23 And we would urge you to modify the proposed resolution to
24 include a request of the staff to at least bring to you so
25 that we can have a public debate this coming November

1 about the feasibility of these limits. We think we'll be
2 persuasive. If we're not, then let the cards fall where
3 they will. But we deserve the opportunity to appear
4 before you in November and to be heard on this issue.

5 Thank you.

6 CHAIRPERSON NICHOLS: Thank you for your
7 testimony here.

8 You know, I appreciate the work that you've done
9 and your advocacy for getting those extra tons. And I
10 want to ask the staff to respond, perhaps not this minute,
11 maybe at the end. It's up to you when you want to
12 respond.

13 But I would object to the characterization that,
14 you know, we should duke it out over what the limit should
15 be. I'm hoping that we can take the information that
16 you've developed and use it and comment on it and try to
17 work together to come forward with a regulation that the
18 Board could adopt. I know you're not intending to be
19 adversarial. But I'm just concerned that this is not -- I
20 don't think that's the kind of proceeding we want to be
21 in.

22 MR. WALLERSTEIN: And I apologize if I came
23 across that way, because that's certainly not our intent.
24 We just simply want the matter brought before --

25 CHAIRPERSON NICHOLS: You want to move it

1 forward. And we agree. But I know the staff has had some
2 concerns about timing and workload and whether they were
3 going to be able to get all the information that they
4 needed.

5 And I certainly believe that this Board would
6 want to encourage them to take advantage of other people's
7 work product to the extent possible so that we don't have
8 to reinvent any wheels around here.

9 EXECUTIVE OFFICER GOLDSTENE: Madam Chairman, I
10 think it would be helpful, if you don't mind, just for Bob
11 Barham to explain briefly how we're partnering with the
12 South Coast.

13 CHAIRPERSON NICHOLS: Okay. Sure.

14 STATIONARY SOURCE ASSISTANT CHIEF BARHAM: This
15 is Bob Barham, Assistant Chief of the Stationary Source
16 Division.

17 We agree with Dr. Wallerstein completely that we
18 need to move ahead with these categories. They're very,
19 very high mating categories and it's necessary to move
20 ahead.

21 We're planning on coming back in November with
22 the cleaning products category. And for the paint
23 thinners and the other categories, we're planning to come
24 back to you in 2009. We feel we need some additional time
25 to resolve some technical issues such as flammability with

1 some of the product, looking at whether or not there are
2 replacements for specific types of paint thinners, and
3 some other technical issues that we feel are important to
4 investigate.

5 But we will work with the South Coast Air Quality
6 Management District in looking at these things and bring
7 something back to you probably mid-2009.

8 CHAIRPERSON NICHOLS: Which is the one that
9 you're proposing to delay till 2009? I'm sorry.

10 STATIONARY SOURCE ASSISTANT CHIEF BARHAM: This
11 would be the paint thinners and lacquer thinners.

12 CHAIRPERSON NICHOLS: And the other one you can
13 do in November?

14 STATIONARY SOURCE ASSISTANT CHIEF BARHAM: Yeah,
15 the cleaning products.

16 CHAIRPERSON NICHOLS: The cleaning products.

17 All right. Well, we'll consider this further as
18 we go forward. But thank you for that.

19 MS. ECHEVERRIA: Good afternoon. Solange
20 Echeverria for SEIU Local 1877, Madam Chair, members of
21 the Board and staff.

22 On behalf of the thousands of janitors that we
23 represent in the state of California, we applaud the
24 California Air Resources Board's efforts to reduce the
25 emissions of volatile organic compounds in consumer

1 products.

2 As the Board weighs its decision to work with
3 other stakeholders and consider the health of those who
4 are the most exposed, as well as protect the health of the
5 most vulnerable among us, such as low income workers,
6 children and consumers uninformed of the risks that they
7 are facing when using these product, we strongly encourage
8 you to include in the language to regulate emissions from
9 institutional and janitorial cleaning products.

10 If the Board includes this language, which was
11 not included in the last draft, there would be an
12 additional reduction of 4.5 tons per day of VOC emissions,
13 an increase of almost 100 percent from the original
14 proposal.

15 While we at SEIU Local 1877 strive to include
16 green cleaning products in our contract language, we need
17 the state's help in regulating the use of these extremely
18 toxic cleaning products.

19 Thank you again for all your hard work.

20 CHAIRPERSON NICHOLS: Thank you, Ms. Echeverria.

21 Are you going to translate, Ms. Bautista?

22 MS. BAUTISTA: Yes.

23 CHAIRPERSON NICHOLS: Thank you.

24 MS. RICO (through interpreter): Good afternoon.

25 Her name is Laura Rico, and she's a janitor. She works at

1 400 Capitol here in Sacramento.

2 I've been working six years as a janitor. And I
3 appreciate your time in hearing me out. And my
4 appreciation to the staff of the Air Resources Board for
5 their work on this regulation.

6 I am the delegate at 400 Capitol Mall in my
7 building and I'm the spokesperson for the workers in that
8 building whenever they have complaints or issues.

9 The chemicals with which we work with do affect
10 our health. For example, sometimes we use this oil to
11 polish metals. My co-workers complain about headaches and
12 nausea. For example, when they clean elevators and the
13 doors have to close.

14 She spoke to the building owners and they tried
15 to change the polish that they were using for the
16 elevators. When they changed it over, it did take them
17 longer, almost double the time to clean it.

18 So they started using the original formula and
19 then they started getting sick again. And what they were
20 told was to sit outside and get some fresh air. But the
21 damage was already done.

22 But logically we're not the only ones affected.
23 The tenants also get affected because the doors are closed
24 when the cleaning's being done in the offices and the
25 bathrooms, et cetera.

1 They don't know which kind of chemicals we're
2 using to clean up their offices.

3 So I'm working hard to make sure that we're -- to
4 change over the -- to use a different polish that wouldn't
5 affect my co-workers. The quality of the work shouldn't
6 matter. Our health should be -- the health of our
7 co-workers and their life should be valued more.

8 So what I ask is that this issue of cleaning
9 products come up before you in November, that you commit
10 today to bringing this item up at your November hearing.

11 Thank you for your attention.

12 CHAIRPERSON NICHOLS: Muchos gracias.

13 Okay. Thank you.

14 Bob Hamilton and then Joseph Yost, Mike freeman.

15 MR. HAMILTON: Thank you, Madam Chair and members
16 of the Board. I am here representing both my company,
17 Access Business Group, that manufactures consumer
18 products, and also the Soap and Detergent Association.

19 And we appreciate the fine work that the Board
20 has done in attempting to control consumer product
21 emissions. We have worked for nearly two decades in the
22 Consumer Product Working Group to assure that the products
23 are both compliant with low VOC emissions and still
24 commercially and technically feasible.

25 We have a concern about one category. The

1 category is fabric softener - single use dryer product.
2 It's a novel category, as was reflected in the way in
3 which it's being regulated as a number of grams per sheet.

4 We are concerned that because of that
5 differential, there's going to be some confusion. The
6 consumers have a tendency to use these products by number
7 of sheets. And in the initial statement of reasons on
8 Page 83 there's an attempt to address the issue that
9 perhaps consumers at lower VOC emissions will instead use
10 multiple sheets instead of single sheets. We had brought
11 forth some information -- market research information
12 about consumer use. Unfortunately, the regulation is for
13 consumer products, and consumers are a critical element in
14 how the products are used. And so we can direct them to
15 use a single sheet, but they may use multiple sheets.

16 It was noted within the Statement of Reasons that
17 we had not brought forth data. And although the data's a
18 little bit unusual when it's market research data, we did
19 bring forth data that demonstrated that consumers do have
20 a tendency when they don't find their clothes sufficiently
21 freshened in the single cycle, that they'll use multiple
22 sheets or return the clothing for a second cycle.

23 ARB notes that the staff will use its periodic
24 surveys to monitor product sales and take appropriate
25 action if any unanticipated increased use is occurring.

1 It is our concern that that might happen and it would take
2 some time before the Board would have this drawn to their
3 attention. So we do believe that this is a premature
4 regulation, although we do see that the staff has worked
5 with us to a significant extent.

6 If you should decide to implement the regulation
7 in any case, we are concerned about the differential in
8 the way in which fragrance is being addressed. It is an
9 exception to the normal use where the manufacturers have
10 an exemption for a certain amount of fragrance. And on
11 page 81 of the initial Statement of Reasons, there is the
12 indication that the staff acknowledges that. And we would
13 just like to make sure that there's sufficient training
14 for some manufacturers who might not be aware or
15 understand that it is a different category.

16 Thank you very much.

17 CHAIRPERSON NICHOLS: Thank you.

18 Mr. Freeman and then Mr. Zechman.

19 MR. YOST: Madam Chair, members of the Board, the
20 staff. My name is Joseph Yost. I represent the Consumer
21 Specialty Products Association.

22 CSPA is a voluntary nonprofit national trade
23 association that represents approximately 250 companies
24 that manufacture a wide range of products for household,
25 institutional, and commercial use.

1 As pertains to this rule making, CSPA Member
2 companies will be subject to new or revised VOC limits for
3 16 of the 19 product categories included in the ARB staff
4 report. During this rulemaking process, CSPA worked
5 cooperatively and closely with ARB staff and various other
6 stakeholders as part of the ARB's Consumer Products
7 Regulation Work Group.

8 We commend the ARB staff's exemplary efforts to
9 ensure that all interested parties had an opportunity to
10 participate in this open and transparent public effort to
11 develop this proposed regulation.

12 The new VOC limits and proposed provisions in the
13 ARB staff proposal present a very serious and costly
14 formulating and marketing challenge. CSPA's general
15 willingness to accept most of this proposed regulation is
16 consistent with our member companies' long-standing
17 efforts to work cooperatively and constructively with ARB
18 staff and other stakeholders.

19 During the past 20 years CSPA-member companies
20 spent many hundreds of millions of dollars to lower the
21 VOC content in consumer products to help improve the air
22 quality in California, while maintaining our industry's
23 ability to supply effective products that consumers can
24 rely on to contribute positively to the health, safety,
25 and quality of life.

1 While CSPA has agreed to meet the technical
2 challenges necessary to comply with most of these
3 stringent VOC limits proposed by the staff, we continue to
4 express concerns about one of the proposed VOC limits and
5 two effective date. These issues are covered in our
6 written comments.

7 Most importantly, CSPA has significant concerns
8 about the proposed second tier technology-forcing VOC
9 limit for the multipurposed lubricant products category.
10 There is no known nor reasonably foreseeable technology
11 that ensures that these products' current multiple
12 functions can be maintained while achieving compliance
13 with a proposed second tier limit. Nonetheless,
14 CSPA-member companies are committing to exercise their
15 best good faith efforts to push the limits of current
16 technologies in developing a new product technology and
17 formulation in hopes that they will prove to be
18 commercially viable products.

19 To be clear, however, this commitment entails
20 taking necessary risk with brand names that have been
21 built over many years. CSPA members will offer additional
22 testimony today explaining in more detail the significant
23 technological and financial risk that their companies are
24 accepting.

25 CSPA hopes that all these proposed limits will

1 prove feasible in the short time frames that are allowed
2 for compliance. However, many CSPA-member companies have
3 yet to identify feasible product technologies to meet
4 these new VOC limits. Therefore, we request that ARB
5 staff commit to work with us to reevaluate these limits in
6 the future if they prove to be technologically and
7 commercially infeasible.

8 Finally, CSPA members are willing to accept the
9 challenge of reformulating our products to meet the
10 proposed global warming potential for pressurized gas
11 dusters.

12 Thank you for this opportunity to comment on this
13 important rulemaking. Going forward, CSPA will continue
14 to work cooperatively with ARB and the staff to identify
15 appropriate and feasible options needed to achieve the
16 ARB's objective of protecting the health and safety of
17 California's residents and the environment.

18 Thank you.

19 CHAIRPERSON NICHOLS: Thank you.

20 Okay. Mr. Freeman, followed by Harry Zechman and
21 Doug Raymond.

22 Hi.

23 MR. FREEMAN: Hi. My name's Mike Freeman. I'm
24 President of the Americas for the WD-40 Company. The
25 WD-40 Company is born, raised, and still dwells in sunny

1 San Diego, California.

2 Our flagship brand, WD-40, is in over 80 percent
3 of U.S. households, is used by a vast majority of industry
4 in their operations and maintenance activities, and is
5 sold by nearly every major retailer.

6 We've come here to support the CARB staff
7 proposal for the multipurpose lubricant categories. We
8 find that the proposal is extremely technologically
9 challenging. It's forcing us into new technologies we
10 haven't even developed yet.

11 It really has two tiers. The first tier is it's
12 going to take the current 50 percent VOC content and take
13 it down to 25 percent by the year 2013. The second tier
14 is to take that 25 percent VOC content down to 10 percent
15 by the year 2015.

16 We supported the 25 percent VOC limit by 2013,
17 even though we don't have any solution in hand. We don't
18 know how we're going to do that. So why are we doing it,
19 why are we supporting it? Well, first off, we think it's
20 the right thing to do. We believe in clean air and we'll
21 do everything we can to support that.

22 We have a history and relationship of working
23 successfully with the CARB staff to meet and beat our VOC
24 goals, and we expect that to continue.

25 We have technical and marketing reviews built in

1 to ensure that there's a strong, consistent effort and
2 communication towards success. We're reaching out to
3 everybody. We're reaching out to the science community,
4 the industry, regulatory community, environmental groups.

5 Hey, you got crazy Aunt Sally, the mad scientist.
6 If she can get us there, she's in.

7 (Laughter.)

8 MR. FREEMAN: We believe that the more people we
9 get involved with the process, the better our chance for
10 success.

11 And even though we have shown science to the CARB
12 staff and to some of you on the Board that clearly
13 demonstrates that our product performance suffers when the
14 VOC content drops, we're moving forward in good faith. We
15 saw this day coming and started our new product
16 development over two years ago -- or about two years ago
17 to try to get to success. And we've had some early
18 success, but we're far from final success.

19 The key challenge is maintaining and hopefully
20 improving the product performance while meeting and
21 beating all the CARB VOC goals, because that's really
22 what's going to help us achieve our mutual clean air
23 goals.

24 WD-40's more than a lubricant. It's a penetrant,
25 it's a water displacer, it's a cleaner, it prevents

1 corrosion and rust. And how you can help us, you can help
2 us find the way. We need the time to develop and
3 successfully introduce a WD-40 that works as good or
4 better than the current product and also meets, beats all
5 CARB VOC goals. And we need your help and support in
6 doing that.

7 I was in Ron Roberts' office the other day. He's
8 your fellow Board member. He's not here today. But he's
9 also a fellow San Diegan, and I want you to know that he's
10 very interested in our success in doing this. I can
11 hardly wait for his phone calls, you know, "Mike, are you
12 done yet?" "Mike, are you done yet?" And it's just going
13 to come on. So he's going to be all over it.

14 But I want you to also understand, one last
15 thing, is whatever happens here goes to other places
16 really quickly. It goes to other states, goes to other
17 countries. We know that. We're in 160 countries. And
18 we -- I want you to know that the WD-40 brand represents
19 50 percent of our total company sales in the United States
20 and 70 percent of our global sales. We're betting the
21 brand and the company on success. That's our call to
22 success. And we want you to join us in that endeavor by
23 supporting the CARB staff proposal for multipurpose
24 lubricants.

25 CHAIRPERSON NICHOLS: Thank you very much.

1 MR. FREEMAN: Thank you.

2 CHAIRPERSON NICHOLS: Harry Zechman, followed by
3 Doug Raymond and Paul Gardner.

4 MR. ZECHMAN: Good afternoon, Chairman Nichols
5 and Board members. My name is Harry Zechman. I'm Chief
6 Operating Officer for Stoner Incorporated.

7 Stoner produces specialized cleaners, lubricants,
8 and coatings for industrial, for commercial, and for
9 consumer use. Over the last 60 years, Stoner has been
10 innovative and is accomplished at producing and creating
11 new and effective products.

12 I'm here today to support staff's proposal for
13 the aerosol glass cleaner category. The staff proposal is
14 to reduce this product category to a 10 percent VOC limit.
15 This reduction will not be easy for our company. Our
16 product, Invisible Glass, is used on substrates such as
17 glass and mirrors. These substrates need to be cleaned
18 and the substrate needs to be left residue free. If a
19 residue remains, the surface appears cloudy or dirty. Our
20 customers expect a high quality product that provides
21 strong cleaning and a transparent finished surface. Our
22 company will spend resources reducing the VOC content
23 while maintaining this high quality product.

24 I would like to thank the staff for their
25 willingness to meet with us and to discuss this topic.

1 Stoner urges the Board to adopt the staff proposal on the
2 aerosol glass cleaner.

3 Thank you very much. And I can answer any
4 questions.

5 CHAIRPERSON NICHOLS: Thank you. Don't see any
6 questions. But if we have any, we'll be able to call on
7 you.

8 Doug Raymond, followed by Paul Gardner, Adam
9 Selisker.

10 MR. RAYMOND: Good afternoon. My name is Doug
11 Raymond. I'm here representing the National Aerosol
12 Association. I'm here to support the Board proposal as
13 written.

14 This has been a very difficult rulemaking. And I
15 believe further rule makings will be even more difficult.
16 Most of the categories that we looked at had been
17 regulated in the past. The other ones were very small
18 categories, which makes it very tough to get emission
19 reductions.

20 We'd like to commend the staff on their
21 willingness to look at all of the information, research
22 thoroughly the categories, and come up with feasible
23 limits.

24 We'd like to reiterate a little bit about what
25 Mike Freeman and Joe Yost were talking about. There are a

1 few categories that have very technology-forcing limits,
2 and we plan on working very closely with the staff to make
3 sure that all the information gets across to them and that
4 these products remain viable.

5 So again I would just like to urge the Board to
6 adopt the proposal as written.

7 Thank you.

8 CHAIRPERSON NICHOLS: Thank you.

9 Mr. Gardner. Then Adam Selisker.

10 MR. GARDNER: Good afternoon, Board members. My
11 name is Paul Gardner. I'm the General Manager of the
12 Blaster Corporation.

13 Our company produces lubricants, and we are best
14 known for a product, PB Blaster, which is the market
15 leader in the penetrating lubricants and the flagship
16 product of our company. This one product produces a
17 majority of our profit and could be found in most retail
18 outlets.

19 I'm here today to support the staff's proposal
20 concerning penetrants. We have met with the staff and
21 discussed the pertinent issues. Currently the 25 percent
22 VOC limit is technology forcing and will take a
23 significant reformulation effort.

24 Our product has been used faithfully for over 50
25 years by consumers and commercial users. Our goal is to

1 continue to manufacture and supply products which are
2 effective to our customers. We plan to work with the
3 staff through the R and D reports and other meetings to
4 ensure that Blaster Corporation can continue to deliver
5 high quality products that our customers have come to
6 expect.

7 Thank you for your consideration on this issue.

8 CHAIRPERSON NICHOLS: Thank you.

9 Mr. Selisker, followed by Greg Johnson.

10 MR. SELISKER: Good afternoon. My name's Adam
11 Selisker, Vice President of Technology for CRC Industries.
12 And I'm happy to report that we support the comments from
13 the rest of the industry folks and we have nothing else to
14 add.

15 Thank you.

16 CHAIRPERSON NICHOLS: And what does your company
17 do? I'm sorry. Which group of --

18 MR. SELISKER: CRC Industries, we are a specialty
19 chemical manufacturers.

20 CHAIRPERSON NICHOLS: Okay. Thank you.

21 MR. SELISKER: Thank you.

22 CHAIRPERSON NICHOLS: Greg Johnson, followed by
23 Doug Fratz.

24 MR. JOHNSON: Hi. My name's Greg Johnson. I
25 represent the Sherwin Williams Company today. We produce

1 consumer products in most of the categories being
2 considered here today.

3 Most of my concerns have been addressed by
4 previous comments. And I would just like to say we
5 support the staff recommendations. And I'll yield the
6 rest of my time to whoever needs it.

7 CHAIRPERSON NICHOLS: Thank you.

8 Mr. Fratz and then Luis Cabrales.

9 MR. FRATZ: Good afternoon. I'm Douglas Fratz,
10 Vice President of Scientific and Technical Affairs at the
11 Consumer Specialty Products Association in Washington DC.

12 I've represented CSPA before this Board in all of
13 the consumer products actions over the last 20 years. And
14 this is -- I'd like to provide today some insights on how
15 this compared within the past and where we appear to be
16 going in the future.

17 As my colleague, Joe Yost, noted, this has been a
18 somewhat difficult rulemaking. Each rulemaking has been a
19 little bit more difficult than the last in many aspects.
20 But we are meeting the -- or being able to commit to meet
21 these new challenges because of the excellent work of your
22 staff over the last nine months.

23 We hope that all of these new limits will prove
24 feasible for our members and our products. But I can tell
25 you from a long experience that each rulemaking and each

1 new standard is becoming more difficult and less cost
2 effective in our contributions towards clean air.

3 According to staff estimates, this rulemaking
4 will cost our industry \$260 million, while providing just
5 under six tons of reductions in VOCs per day. Many of
6 these new limits will require dozens of products to be
7 reformulated in order to get under 200 pounds a day of
8 reduction statewide. One new limit will require 52
9 products to be reformulated in order to obtain a hundred
10 pounds a day in VOC reductions.

11 The staff has acknowledged in the staff reports
12 we need to find new innovative reduction strategies for
13 consumer products in the long term. Our industry is
14 pledged to contributing in any way we can towards clean
15 air here in California and also nationwide. But command
16 and control regulations are becoming more and more
17 difficult. The setting of new standards across broad
18 categories is going to eventually lead to infeasible
19 limits if it hasn't done so already.

20 We've sponsored many scientific studies over the
21 last 20 years just to look at ozone attainment and ozone
22 attainment strategies. The very low impact of our VOCs is
23 well established in those studies. And the reactivity --
24 the very low reactivity of our VOCs means they are
25 one-fifth as much ozone impact as the highest reactivity

1 sources. And also as we go into the future, NOx
2 reductions are five times more effective in ozone
3 reductions per weight than VOC reductions.

4 The \$260 million that we're pledging to invest
5 today probably could be used elsewhere to much better
6 effect, with much higher contributions to ozone reduction;
7 much higher contributions in addition to particulate
8 matter reductions and to global warming, which is a key
9 issue, as you well know and your efforts today show.

10 CHAIRPERSON NICHOLS: Mr. Fratz, your time has
11 expired.

12 MR. FRATZ: Okay. Well, thank you very much.

13 CHAIRPERSON NICHOLS: Thank you.

14 Luis Cabrales and Tim Carmichael.

15 Oh, you're Tim --

16 MR. CARMICHAEL: Yeah, I know what you're
17 thinking, Chairman. You're thinking if that's Luis, I've
18 grown a little bit. But if you don't mind, we're just
19 going to swap positions. Is that okay?

20 CHAIRPERSON NICHOLS: Okay. Sure, of course.

21 MR. CARMICHAEL: Good afternoon. I'm Tim
22 Carmichael with the Coalition for Clean Air. Just a
23 couple of brief comments.

24 We're supportive overall of the staff proposal.
25 We feel that the staff had been very generous in the

1 implementation dates that they have in this proposal. I
2 think that's reflected by most of the industry's
3 supportive comments.

4 You know, I appreciate the "can do" attitude of
5 the industry reps that have testified here today. But I
6 want to remind the Board that not all the companies out
7 there that are producing these products that are high
8 polluting have that attitude. And I hope to the extent
9 that the staff and the Board are going to grant
10 flexibility now or in the future, that you're paying
11 attention to who's really trying and the companies and
12 industries that really aren't trying.

13 We're especially appreciative in the regulation
14 that's before you today of the toxic reductions.
15 Chlorinated solvents are nasty compounds, and we should
16 move away from them everywhere in our society as quickly
17 as possible.

18 You know, a long time ago somebody who has been
19 working on these issues for decades told me that every VOC
20 is a toxic waiting to be discovered. I still believe
21 that. And over time I've come to believe that more and
22 more. And I think that's an important lens for this Board
23 as you consider regulating more VOCs, especially from this
24 sector, which, you know, is definitely not an easy sector
25 to regulate. But most of these compounds -- or many of

1 them today are already identified as toxics. And going
2 forward I think science will show many more are toxic to
3 the environment and to humans than we know today.

4 As your staff and Dr. Wallerstein indicated in
5 his testimony, most of the potential emission reductions
6 have been put off till November or later from this round
7 of consumer products regulation. And some of our comments
8 are -- and to your staff and to the Board members have
9 been focused on that. Five tons is important. It's
10 significant. But we want to get the other 30 that you
11 have the potential to get in the near term. The staff has
12 told us that they need to do survey work in work groups.
13 Fair enough. But we hope the Board will strongly
14 encourage the staff to do those as quickly as possible and
15 not dillydally, if you will, not delay regulating this
16 sector because some industry wants to do a work group for
17 two or three years. I mean this is a very important
18 sector. And if you look at your own website and the
19 projections for emissions in 2010 and 2020, it's very
20 obvious. The numbers are there showing how important it
21 is to regulate this sector better than we have to date.

22 Finally, I want to mention one specific concern
23 that relates to an approach that ARB's using and a
24 potential hazard with it and the reactivity approach to
25 regulating consumer products. There's the potential for

1 companies to bring forward alternatives that are in fact
2 more toxic -- maybe lower VOC but more toxic than the
3 product that's on the market today. Please encourage your
4 staff -- and I think some of your staff, if not all of
5 them, are paying attention to this. But it's a very
6 important piece here. We do not want to change out one
7 problematic product with another problematic product.

8 CHAIRPERSON NICHOLS: Your time's up.

9 MR. CARMICHAEL: Okay. So I encourage you to pay
10 attention to that potential trade-off there.

11 CHAIRPERSON NICHOLS: Thank you.

12 MR. CARMICHAEL: Thank you very much.

13 CHAIRPERSON NICHOLS: Mr. Cabrales, followed by
14 Jim Mattesich.

15 MR. CABRALES: Thank you, Madam Chairman. This
16 is the real Luis Cabrales. I represent Coalition for
17 Clean Air.

18 I submitted written comments on behalf of
19 Coalition for Clean Air and 31 state and national
20 environmental organizations as well as workers' safety and
21 rights groups.

22 I would like to start by commending staff for all
23 the work that they have done to prepare this regulation
24 and for putting up with us. I mean it really takes a lot
25 of patience. Let's acknowledge that.

1 However, I would like to -- having said that and
2 given our time constraints, I would like to address
3 several actions that you can take today to improve the
4 proposal staff prepared.

5 For starters, I'd like to echo what Dr.
6 Wallerstein said earlier about the importance of ensuring
7 that you direct staff today to include industrial and
8 janitorial cleaning products so that they can establish a
9 real timeline to come back with a VOC limit for those
10 products.

11 In addition to the actions addressed by Dr.
12 Wallerstein and Mr. Carmichael, I would like to address
13 several other categories, that seem small in comparison
14 when we talk about VOC limits, but are no less important
15 than the larger fish we can fry today.

16 With that in mind, I would like to start with the
17 issue of methylene chloride in paint strippers. Staff has
18 already included language to regulate methylene chloride
19 from several consumer products. But we want to encourage
20 you to direct staff to also include paint strippers in
21 this group of consumer products. According to these
22 agencies' own surveys and research, methylene chloride
23 tonnage in paint strippers as of 2006 was approximately
24 1.9 tons per day. When you multiply it by 365, that gives
25 you approximately 693 tons of methylene chloride a year.

1 That's a large amount of that highly toxic chemical being
2 emitted in to the air and exposing workers and consumers.

3 In addition to that, we have included information
4 about research available for alternatives for methylene
5 chloride in paint strippers.

6 Another concern has to do with the increased VOC
7 limits and compliance dates for several categories listed
8 in this draft. For example, when we talk about odor
9 removers, the issue that staff had originally intended to
10 set a VOC limit at .1 percent and came back with a
11 proposal with a 6 percent VOC limit for non-aerosol odor
12 removers and a 25 percent for aerosol odor removers and a
13 compliance date moved from 2012 to 2013.

14 CHAIRPERSON NICHOLS: Mr. Cabrales, you've used
15 up your time. I'm sorry. You did send us a letter, I
16 believe --

17 MR. CABRALES: Yes, I did, ma'am.

18 CHAIRPERSON NICHOLS: -- containing the
19 information that you're going over here. So the Board
20 members would have a chance to look at that before we have
21 to actually vote on this item.

22 So if you don't mind, we'll just cut you off
23 here. Thank you very much for your involvement.

24 MR. CABRALES: Thank you very much, Madam
25 Chairman.

1 CHAIRPERSON NICHOLS: But you've spent a lot of
2 good time with our staff as well, I know.

3 MR. CABRALES: Yes, I did.

4 CHAIRPERSON NICHOLS: Mr. Mattesich.

5 MR. MATTESICH: Chairman Nichols, members. Jim
6 Mattesich with the Law Firm of Greenberg Traurig. My
7 client is the Personal Care Products Council, which is the
8 cosmetics industry trade association. You formerly knew
9 it as the Cosmetics, Toiletries, and Fragrance
10 Association.

11 In the words of Tim Carmichael, our group has
12 been one of those that have been trying over the years at
13 working with staff and with your Board. And we appreciate
14 the staff's efforts in this round. We have come to
15 agreement on virtually all except for one small, but
16 important, category, and that's the astringent category.
17 To remind you of the numbers, the staff's proposal is a 35
18 percent cap on the VOCs in these products. The principal
19 VOCs of the products we're talking about are ethanol. And
20 typically the products today are formulated at the higher
21 end for the purpose served at about a 60 percent VOC
22 limit.

23 These are health benefit products. And the
24 active ingredient is -- Dr. Balmes and Dr. Telles would
25 know -- is the VOC in the product, the ethanol that cleans

1 the pores and cleans the skin.

2 We've had two prominent California dermatologists
3 meet with staff to express their belief that the 35
4 percent limit is going to adversely affect many people
5 with acne problems who can't -- in part, the people who
6 can't spend money going to see those dermatologists
7 because they don't either have the money or they don't
8 have the health coverage, and they will be
9 disproportionately impacted by these products not being
10 available to them through the supermarket or drugstore at
11 the levels currently proposed -- or currently produced.

12 And as you all know, the acne is a principal
13 problem, physical and psychological, for many young
14 people, not just in California.

15 The higher VOC level products that are currently
16 produced are needed to address severe oily skin. The 35
17 percent limit is not going to be sufficient. We have
18 suggested that at least the Board consider raising that
19 number to 40 percent. And we would ask you to do that
20 today, or put off this particulate category until industry
21 can do the definitive clinical study, which staff has
22 agreed doesn't exist yet, in order to demonstrate the need
23 for these higher level VOC products to meet the health
24 needs of many, many Californians.

25 CHAIRPERSON NICHOLS: Excuse me, but if I could

1 interrupt you for just a second. I won't charge you for
2 this amount of time. But are all of the products in this
3 category unable to meet the 35?

4 MR. MATTESICH: Madam Chair, there are products,
5 as staff's report indicates, that are formulated today
6 with less than 35, I think the staff would say 70 percent
7 of the market share.

8 CHAIRPERSON NICHOLS: But your association
9 believes that the ones at the higher levels are essential
10 because they're the only one -- I know you're representing
11 an association. But there are some people who can't
12 reformulate to that and they make the assertion that their
13 product is more --

14 MR. MATTESICH: We're not telling you that this
15 isn't technologically feasible. These products have a
16 certain amount of ethanol in them and others have less.
17 What I think we're going to see is that people buy the
18 products that will be remaining on the marketplace and
19 simply have to use more of them, and we might end up in
20 exactly the same place.

21 Two last numbers in my time allotted. The
22 proposal -- and we recognize that you're attempting to get
23 a certain number of tons of reductions here. But this
24 proposal as it stands in the staff report gets you 220
25 pounds. Forty percent instead of 35 would get you

1 approximately I - think staff would agree - half of that,
2 110 pounds. So we're talking about a small amount of
3 pounds, not tons, per day of emissions for a health
4 benefit product that we think is necessary, the doctors
5 who we've consulted with believe is necessary. And we
6 would ask you either to adjust the number to 40 or put
7 this over until we can do the clinical study that would
8 demonstrate the need.

9 CHAIRPERSON NICHOLS: Okay. Thank you.

10 Bill Magavern and then Bonnie Holmes-Gen, and
11 then we'll go back to staff.

12 MR. MAGAVERN: Good afternoon. I'm Bill Magavern
13 with Sierra Club California. And in the context it is I
14 think is that ARB has had some significant success in
15 regulating consumer products, and that that has been not
16 only important in reducing the emissions that form smog
17 but also in terms of driving industry to innovate. And I
18 think that as Cal/EPA looks more broadly at how to green
19 our chemistry, we've actually suggested that there's a lot
20 to be learned from ARB's experience. Although there are
21 also some limitations in your statutory authority, so we
22 need to do some broadening there.

23 Ultimately we would actually like to see
24 multimedia assessments of current products and of proposed
25 alternatives that would account for not only emissions

1 into air but releases to water, impacts on worker health
2 and safety, and hazardous and solid wastes that are
3 generated as well as greenhouse gas emissions. Under your
4 current statutory authority you can't do that, so that's
5 just a suggestion of what the broader Cal/EPA effort might
6 focus on for the future.

7 Coming back to what's before you today, we do
8 support the staff proposal but also of course want to push
9 you to fairly quickly address some of those other products
10 including cleaners and degreasers, paint and lacquer
11 thinners, and paint stripper. We hope that you'll be able
12 to put those on the agenda for later this year.

13 Thank you.

14 CHAIRPERSON NICHOLS: Thank you.

15 Bonnie Holmes-Gen.

16 MS. HOLMES-GEN: Good afternoon, Chairman Nichols
17 and Board members. And, again, I'm with the American Lung
18 Association of California. And I basically wanted to get
19 up here and support the comments of my colleagues at the
20 Coalition for Clean Air and the Sierra Club and urge you
21 to adopt the strongest possible regulation today and to
22 fast track the additional categories that have been
23 delayed to help us meet our smog reduction and toxics
24 reduction goals and to get the greatest public health
25 benefit we can as quickly as possible.

1 And we certainly realize, as you are realizing,
2 that the consumer product category is critical in terms of
3 our efforts to reach our state and federal standards and
4 to protect the public from toxic compounds. And we simply
5 must accelerate our progress in achieving reductions in
6 these areas.

7 We appreciate the regulation that the staff is
8 bringing forward today. And that's an important step
9 forward. But we are concerned that the CARB Board should
10 commit to bringing these additional categories that have
11 been delayed, like paint and lacquer thinners, to the
12 Board as quickly as possible. We would also prefer the
13 November time frame for bringing the paint and lacquer
14 thinner category forward.

15 And we also want to note that we certainly
16 support the prohibition of toxics in these consumer
17 product categories. I think that's a very important
18 strategy for you to pursue.

19 Thank you for taking time to hear our comments.

20 CHAIRPERSON NICHOLS: Thank you.

21 I believe that concludes the testimony on this
22 item. And so I'd like to return it to the staff for
23 comments on the testimony that you've heard.

24 Before we take a vote, we're going to have to go
25 through our ex parte discussions. But I think I'd like to

1 give the staff an opportunity first to talk about the
2 comments that you've heard, if there are any you feel a
3 need to respond to.

4 TECHNICAL EVALUATION SECTION MANAGER TAKEMOTO:

5 This is Carla Takemoto.

6 Are there specific issues that you would like us
7 to address?

8 CHAIRPERSON NICHOLS: Well, I guess I'll mention
9 a couple that were of interest to me.

10 I guess I would be interested if you were
11 concerned about the comment about the fabric softener
12 sheets and whether people are just going to use more of
13 them. That's an argument we've heard in the past from
14 time to time about certain products - if they're less
15 effective, that people will just use more of it. I think
16 it probably depends on whether there's some other fabric
17 softener sheets that works that don't have that problem.
18 But I figure I'll give you an opportunity to address that.

19 So that's one.

20 And then the suggestion about the astringents, we
21 obviously got a lot of mail on that. It's a pretty small
22 category, but there's obviously some people who feel very
23 passionately about this issue. And since I'm not a user
24 of the product, you know, I feel like -- I'm sort of a
25 little bit reluctant to take a position. But we may hear

1 from one of our physicians on this.

2 Anyway, why don't you just deal with those two, I
3 guess, at this point.

4 TECHNICAL EVALUATION SECTION MANAGER TAKEMOTO:

5 Very good.

6 Yes, I do have a couple of comments on the fabric
7 softener dryer sheets. I want to make it clear, first of
8 all, that the proposal has no impact on the active
9 ingredients that make these products work. The
10 ingredients that provide softness to your clothing and the
11 ingredients used to reduce static cling, the proposal
12 would not affect those ingredients. The proposal simply
13 calls for a reduction in the amount of fragrance that is
14 contained on an individual sheet.

15 And we note that we have 26 reported products; 20
16 of those products already comply with the limits. So we
17 believe that we have a very feasible proposal for that
18 category.

19 CHAIRPERSON NICHOLS: Okay.

20 TECHNICAL EVALUATION SECTION MANAGER TAKEMOTO:

21 Related to astringents and toners. I want to
22 make it clear that we are regulating only the cosmetic
23 astringent and toners. We are not proposing to regulate
24 over-the-counter drugs or those types of products that
25 would be prescribed by a physician. The proposal does not

1 affect any medicated product.

2 And I wanted to note again that at the 35 percent
3 limit we do have a complying market share of 70 percent of
4 the products that already comply with this limit. So we
5 believe that it is a feasible proposal.

6 CHAIRPERSON NICHOLS: So I'm going to display my
7 lack of familiarity with this particular product once
8 again. But I understand we're not regulating anything
9 that's regulated by the FDA. So that would be the things
10 that are prescription drugs. But in terms of things that
11 you would find stocked on the shelf in a good grocery
12 store -- I mean a good drugstore or a Rite-Aid or
13 whatever, are you saying that products that are labeled
14 for use or that people consider in the category of things
15 that you'd use for acne would not be covered by this?

16 TECHNICAL EVALUATION SECTION MANAGER TAKEMOTO:

17 Those are not subject to this rulemaking. They
18 would have an active ingredient, a drug, maybe a salicylic
19 acid or something like that. And that would be considered
20 an over-the-counter drug. And those are the types of
21 products that would be used to address issues such as
22 acne.

23 CHAIRPERSON NICHOLS: Okay.

24 BOARD MEMBER HILL: Madam Chair?

25 CHAIRPERSON NICHOLS: Yes, Ms. Hill.

1 BOARD MEMBER HILL: If I could just follow up on
2 that just for a second.

3 CHAIRPERSON NICHOLS: Yes, please.

4 BOARD MEMBER HILL: Because I know probably less
5 than anyone here about this subject. But it did intrigue
6 me because of the -- you know, in looking at the staff's
7 initial recommendation of 10 percent; and then reading the
8 California Department of Public Health, Food and Drug
9 Branch opinion that -- it's their opinion that a 10
10 percent alcohol limit for acne products would adversely
11 affect their health benefit, was their comment. And then
12 we went from 10 percent to 35 percent. And then we have a
13 letter from a Dr. Gottioli going into some fairly
14 extensive reasoning why 40 percent is preferred but
15 stating that 60 percent would be better.

16 And in looking at the issue of those who
17 purchased these products for -- and my assumption is it is
18 some health benefit. I mean you're saying that it's not
19 an acne product. But I would guess that based on the --
20 unless they take it for some health benefit, health relief
21 of some kind, whether it's cleansing, and generally would
22 use this rather than go to a dermatologist where there's a
23 cost -- I mean we're all trying to keep the cost of health
24 care down. And a lot of people from a social justice
25 standpoint can't afford to go to a dermatologist, so they

1 would try what they could find over the counter. And I
2 would hope that we would be able to provide the most
3 effective product for them in that opportunity that could
4 get them the best relief and the best benefit.

5 So I guess -- I hear the 10 percent initially,
6 then we went to 35 percent, and then a medical doctor
7 from -- or dermatologist UCSF is saying 40 percent. I
8 guess what I'm wondering is maybe there is reasoning to --
9 you know, what is the right number? And is there a number
10 that does show some health benefit and where another
11 number would not -- another percentage of VOC would not?
12 So I guess what I'm suggesting is that maybe the idea of
13 looking at this further and having some study determine if
14 there is a health benefit, at whatever point that is,
15 would be worthwhile. And maybe that issue could be
16 brought back to us in November, if that's possible, to
17 look at. It just doesn't -- I guess I don't have enough
18 information to really relate to that or to make a real
19 valid intelligent decision on it based on the
20 controversial and disparate numbers.

21 And I see an answer coming there somewhere.

22 CHAIRPERSON NICHOLS: Do you want to respond?

23 BOARD MEMBER TELLES: Maybe I'll respond to that
24 one.

25 CHAIRPERSON NICHOLS: Okay.

1 BOARD MEMBER TELLES: Last night I talked to the
2 staff and I had the same concerns. And after i'd finished
3 talking to them, I went over to the hospital and had a
4 dermatologist in the hospital and was talking to him about
5 this. And in medicine if you ask more than one physician,
6 you're going to get more than one opinion. And this
7 particular dermatologist's opinion was that these products
8 are probably not good for using to treat acne. And it was
9 this dermatologist's opinion that using an astringent with
10 that much alcohol maybe will actually exacerbate acne
11 rather than make it better. And she's been practicing
12 dermatology for 20 years and hasn't used these kind of
13 products at all. And uses products that are
14 over-the-counter and some products that are prescription
15 drugs too. But she mentioned that there's
16 over-the-counter drugs which are available too.

17 I think it's a confusing issue. It kind of
18 depends on who's your dermatologist.

19 But I think that at least talking to other
20 dermatologists, there are products available that, if
21 there was a positive vote on this, it wouldn't seriously
22 impact people.

23 CHAIRPERSON NICHOLS: I had a different issue
24 also in terms of the resolution and what we're going to be
25 doing in the future on this, if people don't have other

1 questions about the items that were brought up in the
2 testimony.

3 BOARD MEMBER TELLES: I just have one question.

4 One of the witnesses mentioned that this was --
5 the total cost was \$250 million. And the estimates --
6 and, you know, if you use those kind of figures, for the
7 first year that you get reductions it would be about \$136,
8 985 per ton reduction in VOCs if you used those kind of
9 numbers if we're getting these five tons reduction. And
10 I'm just wondering how the -- is there a discrepancy
11 between what industry is seeing the cost of this is versus
12 what the staff is seeing the cost?

13 MEASURES DEVELOPMENT SECTION MANAGER MALLORY:

14 This is David Mallory of the staff.

15 The estimate of \$250 million cost is correct, and
16 it's incurred over ten years as a standard practice. So
17 it would not be an upfront cost of \$250 million. It would
18 be incurred over ten years.

19 DEPUTY EXECUTIVE OFFICER SCHEIBLE: And that's
20 what we use to get our \$6 a pound estimate. And \$6 a
21 pound is on the higher side of acceptable cost for the
22 types of measures we've done before.

23 CHAIRPERSON NICHOLS: Okay. Yes, John. Oh,
24 sorry.

25 Ms. Berg.

1 BOARD MEMBER BERG: Thank you very much, Madam
2 Chairman.

3 I had a question on the motor vehicle wash. I
4 notice that we just had one category, where on other
5 categories we have aerosol and non-aerosol. And I noticed
6 in a couple of the public comment letters that there was a
7 concern about an aerosol product that this might ban.

8 Have we resolved that issue or is it an issue?
9 Do we need to be concerned about that?

10 TECHNICAL EVALUATION SECTION MANAGER TAKEMOTO:

11 Ms. Berg, we I believe have resolved the issue.
12 The data that were provided to us that we based our
13 initial proposal on, no aerosol products were reported.
14 But since we received the data, we became aware of some
15 aerosols that had been introduced into the market. And we
16 do not believe that the limit that we have proposed of 0.2
17 percent by weight -- that is not feasible for an aerosol
18 product. So what we have done is we have taken the limit
19 and made sure that it only applies to non-aerosol
20 products. We need to get data for those aerosols and come
21 back to you with a limit for those if appropriate.

22 BOARD MEMBER BERG: That's great. So we will
23 come back to us then, because I think it is important that
24 we regulate the aerosols. I just wanted to make sure we
25 were doing that appropriately.

1 TECHNICAL EVALUATION SECTION MANAGER TAKEMOTO:

2 Yeah, we'll put it on a list of categories to be
3 surveyed and find out what the emissions and sales of
4 those products are and come back to you.

5 BOARD MEMBER BERG: Great.

6 And then as a disclosure, because I would like to
7 discuss the paint and the thinner issue, I'm not involved
8 in the sale or manufacturing of consumer paint and thinner
9 products. But I would like to see whatever we could do to
10 help bring that back before the Board as quickly as
11 possible, understanding that staff does have some work to
12 do. I'm a little confused personally on the consumer end
13 versus industry or commercial that is being regulated.
14 And so there just might be some labeling problems. There
15 might be some misuses out there. And so I do think
16 encouraging staff to bring it back as soon as possible
17 would be appropriate.

18 CHAIRPERSON NICHOLS: I also want to understand
19 this issue about the janitorial cleaning products that are
20 used by the commercial janitorial services, because I
21 think those are occupation exposures but they're not
22 regulated effectively.

23 Excuse me?

24 BOARD MEMBER BALMES: I actually wanted to make
25 that point.

1 CHAIRPERSON NICHOLS: Yeah. And I think it's a
2 serious problem given the amount that people are exposed
3 to. I've seen some of these gigantic vats out there, you
4 know, and office situations and seeing the people using
5 them in situations that, frankly, as an occupant of the
6 building sometimes you were, you know, feeling fumigated
7 as you walked by the room where they were working and
8 mixing the products. And I would like to make sure that
9 we're dealing with those in a serious way, because the
10 exposures I think are very high.

11 So what's the story on that category?

12 TECHNICAL EVALUATION SECTION MANAGER TAKEMOTO: I
13 guess I can address cleaning products in general. And
14 right now for products such as a non-aerosol glass cleaner
15 or a non-aerosol, just a general purpose cleaner, things
16 like that, the limits are already quite low, at 4 percent
17 by weight VOC. But those are some of the types of
18 products that we are committed to coming back to you in
19 November and see if we can even reduce the VOC content
20 further.

21 CHAIRPERSON NICHOLS: Okay. So that's the
22 November category?

23 TECHNICAL EVALUATION SECTION MANAGER TAKEMOTO:
24 Yes, yes.

25 CHAIRPERSON NICHOLS: And then the ones that

1 you're proposing to wait until 2009 on, those were the
2 paint and thinners -- the other paints and thinners?

3 TECHNICAL EVALUATION SECTION MANAGER TAKEMOTO:

4 Yes. On the slide on ongoing work, we had a
5 number of other projects that are ongoing. Some of them
6 are toxics reduction strategies that we would be looking
7 at, which wouldn't count towards our SIP commitment, but
8 still important to evaluate to see if there are some
9 adverse exposures.

10 But some of those measures to reduce toxics would
11 be hopefully brought to you next year. We are hoping to
12 bring to you proposals for such things as paint and
13 lacquer thinners. And we have a host of other categories
14 that we have new data on. And as soon as we can get data
15 reviewed and can propose limits, we'll be coming back to
16 you with more limits and more categories.

17 CHAIRPERSON NICHOLS: Well, to the extent that
18 there's a workload issue here, which I assume there is, I
19 guess one of the things that I'm curious about is whether
20 there isn't some mechanism that we could use to take
21 advantage of the South Coast District's offer, since they
22 apparently have staff available to work on this issue and
23 are anxious because of their SIP commitments and
24 presumably because of their interests in toxics to
25 participate.

1 Isn't there a way we could create a work group or
2 deputize the South Coast staff in some fashion or another
3 to do some of this work as long as they would do it in
4 whatever format? I mean, you know, I assume we have
5 differences in the way we go about doing our rulemakings
6 to some degree. But still couldn't we find a way to
7 collaborate here? Or exploit, for lack of a better term.

8 BOARD MEMBER HILL: At no charge, correct?

9 CHAIRPERSON NICHOLS: Of course.

10 AIR QUALITY MEASURES BRANCH CHIEF BROOKS: This
11 is Janette Brooks. And we have already been talking with
12 South Coast staff. And they are going to be helping us
13 with the information they have from their certification
14 programs on the cleaning products for November. And then
15 we are going to be forming a working group for the paint
16 thinners. And the South Coast staff is going to be very
17 involved in helping us with that. And, in fact, they have
18 been helping us to address the issues that we're
19 summarizing for the first work group meeting.

20 So we very much will need their help, especially
21 in terms of some of the coatings and the need for thinners
22 and some of the issues that we've gotten from some of the
23 paint associations.

24 CHAIRPERSON NICHOLS: Great. Well, I think
25 you're hearing some impatience up here on the part of the

1 Board to get at this issue, because clearly there's a --
2 even though the tons may not be so great -- some of them
3 are actually, serious. But in any event, the need is
4 there.

5 So I don't know that we can set a deadline for
6 you other than just say we certainly hope you can stick to
7 the November deadline for the first group; and that in
8 November when you report to us on those, we can get an
9 update from you on your progress on the second category.

10 AIR QUALITY MEASURES BRANCH CHIEF BROOKS: We'd
11 be happy to do that.

12 CHAIRPERSON NICHOLS: Okay.

13 BOARD MEMBER BALMES: Madam Chairman, I just
14 wanted to hammer home on the health side, which you
15 already brought up, so that was good.

16 You know, custodial workers, as the SEIU
17 representatives mentioned, are at high risk for health
18 effects. And there were -- it was mostly neurotoxicity
19 that was brought up by the witnesses. But in terms of
20 occupational asthma, which is an area of my expertise,
21 there was a European study, an EU-wide study - that also
22 included Oregon - that actually showed that custodial
23 workers and cleaning agents was the highest single
24 category of risk. So that's one thing.

25 And then I've actually taken care of a furniture

1 stripper who got methylene chloride intoxication by
2 working in a relatively closed space with poor
3 ventilation. So I just want to underscore the testimony
4 about -- I mean there's -- we really shouldn't be making
5 products with methylene chloride anymore.

6 And, finally, the reactivity issue that Tim
7 Carmichael made -- or the point about is important. For
8 example, a colleague of mine at UC Berkeley, Mike Wilson,
9 who many of you may know from his green chemistry work,
10 his doctoral dissertation was about how there was an
11 unintended occupational health consequence of moving
12 away -- in the automobile repair shops, moving away from
13 chlorinated hydrocarbons, which were toxic to the
14 environment to -- and probably somewhat toxic to humans.
15 But they switched to a straight chain product, anhexane,
16 which is a direct neurotoxin. And a lot of automobile
17 workers got sick from that.

18 So I think it is important, if we're going to
19 move to reactivity as a criterion, that we think about it
20 carefully in terms of unintended consequence.

21 CHAIRPERSON NICHOLS: What you just said reminded
22 me that one thing that would be useful to do might be to
23 get a briefing for this Board on what's going on with the
24 green chemistry initiative that's being led by the DTSC
25 group. There's a major effort underway at the agency

1 level being led by DTSC. And I know we've been involved.
2 But it might be really good for the Board as a whole to
3 hear about how that's going.

4 BOARD MEMBER BALMES: Yeah. The Scientific
5 Advisory Council for Green Chemistry, which I was vice
6 chair of, just finished a report with various options to
7 Director Gorson, something that could be shared.

8 CHAIRPERSON NICHOLS: So, Mr. Goldstene, maybe in
9 one of our upcoming health briefings we could -- a time
10 slot we might use. I know we've got hectic agendas here.
11 But maybe we could put something --

12 EXECUTIVE OFFICER GOLDSTENE: I was actually
13 thinking of early next year, given the fall agendas are
14 very tight already. But we'll work with DTSC maybe later
15 this year.

16 CHAIRPERSON NICHOLS: Okay. And maybe there's
17 something you could just have sent to the rest of us or
18 make available to those --

19 EXECUTIVE OFFICER GOLDSTENE: We could certainly
20 do that. And I think it's a good idea.

21 CHAIRPERSON NICHOLS: -- of us who just want to
22 take a look at it, those of us who are gluttons for more
23 information.

24 Thank you.

25 So we now get back to the action at hand here. I

1 guess I need to officially close the record and remind
2 people that there'll be a -- that the record will be
3 reopened when the 15-day notice of public availability is
4 issued.

5 And then we need to do our ex parte statements.

6 And I'll start with mine, if I can find it.

7 So I had meetings with the WD-40 folks, Mike
8 Freeman, Laurie Nelson, Doug Raymond, on June 3rd.

9 I met with the Coalition for Clean Air, a number
10 of representatives, to discuss this issue. But
11 particularly Luis Cabrales, Tim Carmichael, and Nidia
12 Bautista.

13 And then there was a -- I made an attempt
14 yesterday, which was not successful, to meet with some
15 representatives of the Estee Lauder Company. But I
16 believe that their information was summarized here today.
17 It was on the astringents issue.

18 Okay. So looking down this way, I guess.

19 BOARD MEMBER RIORDAN: All right. Madam
20 Chairman, on June 17th I did meet in southern California
21 with the Consumer Specialty Products Association
22 represented by Douglas Fratz. And his comments today
23 reflected very much the subject of our conversation as
24 well as the other person that spoke today representing the
25 Consumer Specialty Products Association.

1 BOARD MEMBER TELLES: I'd had a phone
2 conversation with the folks at California Clean Air about
3 the various products involved.

4 Do you want me to go into detail?

5 CHAIRPERSON NICHOLS: Is it the Coalition for
6 Clean Air?

7 BOARD MEMBER TELLES: Yeah, Coalition for Clean
8 Air.

9 CHAIRPERSON NICHOLS: As long as the substance
10 was essentially what they covered today, that'd be --

11 BOARD MEMBER TELLES: Yes, covering all the
12 substance.

13 I also had a conversation, as I mentioned
14 earlier, with Dr. Mary Linday, who's a Stanford trained
15 dermatologist, the wife of a patient of mine that I
16 discharged from the hospital last night.

17 CHAIRPERSON NICHOLS: Thank you.

18 BOARD MEMBER BERG: Madam Chair, I had a phone
19 call on June 23rd with Luis Cabrales from the Coalition of
20 Clean Air and Naveen Berry with South Coast Air Quality
21 Management District.

22 And then on June 25th I had a meeting here in
23 Sacramento with the Consumer Products Specialty Products
24 Association. And attending that meeting was Douglas Fratz
25 and Joseph Yost.

1 Their conversation of both meetings mirrored the
2 testimony we heard today.

3 BOARD MEMBER SPERLING: Yes. And I met June 9th
4 in Davis with Mike Freeman of WD-40 and Laurie Nelson.
5 And the meeting reflected their testimony today.

6 CHAIRPERSON NICHOLS: Ms. Kennard.

7 BOARD MEMBER KENNARD: I have nothing.

8 BOARD MEMBER HILL: Thank you, Madam Chair.

9 On June 24th I had a conference call with Darius
10 Anderson of Platinum Advisors and Nancy Loudon of Estee
11 Lauder to discuss alcohol content and Consumer Products
12 Regulation.

13 On June 25th a call with Luis Cabrales from
14 Coalition for Clean Air and Naveen Berry from South Coast
15 AQMD.

16 BOARD MEMBER BALMES: And I met with Mike Freeman
17 and Laurie Nelson on May 13th. And the substance of the
18 discussion was very similar to the presentation -- or
19 testimony today.

20 Had a conference call on June 25th with Luis
21 Cabrales and various other members of Coalition for Clean
22 Air, Naveen Berry from South Coast Air Quality Management
23 District.

24 And prior to the publication data of May 9th I
25 also met with representatives of the Personal Care

1 Products Association, and also with Dr. Gottioli at UCSF.

2 CHAIRPERSON NICHOLS: That's the person who wrote
3 us the letter?

4 BOARD MEMBER BALMES: Yeah. A colleague of mine
5 at UCSF.

6 CHAIRPERSON NICHOLS: Great.

7 BOARD MEMBER RIORDAN: Madam Chairman?

8 CHAIRPERSON NICHOLS: Yes.

9 BOARD MEMBER RIORDAN: I'd like to move approval
10 of Resolution 08-30.

11 CHAIRPERSON NICHOLS: Do we have a second?

12 BOARD MEMBER TELLES: Second.

13 CHAIRPERSON NICHOLS: Thank you.

14 Any further discussion by Board members, or other
15 comments?

16 All right. If not, I think we can do this by a
17 voice vote.

18 All in favor please say aye.

19 (Ayes.)

20 CHAIRPERSON NICHOLS: Any opposed?

21 Motion carries.

22 Thank you. Good work.

23 We have two more items. This is a big day.

24 So let's give staff a chance to change seats.

25 Congratulations and thank you very much for your good

1 work.

2 The next item on the agenda is going to be the
3 consideration of the Ventura and Western Mojave Desert
4 8-hour Ozone Attainment Plans.

5 Okay. This is not a regulatory item, as I
6 understand it. But it is a presentation that we need to
7 get a briefing on. So --

8 EXECUTIVE OFFICER GOLDSTENE: Well, the first
9 item is the 8-hour ozone.

10 CHAIRPERSON NICHOLS: -- we'll start with the
11 8-hour ozone standard, yes, for the Ventura and Western
12 Mojave Desert.

13 EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman
14 Nichols.

15 CHAIRPERSON NICHOLS: I'm sorry. We do have a
16 resolution. I apologize. I didn't see it.

17 Okay. We do.

18 EXECUTIVE OFFICER GOLDSTENE: ARB staff will
19 brief the Board this afternoon on the 8-hour ozone
20 attainment demonstration plans for the Ventura County and
21 the Western Mojave Desert federal ozone non-attainment
22 areas. These plans demonstrate how these two regions will
23 attain the current federal ozone standard.

24 I'd like to introduce Andrea Juarez from Planning
25 Division to begin the presentation.

1 Andrea.

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

4 AIR POLLUTION SPECIALIST JUAREZ: Thank you, Mr.
5 Goldstene.

6 Good afternoon, Chairman Nichols and members of
7 the Board.

8 --o0o--

9 AIR POLLUTION SPECIALIST JUAREZ: This afternoon
10 I'm going to talk about ARB staff analysis of the Ventura
11 County and Western Mojave Desert 8-hour ozone attainment
12 plans. U.S. EPA originally classified each of these ozone
13 non-attainment areas as moderate areas, indicating that
14 local ozone concentrations are declining and approaching
15 the standard.

16 I will begin today's presentation with a brief
17 regional overview. I will then follow with a review of
18 the 8-hour ozone attainment plans for both Ventura County
19 and Western Mojave Desert. Finally, I will provide the
20 staff recommendations.

21 --o0o--

22 AIR POLLUTION SPECIALIST JUAREZ: This map
23 illustrates the non-attainment planning areas and
24 surrounding air districts. The blue areas represent
25 Ventura County and the Western Mojave Desert. The green

1 measures. The plan projects attainment in 2012.

2 --o0o--

3 AIR POLLUTION SPECIALIST JUAREZ: The figure on
4 the screen shows the change in Ventura's ozone design
5 values over the last two decades, and illustrates the
6 improvement in the County's air quality.

7 For the 8-hour ozone standard, the design value
8 is the average of the fourth Aye highest value in each of
9 three consecutive years. This is the metric that is used
10 to determine attainment status and that forms the basis
11 for plan development. As recently as ten years ago,
12 Ventura's design value was approximately 40 percent above
13 the standard. At 0.09 parts per million, the 2006 design
14 value is less than 10 percent above the standard.

15 --o0o--

16 AIR POLLUTION SPECIALIST JUAREZ: The Ventura
17 attainment demonstration uses a combination of
18 photochemical modeling and supplemental analyses known as
19 the weight of evidence demonstration, as required by U.S.
20 EPA modeling guidance.

21 U.S. EPA has reclassified the Ventura County
22 Non-attainment Area to serious, which has a June 2013
23 attainment deadline.

24 The photochemical modeling conducted by the South
25 Coast Air Quality Management District, taken together with

1 supplemental analyses conducted by ARB staff, supports a
2 finding that Ventura will attain the federal 8-hour ozone
3 standard by 2012.

4 --o0o--

5 AIR POLLUTION SPECIALIST JUAREZ: Next I will
6 discuss the Western Mojave Desert 8-hour ozone attainment
7 plan.

8 --o0o--

9 AIR POLLUTION SPECIALIST JUAREZ: The Western
10 Mojave Desert Non-attainment Area is overwhelmingly
11 impacted by ozone transport from the South Coast Air
12 Basin. As a result, attainment in this area is governed
13 largely by the rate at which emissions are reduced in the
14 South Coast, and ARB's 2007 state strategy is a key
15 component in the Western Mojave Desert plan.

16 In the plan, the Antelope Valley and Mojave
17 Desert districts have each committed to review specified
18 rules to determine if they meet federal reasonably
19 available control technology requirements and to adopt any
20 needed revisions.

21 Photochemical modeling projects that attainment
22 can be reached by 2020.

23 --o0o--

24 AIR POLLUTION SPECIALIST JUAREZ: This figure
25 shows that the Western Mojave Desert has experienced a

1 substantial reduction in 8-hour ozone design values. In
2 1990, the Hesperia monitoring site, which is near the
3 border between the Mojave Desert and the South Coast Air
4 Basin, exceeded the standard by almost 90 percent. Today
5 its design value is less than 20 percent over the
6 standard.

7 --o0o--

8 AIR POLLUTION SPECIALIST JUAREZ: Modeling
9 conducted by the South Coast Air Quality Management
10 District shows that emissions from sources within the
11 Western Mojave Desert are not sufficient to cause ozone
12 violations, indicating that South Coast emission levels
13 must decrease before the Western Mojave Desert area can
14 attain the standard. Modeling projects attainment in
15 2020, as a result of meeting the 2007 State Strategy
16 emission reduction commitments in the South Coast. The
17 ARB's supplemental analysis supports this finding. The
18 local districts have requested a reclassification that
19 would result in a June 2021 attainment deadline.

20 --o0o--

21 AIR POLLUTION SPECIALIST JUAREZ: In conclusion,
22 staff recommends that you approve both the Ventura and
23 Western MOJAVE Desert 8-hour ozone plans as revisions to
24 California's State Implementation Plan.

25 CHAIRPERSON NICHOLS: Okay. Thank you. Thank

1 you for the presentation.

2 Are there any questions from any of the Board
3 members on this item?

4 Yes, Ms. Berg.

5 BOARD MEMBER BERG: I just have a quick question
6 on the charts.

7 I just found it interesting that around 2000 we
8 had kind of a downward curve on both Lancaster and Ojai
9 and then we had a --

10 EXECUTIVE OFFICER GOLDSTENE: Ms. Berg, which
11 page are you looking at?

12 BOARD MEMBER BERG: I'm sorry. Ten.

13 EXECUTIVE OFFICER GOLDSTENE: Slide 10?

14 BOARD MEMBER BERG: Slide 10.

15 So we had a downward trend going in Lancaster and
16 then we had an upward swing about 2002.

17 And the same on Ojai on slide 6. We had a
18 downward trend going until about 2000, and that went
19 upward as well. I just wondered what the cause of that
20 would be.

21 LIAISON SECTION MANAGER OEY: This is Sylvia Oey.

22 The cause of that is actually very high years in
23 1998 and 2003. Those were both exceptionally bad years
24 for air quality. And because the numbers that you're
25 looking at are actually three-year averages as reflecting

1 the standard, the resulting impression is that we had a
2 strong downward trend for a few years there.

3 Basically that year was bracketed by very high
4 ozone years.

5 BOARD MEMBER BERG: It's just interesting that
6 the line above it, both in Hesperia and Simi Valley,
7 didn't show the same trend. I just thought it was
8 interesting that, you know, two specific areas had pretty
9 dramatic upward trends there.

10 Thank you.

11 BOARD MEMBER TELLES: Question.

12 What percentage of your pollution inventory
13 actually blows in from the South Coast?

14 AIR QUALITY AND TRANSPORTATION PLANNING BRANCH
15 CHIEF KARPEROS: Kurt Karperos with ARB staff.

16 When you consider transport from one region to
17 another, it's literally as variable as the weather. And
18 so pinpointing a particular percentage is difficult. It
19 differs ever day. In the relationship between the South
20 Coast and the downwind high desert, the way we describe it
21 is the local region is overwhelmed by the upwind
22 emissions. And it is the upwind emissions that dominate
23 and essentially drive the ozone concentrations.

24 A way to think of it -- sort of flip the problem
25 over and think of it differently, in terms of the

1 reduction in transport the SIP approved last year, along
2 with the existing control program, will reduce NOx
3 emissions between now and 2020 by about 60 percent in the
4 South Coast Air Basin. So we'll see that sort of
5 reduction in the emissions blown downwind.

6 BOARD MEMBER TELLES: Maybe I'll just rephrase my
7 question just to get a better understanding of the
8 significance of the South Coast. If you did nothing,
9 would you still be in non-attainment just because of what
10 blows in?

11 AIR QUALITY AND TRANSPORTATION PLANNING BRANCH
12 CHIEF KARPEROS: Yes, that's exactly what the modeling
13 showed. It was the upwind emissions that were driving the
14 concentrations.

15 To give you a better sense of the relative scale,
16 the NOx inventory in the South Coast Air Basin is almost a
17 thousand tons per day currently; compared that to the high
18 desert, which is about 172 tons per day. So almost ten
19 times larger.

20 CHAIRPERSON NICHOLS: We have one witness, Mr.
21 Villegas, from the Air Pollution Control District in
22 Ventura County.

23 Welcome.

24 MR. VILLEGAS: Chair Nichols, members of the
25 Board. I'm Mike Villegas, Air Pollution Control Officer

1 for Ventura County. It's been a long road, but we're here
2 before you with our plan.

3 The Ventura County APCD staff and board are fully
4 committed to implementing this plan as soon as possible to
5 ensure healthful air for our country residents. We have a
6 long history of aggressive rulemaking and we're going to
7 continue with this plan.

8 Our district board has already adopted two of the
9 control measures in this plan: One, strengthening our
10 rule for soil decontamination operations; another,
11 strengthening our rule for the coating of metal parts and
12 products.

13 We recently workshopped another control measure.
14 But we're going to be strengthening our rule for
15 automobile coating operations.

16 I'm sure you know that to obtain the federal
17 standard the bulk of the future emission reductions are
18 going to come from mobile sources. And we are fully
19 committed to support and work with CARB staff on this
20 critical effort.

21 I'd like to conclude by thanking the staff from
22 the South Coast District for their assistance with the
23 photochemical modeling, and certainly CARB staff with
24 their assistance on the weight-of-evidences analysis and
25 the motor vehicle emission inventory.

1 I urge your Board to approve this new plan that's
2 going to serve as a road map for improving air quality in
3 Ventura County.

4 CHAIRPERSON NICHOLS: Thank you very much.

5 We haven't heard any opposition. And, you know,
6 frequently you hear from local groups that are opposed or
7 upset about, you know, an attainment plan or question it.
8 But we've had none of that, as far as I know, not in
9 person or in writing, which is amazing actually. It must
10 be that you guys really have convinced them that you've
11 done the right thing here and that you're doing everything
12 you can do, which is great. I commend you for that.

13 Did the Board members have any other questions
14 or --

15 BOARD MEMBER HILL: Madam Chair, I'll move the
16 Resolution 8-26 and 8-32.

17 BOARD MEMBER BALMES: Second.

18 CHAIRPERSON NICHOLS: We have a second.

19 Is there any discussion?

20 All in favor say aye.

21 (Ayes.)

22 CHAIRPERSON NICHOLS: All right. Good work.

23 Onward to clean air in Ventura and Western
24 Mojave.

25 And now our final item, which is just an

1 informational item, not an action item, is a review of the
2 status of the Enhanced Vapor Recovery Program.

3 And, Mr. Goldstene, do you want to lead this
4 discussion here?

5 EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman
6 Nichols.

7 The Enhanced Vapor Recovery Program is being
8 implemented in stages from 2001 to 2010. The next
9 compliance deadline requires that service stations upgrade
10 their Phase II vapor recovery systems by April 1st, 2009.
11 Several interested parties requested the progress towards
12 the April deadline be discussed before the Board due to
13 concerns that there may not be enough time to complete the
14 required station upgrades. Staff's written April 2008
15 progress report, which was provided to you and the public
16 in early May, indicates that the deadline can still be
17 met. Today staff will present a summary of the April 2008
18 status report.

19 And again, as Chairman Nichols already pointed
20 out, this is just an informational item.

21 At this time I'd like to turn the presentation
22 over to Cindy Castronovo of our Monitoring and Laboratory
23 Division, who will present the progress report.

24 Cindy.

25 (Thereupon an overhead presentation was

1 presented as follows.)

2 AIR POLLUTION SPECIALIST CASTRONOVO: Thank you,
3 Mr. Goldstene.

4 Good afternoon, Chairman Nichols and members of
5 the Board. Today I will present an update on
6 implementation of the Enhanced Vapor Recovery Program.

7 --o0o--

8 AIR POLLUTION SPECIALIST CASTRONOVO: My
9 presentation will first briefly review background
10 information on enhanced vapor recovery, then focus on the
11 progress so far in meeting the April 2009 EVR Phase II
12 deadline. I'll discuss our efforts to keep the
13 implementation process on track.

14 --o0o--

15 AIR POLLUTION SPECIALIST CASTRONOVO: Enhanced
16 vapor recovery affects the two vapor recovery systems that
17 are used at gas stations, which are known as Phase I and
18 Phase II systems.

19 Phase I vapor recovery controls emissions by
20 collecting vapors during cargo tank deliveries. As fuel
21 is routed through one hose to the underground storage
22 tank, the displaced vapors are sent back to the truck in
23 the second hose.

24 Phase II vapor recovery controls emissions in a
25 similar manner during vehicle refueling. In this case,

1 the fuel and vapor travel in opposite directions through a
2 coaxial hose on the dispenser.

3 Phase I and Phase II system components also help
4 reduce gasoline vapor leaks from the underground storage
5 tank and piping when no gasoline transfers are occurring.

6 --o0o--

7 AIR POLLUTION SPECIALIST CASTRONOVO: There are
8 two major types of Phase II vapor recovery systems.

9 Balance systems rely on a long bellows or "boot"
10 to make a tight seal with the vehicle fillneck interface.
11 The gasoline vapors in the vehicle gas tank are passively
12 displaced back through the bellows during fueling.

13 Assist systems use a vapor pump inside the
14 dispenser to vacuum up the vapors during refueling. A
15 tight seal of the nozzle against the car is not needed for
16 assist systems, so the nozzle has what is called a
17 "mini-boot" to help with vapor collection.

18 Some types of assist systems were found to lead
19 to excess emissions when fueling vehicles equipped with
20 onboard refueling vapor recover, which I will review next.

21 --o0o--

22 AIR POLLUTION SPECIALIST CASTRONOVO: Onboard
23 Refueling Vapor Recovery, or ORVR, is a federal
24 requirement that provides for collection of the refueling
25 vapors in a carbon canister on the vehicle. It performs

1 the same function as a Phase II vapor recovery system. If
2 you drive a newer car, chances are it has ORVR.

3 ORVR systems were first required for some
4 passenger cars in the 1998 model year and were phased in
5 over the next eight years. By the 2006 model year almost
6 all passenger, light-duty, and medium-duty vehicles were
7 equipped with ORVR.

8 --o0o--

9 AIR POLLUTION SPECIALIST CASTRONOVO: As of this
10 year, the ORVR systems control about 60 percent of the
11 transfer emissions during vehicle refueling. Based on our
12 projections, however, Phase II systems at gas stations
13 will continue to be necessary for emission control until
14 at least 2020.

15 --o0o--

16 AIR POLLUTION SPECIALIST CASTRONOVO: Before EVR,
17 station owners complained that vapor recovery equipment
18 was not durable and required unreasonable maintenance.
19 Consumers were unhappy with fuel dripping on their shoes
20 or spilling during fueling events. Districts found that
21 annual inspections did not assure the station would be in
22 compliance even a month later. As shown here, EVR
23 addresses these concerns and others as well.

24 More stringent and longer certification testing
25 ensures system components meet standards over longer time

1 periods. EVR standards for nozzles reduce spillage and
2 nozzle vapor leaks. EVR systems are required to meet
3 minimum underground storage tank pressures to reduce
4 fugitive emissions. And, as already mentioned, EVR
5 systems must be compatible with ORVR vehicles.

6 A new requirement for EVR is the use of vapor
7 recovery monitoring systems known as "in-station
8 diagnostics" or ISD. ISD systems provide 24/7 monitoring
9 of vapor recovery system operation and alert the operator
10 when problems occur.

11 --o0o--

12 AIR POLLUTION SPECIALIST CASTRONOVO: Phase II
13 vapor recovery systems were introduced in California in
14 the 1970s and are now used throughout the state to reduce
15 reactive organic gas, or ROG, emissions, as well as limit
16 exposure to toxic air contaminants such as benzene.

17 The EVR amendments, approved by the Board in
18 2000, were necessary for three main reasons:

19 To achieve additional emission reductions as
20 outlined in the 1999 SIP lawsuit settlement;

21 To ensure Phase II systems were compatible with
22 ORVR vehicles: And

23 To improve in-use performance of both Phase I and
24 Phase II systems.

25

1 throughput stations have until September 2010. Low
2 throughput stations - less than 600,000 gallons per year -
3 are exempt from ISD requirements.

4 --o0o--

5 AIR POLLUTION SPECIALIST CASTRONOVO: The EVR
6 Phase II effective date was extended several times, as it
7 took longer than expected to get a system certified. The
8 first EVR Phase II system, the Healy assist system, was
9 certified in April 2005. Under state law, existing
10 stations have four years after the effective date to
11 upgrade equipment to meet EVR Phase II standards. That's
12 why the Phase II deadline is April 1st, 2009.

13 In 2004, the original ORVR compatibility deadline
14 was extended to allow stations to do both the ORVR
15 compatibility upgrade and the EVR Phase II upgrade at the
16 same time.

17 Most stations with assist systems that were not
18 ORVR compatible chose to switch to a pre-EVR balance
19 system to comply with the ORVR compatibility deadline and
20 do their second upgrade once more EVR Phase II systems
21 became available. Approximately 30 percent of the service
22 stations in California converted from assist to balance
23 rather than move directly to full EVR compliance. This
24 resulted in about 90 percent of the state using balance
25 vapor recovery systems.

1 This completes our background section. Next we
2 will discuss the status of the EVR Phase II upgrade.

3 --o0o--

4 AIR POLLUTION SPECIALIST CASTRONOVO: The next
5 several slides summarize information from the April 2008
6 staff report. Based on district surveys, we estimate
7 there are about 12,000 stations subject to the April 2009
8 deadline. Eighty percent of the stations are located in
9 four air districts: South Coast, Bay Area, San Joaquin
10 Valley, and San Diego.

11 --o0o--

12 AIR POLLUTION SPECIALIST CASTRONOVO: This chart
13 showing EVR Phase II implementation progress in the South
14 Coast Air Quality Management District has been updated
15 from the version in the staff report to include data from
16 April and May. The data show that 38 percent of the
17 stations in the South Coast have already received a permit
18 to install an EVR Phase II system from the district, and
19 11 percent have EVR Phase II systems installed and
20 operating.

21 Similar data from other districts is being
22 collected and compiled. And based on initial surveys, it
23 appears the 11 percent completed estimate is a good
24 assumption for EVR Phase II progress statewide.

25 The rate of installation must increase in order

1 to complete the EVR upgrades in time. The question is
2 whether there are sufficient installation contractors and
3 equipment to support increases in installation rates to
4 meet the deadline.

5 --o0o--

6 AIR POLLUTION SPECIALIST CASTRONOVO: Staff has
7 been in close contact with the manufacturers of EVR Phase
8 II systems as well as the local equipment distributors and
9 find that equipment is readily available now.

10 If equipment is not already in stock at the
11 distributor, it can be obtained within one week of the
12 equipment order.

13 Based on current equipment inventories, and
14 information on manufacturer production rates, we calculate
15 that there will be sufficient equipment available to
16 complete the upgrades over the next nine months.

17 --o0o--

18 AIR POLLUTION SPECIALIST CASTRONOVO: Contractors
19 that install EVR and ISD systems are required to be
20 certified by the system manufacturer.

21 There are over a thousand individuals trained to
22 install the Franklin/Healy EVR Phase II system. Since it
23 typically takes about a week to complete an EVR Phase II
24 installation, there are sufficient certified individuals
25 to upgrade the approximately 10,500 remaining stations in

1 the next nine months.

2 --o0o--

3 AIR POLLUTION SPECIALIST CASTRONOVO: As you may
4 recall, there are 4,500 stations in the South Coast Air
5 District. This slide shows that the April 1st, 2009,
6 deadline is feasible based on projected equipment and
7 contractor availability. If we extrapolate the
8 projections outside South Coast District, we can expect
9 similar compliance for the entire state.

10 --o0o--

11 AIR POLLUTION SPECIALIST CASTRONOVO: Now that we
12 have established that resources are available to meet the
13 deadline, we should mention some other potential barriers
14 to timely implementation.

15 Station owners may continue to wait for another
16 system option. EVR Phase II systems in the certification
17 pipeline could provide additional choices and maybe a
18 lower cost system. However, any additional system would
19 not be available until fourth quarter this year at the
20 earliest. And there is no guarantee that these systems
21 will pass all the certification tests.

22 Previous EVR upgrades in most cases required
23 replacement or addition of existing vapor recovery
24 components. EVR Phase II systems require installation of
25 a pressure management system or vapor processor, which

1 brings in additional permitting entities, which can take
2 more time.

3 And, finally, there's the perception that if a
4 significant number of stations are not expected to meet
5 the deadline, then ARB will provide an extension.

6 --o0o--

7 AIR POLLUTION SPECIALIST CASTRONOVO: Some air
8 districts have developed their own programs to help speed
9 up EVR implementation.

10 The Sacramento Air District waived the permit fee
11 if the application for the EVR upgrade was received by the
12 April 1st, 2008, and the installation completed by October
13 1st, 2008. This incentive helped bring about half of the
14 affected stations into the permit process.

15 San Diego and South Coast districts have imposed
16 early application and/or compliance plan deadlines to keep
17 station owners on track. These efforts will force station
18 owners to start their EVR upgrade six months before the
19 deadline.

20 --o0o--

21 AIR POLLUTION SPECIALIST CASTRONOVO: Additional
22 permits from other local agencies is often necessary
23 before initiating the EVR upgrade. It is not unusual to
24 need permits from the five agencies listed here.

25 Local agency staff, other than the air district,

1 are often unfamiliar with vapor recovery system operation.
2 Fire agency officials are wary of the safety of the vapor
3 processors, though vapor recovery processors have been in
4 use for many years and must have state fire marshal
5 approval before being certified by ARB. Environmental
6 health agencies often act as the Certified Unified Program
7 Agency, or CUPA, overseeing the underground storage tank
8 program. CUPA staff are concerned about ISD, which is
9 usually an add-on to the existing underground storage tank
10 monitor.

11 Planning agency approval can be the biggest
12 hurdle as some jurisdictions don't like the looks of the
13 vapor processors and can require multiple submittals until
14 a site plan is accepted.

15 Staff have found that education of these
16 permitting agencies is the key component in speeding up
17 the permit process.

18 --o0o--

19 AIR POLLUTION SPECIALIST CASTRONOVO: As outlined
20 in the staff report, ARB staff have been working with the
21 local air districts to help expedite EVR implementation
22 through a variety of outreach activities.

23 Dozens of seminars have been held to educate
24 station owners and local permitting agencies on the EVR
25 requirements.

1 Numerous advisories have been issued both by ARB
2 and the districts. ARB advisories are posted on our vapor
3 recovery webpage and stakeholders are notified of new
4 developments through the vapor e-mail listserve.

5 The Enforcements Division Compliance Assistance
6 branch prepared a color brochure as an introduction to the
7 EVR April 2009 deadline, which is updated regularly.

8 Letters were sent to planning agencies throughout
9 the state which explained the EVR mandates and offered EVR
10 education to local jurisdictions.

11 And a special EVR home webpage is up and running
12 to help provide detailed information to station owners,
13 local permit agencies, and other stakeholders.

14 --oOo--

15 AIR POLLUTION SPECIALIST CASTRONOVO: As stated
16 in the staff report, staff will continue to expand
17 outreach to local permit agencies, particularly planning
18 departments to ensure installations continue on track.

19 We will work with the districts to continue
20 monitoring the number of EVR permits and EVR
21 installations. Staff will keep in close contact with the
22 equipment manufacturers to make sure promised production
23 keeps up with demand.

24 Staff will continue to share our information
25 through public meetings on the EVR program, such as the

1 one held May 14th to discuss the April progress report.

2 Staff will provide a second written report to you
3 in October on the EVR implementation status.

4 --o0o--

5 AIR POLLUTION SPECIALIST CASTRONOVO: The next
6 two slides provide some of the comments received at our
7 public meeting on May 14th. Many are concerned about the
8 cost of the EVR upgrade, and some say they will be forced
9 to close their station. Note that EVR upgrade costs, from
10 contractors estimates, are similar to the cost estimates
11 in the 2000 EVR rulemaking. Staff will continue to
12 provide details on the existing state grant and loan
13 program administered by the State Water Board known as the
14 RUST program in outreach materials and will add
15 information on other financing options, including leasing.

16 Some stakeholders say that it is not realistic to
17 expect all stations in the state to be in compliance by
18 the April 2009 deadline, considering time remaining for
19 10,500 sites to do the upgrade. As we have shown,
20 resources are available and we are working with local
21 agencies to speed up permitting. Local air districts have
22 a multitude of ways to enforce the deadline, including
23 mechanisms such as abatement orders, which can allow
24 station operation to continue with penalties if milestones
25 towards compliance are met.

1 --o0o--

2 AIR POLLUTION SPECIALIST CASTRONOVO: There is a
3 perception that the EVR balance system is the best fit for
4 a pre-EVR balance system. Some say more time should be
5 provided as the EVR balance system was certified one year
6 before the deadline. In fact, the best choice of EVR
7 system is more dependent on individual station layout than
8 on the type of pre-EVR vapor recovery system. In any
9 case, EVR balance systems are available now. Both balance
10 and assist EVR Phase II systems can be installed at sites
11 with pre-EVR systems, often at similar cost.

12 Staff was criticized for not including issues
13 associated with the EVR Phase II and ISD system roll-out
14 in the staff report.

15 Responding to in-use vapor recovery issues is
16 routine. But staff has taken additional actions, such as
17 regular conference calls and meetings with installation
18 contractors and equipment manufacturers, to identify any
19 problem areas early and resolve them quickly.

20 --o0o--

21 AIR POLLUTION SPECIALIST CASTRONOVO: This
22 concludes our summary of the April 2008 EVR progress
23 report and the May 14th EVR public meeting.

24 As mentioned earlier, a second staff report
25 document on progress towards the April 2009 deadline will

1 be provided to you in October.

2 --o0o--

3 AIR POLLUTION SPECIALIST CASTRONOVO: In summary,
4 the EVR upgrades have been anticipated since the program
5 was approved by the Board in March 2000. An EVR Phase II
6 system has been available since 2005.

7 Over 1,000 certified contractors and plenty of
8 equipment are available to make these upgrades happen.

9 There is enough time remaining to meet the
10 deadline if station operators act now.

11 This concludes my presentation.

12 CHAIRPERSON NICHOLS: Thank you.

13 I do want to note that one of the reasons for
14 holding this hearing is that when I testified in front of
15 the Senate Rules Committee at my confirmation hearing,
16 this issue was raised as a concern. And I know -- we've
17 heard from a number of other legislators who've written to
18 us about this issue, particularly some of those
19 representing rural areas. And so they asked us to make
20 available both a staff report and also to listen to
21 station owners or other members of the public who might
22 have comments on this issue. Obviously it continues to be
23 controversial. Even though, as the staff has indicated,
24 we've moved a long ways towards compliance, there still
25 are clearly people who are experiencing difficulties with

1 this as well. So I think that's the backdrop for this
2 hearing. And I think we do need to hear from the people
3 who are concerned and give them our due attention and see
4 if there's anything we can think of that would be helpful
5 to do at this time.

6 So with that, I think we'll hear from the public,
7 beginning with Barry Wallerstein from the South Coast Air
8 Quality Management District, followed by Barbara Lee of
9 CAPCOA.

10 MR. WALLERSTEIN: Good afternoon. Again, Barry
11 Wallerstein, Executive Officer of the South Coast AQMD.
12 And I'm about to miss my airplane. But I will gladly miss
13 it to testify before you on this item, because this is
14 also a very important item.

15 Vapor recovery at service stations is one of our
16 primary VOC control measures. Just last weekend we had a
17 one-hour ozone concentration of .176. And you might
18 recall the federal one-hour ozone standard was .12. Our
19 highest ozone levels are typically in July. And it was
20 attributable last week in part to the hot spell. But if
21 we get a hot spell this July, you can imagine what the
22 ozone level will likely be.

23 As your very comprehensive staff presentation
24 laid out, we're working well with the staff on making sure
25 that the facilities can comply. And we would ask you to

1 stay the course, as recommended by your staff. We would
2 point out that we have nearly 2,000 facilities in South
3 Coast that have either installed or gotten their permits
4 or are in the process of installing early. And what would
5 it mean to those business owners that moved forward
6 appropriately, invested, if all of a sudden we were to
7 send mixed messages or the wrong messages about compliance
8 with this very necessary requirement.

9 Your staff also pointed out that we actually went
10 to our governing board in a public hearing and modified
11 our regulation for vapor recovery to require compliance
12 plans for those facility operators that hang back and
13 don't submit permit applications early. And for those
14 that submit the permit applications early, they're saving
15 the compliance plan fee. So there is an economic
16 incentive.

17 So your staff's given a very thorough, wonderful
18 presentation. We'll come back in October and update you.

19 Lastly, let me just mention that the figures my
20 staff gave me on people that have moved forward and
21 received permits are about 4 to 5 percent higher than they
22 had relayed to your staff for the staff presentation. So
23 things are going quite well actually.

24 Thank you.

25 CHAIRPERSON NICHOLS: Thank you. It's good to

1 hear that.

2 Barbara Lee.

3 MS. LEE: Madam Chairman and members of the
4 Board. I'm the Air Pollution Control Officer in northern
5 Sonoma County. I'm also the President of the California
6 Air Pollution Control Officers Association.

7 I just want to briefly mention to you that the
8 vapor recovery program is probably the area of greatest
9 collaboration between air district staff and ARB staff.
10 We have a standing committee where we work together on
11 program evaluation and improvement. It's a very
12 successful Committee. If it's not always a happy
13 committee, it's one that's very productive.

14 We also collaborate on the review of system
15 certifications and also on field review of the performance
16 of the systems as time moves on. And that's very
17 important.

18 It's a large VOC source category. It's important
19 to attainment in many air districts. And it's also a
20 source of exposure to benzene and other toxic air
21 contaminants. And reducing that is very important to us.

22 Bottom line, these emission reductions associated
23 with this program are critical. We applaud ARB staff work
24 on this important source category.

25 We do recognize that some air districts have

1 communicated to you that they have some concerns in their
2 areas about program implementation. We urge you to listen
3 carefully to the concerns that they raise.

4 At the same time, the Association is prepared to
5 work with ARB staff to address compliance and
6 implementation issues as they arise. And we urge the Air
7 Resources Board to stay the course, as Dr. Wallerstein
8 said, on this important regulation and we will continue to
9 work with you in the future.

10 Thank you very much.

11 CHAIRPERSON NICHOLS: Thank you.

12 BOARD MEMBER RIORDAN: Madam Chair, while
13 Barbara's here -- and I don't know whether you have to
14 catch a plane or whatever.

15 In the briefing that I had with staff, it
16 occurred to me that in some of the more remote areas that
17 those air districts may have to really assist the
18 applicants with a local agency if they have to get a
19 permit for any of the above-ground construction. There
20 are times when local agencies can slow down, for a whole
21 variety of reasons, you know, the permitting process. And
22 I would hope that maybe you could talk to your air
23 pollution control officers to do some interface with those
24 local agencies on behalf of the applicants. Because I
25 tend to think that's where you may get some slowdown in

1 the ability to complete the process. And I think that's
2 something that we really should try to help the applicant
3 with.

4 MS. LEE: I would certainly be happy to convey
5 that message, especially to the rural air districts, being
6 one of them myself.

7 BOARD MEMBER RIORDAN: Thank you.

8 BOARD MEMBER BERG: And, Madam Chair?

9 CHAIRPERSON NICHOLS: Yes.

10 BOARD MEMBER BERG: Before Barbara leaves,
11 congratulations on accepting the new position.

12 MS. LEE: Thank you.

13 CHAIRPERSON NICHOLS: Thank you.

14 All right. Jim White, followed by Jay McKeeman.

15 MR. WHITE: Good afternoon, Chairman Nichols,
16 members of the Board and staff.

17 My computer just went down. That's very
18 embarrassing.

19 Perhaps you can -- wait a minute. No, I think I
20 can get it back up real quick here.

21 CHAIRPERSON NICHOLS: You have a slide
22 presentation?

23 MR. WHITE: Can you give me a moment here?

24 CHAIRPERSON NICHOLS: Sure.

25 MR. WHITE: Okay. I'm here on behalf of BP -- I

1 mean WSPA. I'm actually the Regulatory Affairs Manager
2 for BP's retail operations. And I'm here speaking on
3 behalf of the Western States Petroleum Association.

4 We've actually submitted detailed comments in a
5 letter to the clerk of the Board.

6 We'd like to start off by recognizing that CARB
7 staff has actually done some great work. We applaud them
8 in the program that they've put together. It's still
9 lacking some areas. There's still areas of concern to us.
10 And a lot of those concerns are detailed in that letter
11 that I referred to.

12 I do want to make sure that -- set the record
13 straight that in the letter to you, Madam Chairman, last
14 September we listed a bunch of recommendations. CARB
15 staff has actually followed through on a lot of those
16 recommendations, and we thank them for that. However,
17 saying that, there's still some very key concerns.

18 First, we notice that the staff states in their
19 report, and I quote, "Gasoline dispensing facility
20 operators and gasoline marketer associations requested an
21 extension of the 2000 implementation deadline." I just
22 want to clarify that WSPA and our members of -- our
23 membership of gasoline marketers who operate gasoline
24 dispensing facilities did not ask for such a request, did
25 not make such a request. It was done by another

1 organization.

2 Second, the staff report did not mention several
3 key technical problems experienced by the EVR certified
4 equipment since the four-year clock began.

5 There are also a few other problems that we have
6 identified in an 18-month ISD in-use evaluation conducted
7 by CARB through December 2007. WSPA conducted our own
8 analysis of the data from that program, and we have
9 offered to share the results with ARB and CAPCOA. And we
10 hope to present that results in the very near future.

11 Third, the executive summary of the staff report
12 states that emission reductions from EVR systems will
13 total 372 tons per day of reactive organic gases
14 statewide. While on page 2 of the report, ARB staff tries
15 to clarify this calculated emission reduction of 25 tons
16 per day from the EVR program, the remaining emission
17 reductions are both due to pre-EVR vapor recovery systems
18 and ORVR.

19 The staff report also omitted mention of the
20 benefits on onboard refuel and vapor recovery systems,
21 ORVR, that are installed on vehicles nationwide. And the
22 fact is that EVR Phase II programs are redundant with
23 these systems. Each year the emission reductions
24 associated with ORVR increase and the ARB has previously
25 shown that emission reductions associated with EVR Phase

1 II will decrease over time.

2 CHAIRPERSON NICHOLS: Could I stop you for just a
3 second.

4 MR. WHITE: Yes, ma'am.

5 CHAIRPERSON NICHOLS: Actually you are out of
6 time according to my time clock.

7 MR. WHITE: I was just going to close.

8 CHAIRPERSON NICHOLS: Okay. But I wanted to just
9 question what you just said, because I thought you
10 presented a chart that showed that there were still
11 benefits for the program even with the ORVR.

12 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Oh,
13 yes, there are, because not all the cars -- in fact, only
14 I think 60 percent of the cars on the road today are
15 equipped with that onboard vapor recovery. So for the
16 other cars the only way that you achieve emission
17 reduction on some refueling is through the Phase II or the
18 gas station part. And since this --

19 CHAIRPERSON NICHOLS: So you're not claiming that
20 there are benefits for the newer cars that have these
21 systems; It's just that the fleet as a whole hasn't turned
22 over to --

23 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Well,
24 we claimed benefits from the part that's already been
25 implemented before because there was essentially -- when

1 EPA did the ORVR, the onboard vapor recovery, it created a
2 pollution problem in California where it made the stations
3 dirtier. And so that's been resolved by the station end
4 having to be compatible with the car now, and there were
5 reductions. But that's already been implemented as part
6 of the EVR program.

7 So we've got -- the Phase I's done. The ORVR
8 part's done. It's now the nozzles and the dispenser part
9 and the underground tank part that's at stake right now
10 that's being implemented by April of '09.

11 MR. WHITE: Madam Chair, the point we were making
12 is that as ORVR expands it increase in benefits and
13 because it does the same job as EVR II, EVR II benefits
14 reduce, ORVR benefits increase.

15 CHAIRPERSON NICHOLS: Over time, right.

16 MR. WHITE: Over time.

17 CHAIRPERSON NICHOLS: I understand.

18 Okay. Thank you very much.

19 MR. WHITE: Thank you very much.

20 CHAIRPERSON NICHOLS: Okay. Jay McKeeman,
21 followed by Craig Moyer.

22 MR. McKEEMAN: Thank you very much, Madam
23 Chairman, Board members, staff for providing us an
24 opportunity to talk to you today.

25 I would ask a little bit of leniency in my time

1 allocation. Our annual meeting just finished yesterday
2 and many of our members that expressed an interest in
3 attending today weren't able to attend because they're in
4 travel or expended their ability to stay away from the
5 office during our annual meeting. So I won't take very
6 long, but I just --

7 CHAIRPERSON NICHOLS: You're speaking on behalf
8 of others.

9 MR. McKEEMAN: I'm speaking on behalf of others
10 that asked me to speak on behalf of them.

11 Just as a context, as a matter of context for
12 this situation. There are approximately 7,000 service
13 stations yet to be permitted. There are approximately
14 10,500 service stations where the equipment has yet to be
15 installed. That has to be done in eight months. That is
16 an unprecedented activity, permitting and installation
17 activity in this state.

18 So we don't think that the calculation is simply
19 the amount of equipment and the amount of installers
20 available. There are a lot of other variables that are
21 involved in how this gets accomplished. And we're very
22 concerned that -- come April 1st that California motorists
23 aren't faced with the specter of closed service stations.
24 And we've got some recommendations and ideas on how to do
25 that.

1 Another piece of context, this is, conservatively
2 speaking, at about \$50,000 a station. This is a \$585
3 million compliance program. That's a big and a very
4 expensive program. And when our association gets asked on
5 a regular basis to attend legislative hearings about the
6 price of fuels in the state, I would invite any of you to
7 join me at the podium in explaining why this is the case.
8 These kinds of costs get passed on to the motorist and
9 they're added into the fuel cost for the state. I'm not
10 saying that they're not necessary. It's a reality. And I
11 think it's important that the legislators understand that
12 it's not just the service station operator that's making
13 the high price of fuel.

14 Four years is not four years, is where I start my
15 discussion. There has been a legal interpretation by
16 staff that basically says once an EVR system, regardless
17 of whether that system applies to systems that are
18 currently in use, is approved, that starts the four-year
19 clock.

20 For balance systems, literally balance systems
21 have not had the opportunity to use a balance -- a system
22 that was compatible with their systems until May of 2007.
23 So in reality, balance systems have had only two years to
24 comply, and this is because of a legal opinion. We don't
25 agree with that legal opinion. We believe it flies in the

1 face of the legislation, which was to give owners and
2 operators a fair amount of time to get through an
3 installation and retrofit process.

4 Where this particularly comes to home for us,
5 other than the current situation, is that staff is
6 recommending a two-year extension for EVR compliance on
7 bulk plants. And those are systems that our members
8 operate. They're hooked to both a fueling rack that fuels
9 delivery trucks and an underground storage tank and a fuel
10 dispenser. We believe that our members should have a full
11 four years from the time a system is certified for that
12 unique type of fueling configuration, not just two-year
13 extensions or one-year extensions or whatever the Air
14 Board feels is appropriate. We believe the full four
15 years needs to be provided. And we'd enjoy talking with
16 you and your staff about how four years needs to be four
17 years.

18 As you've heard from staff, the new systems have
19 created unique permitting and installation problems. And
20 that's largely related with the vapor processor. Those
21 problems and delays were not anticipated at the time the
22 staff did their certifications, but they've come into
23 play. And they add to delay and they add to cost,
24 significant cost. A lot of the times with -- especially
25 with planning agencies, if you have to take up parking

1 area to put them in, they'll frequently ask for offsets
2 for parking. Landscaping, fire departments want
3 fire-rated walls. This all adds to the cost of the
4 ultimate installation. So there are issues there.

5 Small service stations, as staff and you have
6 noted, are in a problem. And it's not just a problem of
7 permitting or availability. It's an economic problem.
8 As we all know, property values have gone down. And as we
9 all know, credit is harder to get. And right now service
10 stations' credit lines are being eaten up by the cost of
11 fuel. So when they go into a bank and ask for financing
12 on installation of a 50,000 or more dollar system, they're
13 getting some serious pushback from the financial community
14 on that.

15 And we do not advocate exemption of small
16 stations. Our members feel that everybody needs to be
17 included. But there are some state programs that could be
18 useful. The RUST program has been identified. But we
19 know that that program is overcommitted for the coming
20 year. And if there's any way that some additional funds
21 can be put into the RUST program to help small service
22 stations -- and I would suggest that grants are probably
23 more appropriate because low interest loans go on to their
24 credit report and it really hampers them in terms of
25 staying in business, especially when they have to get cash

1 to help buy the next tank of fuel. So if we could look --

2 CHAIRPERSON NICHOLS: Just to be clear - I'm
3 sorry - since we're extending your time anyway.

4 MR. McKEEMAN: Sure.

5 CHAIRPERSON NICHOLS: You're okay with
6 discriminating in effect in favor of small stations when
7 it comes to grants, just not --

8 MR. McKEEMAN: Economic hardship is something
9 that, you know, is unavoidable. It's there and there's
10 nothing that we can do to remedy that other than provide
11 assistance for those that can't afford.

12 And I would also suggest that if we look at a
13 remedy system for those small service stations that have
14 already put the equipment in, I think we need to treat
15 them all the same. If they're a small service station,
16 they probably have the same economic problems; they just
17 found a different way to skin the cat. But I think
18 it's -- just keep that level playing field available for
19 small service stations would be beneficial.

20 Most importantly, enforcement discretion we
21 believe is going to be needed. A fairly good model was
22 provided in the Phase I compliance deadline. And one of
23 the main reasons that that model was necessary was
24 weather. And if you take a look at the compliance
25 deadline, this is April of next year, and weather may

1 become a factor in terms of installation and delays. But
2 there may be other reasons like permitting or financial
3 barriers that people run into. And we think that if
4 somebody has provided in good faith a compliance plan to
5 the air district and has shown good faith in ordering
6 parts or scheduling installation, but due to circumstances
7 beyond their control they can't make the deadline, they
8 should be given discretion; not stipulated enforcement or
9 variances, which have very large penalties involved. This
10 is: "I've tried my hardest. I'm going to get it done.
11 You've got any plan. If I have to make adjustments to
12 that plan, I need to come back and talk to you about that
13 and make sure that it happens."

14 So to date there is no enforcement discretion
15 guideline out there that would suggest that this remedy is
16 available. And we think that that needs to be done very
17 quickly.

18 There are a couple of issues about in-station
19 diagnostics as well. One of the issues that we're
20 starting to see is some durability issues or programming
21 issues about the operation of ISD. And there's a fairly
22 small universe of ISD systems in place. We need to keep a
23 close I on those systems and make sure that they're
24 operating the way they're supposed to. And we certainly
25 would look forward in the October report an update on ISD

1 operations and problems that are being encountered and
2 whether those problems are in fact being resolved cost
3 effectively and under warranty or if the owner-operator is
4 having to solve that problem.

5 The other thing that we see as a disturbing trend
6 is that some air districts are starting to put permit
7 conditions that say, "If your alarm goes off too many
8 times, you're in violation." Our understanding, I believe
9 the Air Board staff's understanding, is that ISD is a
10 management tool. It is a tool that helps service station
11 operators understand when there's a problem. If they're
12 ordering equipment, repairs or investigation into why that
13 alarm went off in adequate time frames and are responding
14 to repairs, there should be no harm, no foul. And it's
15 not a way for districts to be able to get the ticker tape
16 and say, "You were out of compliance on these days and
17 here's your ticket for being out of compliance." Because
18 there are further steps that are involved, which is, "Did
19 you take the appropriate action in a timely manner?" And
20 If you have, then it becomes a management tool. So we're
21 just seeing that as a disturbing trend.

22 One other item that came up in a presentation
23 that ARB made down at our annual meeting is that they're
24 thinking about putting an executive order that would
25 require hanging hardware. If you replace a nozzle on a

1 balance system, a current balance system before you put in
2 the replacement, you would have to replace that with
3 basically a VST, the approved system nozzle. We're
4 concerned about that. Number one, sole source; you know,
5 there's only one maker of that. It's untested equipment.
6 We're not sure that it's going to operate properly in the
7 field. And for those of our members or any service
8 station that's going to switch to a Franklin system, that
9 would mean that they'd have to pay for the new nozzle and
10 then have to pay for a new nozzle once the system was put
11 in.

12 So we've got some concerns with that requirement.
13 This is I fairly short time frame. I think we can just
14 let things operate the way they are. And as of April 2009
15 everybody's going to have new systems in place or close to
16 it.

17 Thank you very much for taking your time.

18 CHAIRPERSON NICHOLS: Okay. Thank you. Your
19 presentation was helpful. It was specific. I appreciate
20 it.

21 All right. We're going to hear from Craig Moyer,
22 followed by Pete Carpenedo.

23 MR. MOYER: Good afternoon. My name is Craig
24 Moyer. I'm with the law firm, Manatt, Phelps & Phillips.
25 And I think Jay did a great job. I will keep my comments

1 very brief, focused on one topic, what he referred to as
2 the enforcement discretion area.

3 I've represented independent oil companies
4 virtually my entire career. I have seen in the refining
5 sector that it is possible for independence to leave the
6 market. That many times there is a disproportionate
7 impact on independent marketers, independent producers,
8 independent refiners, that these regulation can have
9 unintended consequences. And so I wanted to focus in that
10 area and then particularly tie it to the enforcement issue
11 that Jay talked about a little bit.

12 Certainly I think it's important to remember that
13 because of these increased gasoline prices, that has
14 strained the credit that's available to the individual
15 marketer. So that individual guy who has two or three
16 stations and 20,000 gallons at a station now has twice as
17 much credit that he needs to come up with in order to buy
18 the product at that station. In the meanwhile, the fair
19 market value of the real property, the gas station, has
20 declined in the last eight months. These are things that
21 were not -- we weren't even thinking about eight,
22 nine months ago when gas was a mere three dollars a
23 gallon. So I think that has truly changed things around
24 and rather dramatically.

25 So, again, just want to cut to the chase. Right

1 now all we have is two things: A stipulated order for
2 abatement or a variance. Neither of those is an
3 easy-to-do mechanism. The districts all do stipulated
4 orders for abatement. They all do variances. But if they
5 have a lot of them, it would be much better -- it makes it
6 very difficult for industry on the one side. It makes it
7 difficult for the agencies on the other. So your staff
8 has already done a great job trying to work this issue
9 through with the locals. You heard from Barbara Lee. You
10 heard from Barry Wallerstein the importance of reaching
11 out.

12 So I would encourage you to continue to have your
13 staff work to ensure that CAPCOA, the local districts, the
14 industry, CARB, create essentially a road map. What does
15 it take to do due diligence? What do you need to do in a
16 timely fashion? So that when you get around to April 1,
17 2009, you're not arguing about whether or not what you did
18 was good faith in order to comply, that what you've
19 done -- that the failure to comply was beyond your
20 reasonable control.

21 Thank you very much.

22 CHAIRPERSON NICHOLS: Thank you. I appreciate
23 that.

24 Pete Carpenedo, followed by Steve Lopes.

25 MR. CARPENEDO: Pete Carpenedo with Dassel's

1 Petroleum. Thank you for your time, all of you.

2 As a small marketer, we -- and naturally you've
3 heard it all - credit constraints, property values being
4 eroded. We would just ask that you take those things into
5 consideration. We have already upgraded one station.
6 And, you know, as we go on and pay for that expenditure,
7 now there's -- you know, we're in the budget to do the
8 others, but it's becoming more and more of a hardship.

9 Being a truck owner, another issue which is
10 coming down the line, those things, heavy-duty -- you
11 know, it's an unrelated issue but it is a related issue.
12 We have to think of upgrading our vehicles, you know, in
13 the next couple of years, so that's another chunk out of
14 our budget. You know, we are the conduit. We're not the
15 major oil companies. We only sell what is, you know --
16 the pipeline to get the product to those that need to get
17 to work and to recreate and do other things.

18 And I thank you for your time.

19 CHAIRPERSON NICHOLS: Thank you.

20 David Atwater, followed by Bonnie Holmes-Gen and
21 Kathryn Phillips.

22 Oh, I'm sorry. I missed Steve Lopes. I'm sorry.
23 I jumped ahead. Forgive me.

24 MR. LOPES: Good afternoon. My name is Steve
25 Lopes. I represent Western States Oil Company. We're in

1 San Jose and we've been there since 1956. We're a second
2 generation family-owned business.

3 We're a fairly small company. We have 42
4 employees. And we operate five card-locked retail
5 combination fueling stations. And that represents about
6 28 underground storage tanks and 87 fueling hoses.

7 Over the years we've been able to comply with all
8 the various rules and regulations affecting our operations
9 and we've expended a lot of money doing so. Now, last
10 November we were able to upgrade our largest unit and
11 bring it into compliance with both EVR and ISD.

12 And then in January of this year when we were
13 looking forward to the timeline for the April 2009 and
14 everything looked pretty good, we had one unit already
15 done and we had four more to do, but wild things happened
16 in the last few months and gasoline just -- gasoline and
17 diesel -- we saw mostly diesel -- has gone through the
18 ceiling. And right now it looks doubtful that we'll be
19 able to comply with the other four units.

20 And our association has told us that "if you make
21 a good faith effort and order the equipment, that there
22 might be some leeway down the road." But the problem is,
23 if you order the equipment and they deliver it to you,
24 then you got to pay for it. And if you don't have the
25 money to pay for it, then your credit status might be at

1 risk.

2 So the big thing for us right now is -- and I'm
3 not the only one. All my colleagues in our size company
4 are having a hard time with the banks because -- well, for
5 example, when we negotiated our line of credit last
6 November, you know, diesel was three and a quarter, and
7 now it's almost \$5 a gallon wholesale. And we haven't
8 sold any more gallons. It's just that our inventory costs
9 have gone way up. And it's unlikely at this point in time
10 that our bank's going to increase our line another 3 to
11 \$400,000 to make the additional upgrades.

12 CHAIRPERSON NICHOLS: Thank you.

13 MR. LOPES: The other thing is the penalties.
14 I'm just concerned that there might be some penalties if
15 we're not able to comply. Like I said, we've been doing
16 this for a long time and we've always been able to comply
17 in the past. But due to the extremely high cost of fuel,
18 it looks like it's going to be extremely difficult for us
19 to get everything into compliance. But we will be working
20 in that direction.

21 CHAIRPERSON NICHOLS: I'm sorry. I thought you'd
22 finished before you had. I appreciate the comment.

23 MR. LOPES: Thanks for your time.

24 CHAIRPERSON NICHOLS: Okay. Mr. Atwater, and
25 then Bonnie Holmes-Gen.

1 MR. ATWATER: My writing stinks. It's Atwater.

2 I've got a lot to do here and only have three
3 minutes to do it, so I better get at it here.

4 Okay. State sales tax is currently making 36
5 cents a gallon off of the gas you buy. VISA and Master
6 Card are making about 13 to 15 cents off of every gallon
7 of gas you buy. The station dealers are making about a
8 nickel. That's down less than half of what they made
9 20 years ago.

10 I don't know a station dealer who has a credit
11 line at a bank. I supply 100 dealers and I deliver to
12 those guys. Don't know one that has a credit line at a
13 bank. They're using my credit. I deliver a load on
14 Monday, and they pay me for the first load when they get
15 their second load on Wednesday or Thursday or Friday; they
16 pay me for the first load. So they're living off of my
17 credit line right now. Okay? They got no credit. And my
18 dealers are coming to me and saying, "What do I do?"

19 So we had a symposium at our 100 percent
20 solar-powered office, the largest solar facility in San
21 Joaquin County. And we had three different sessions. We
22 inviting dealers in from all those stations. We had
23 contractors there. We had a leasing company there -- a
24 leasing company -- who was willing to look at leasing this
25 equipment to our dealers.

1 After those three symposiums most of the guys
2 just said, "Well, I'm going to wait. I can't do it."
3 "Well, what about April?" "Well, you know what, if I
4 can't do it, I can't do it. They can't squeeze blood out
5 of a rock. I can hardly pay you for the gas you're
6 delivering now that you're carrying my credit on." So
7 they're just going to wait.

8 All my customers, every single one of them are
9 independents, just like me. I'm an independent petroleum
10 marketer. They're independent mom-and-pop-run stations.
11 Mom and pop -- he doesn't have time to go out and get
12 permits and stuff because, frankly, he's working the cash
13 register. My average customer works the cash register 10
14 to 15 hours a day, okay, because they are mom and pop.
15 And the other family members work the rest of the
16 24 hours.

17 This is important. I mean you guys out there,
18 you know, who've never run a real business, I'll tell you
19 these independent station operators, they're doing
20 something that I couldn't do. I'll tell you why I
21 couldn't it. We sold our last gas station in November of
22 '06. Why? Guess what, guys. It's in the program. I
23 couldn't afford to operate our 20 stations. We sold them.
24 It took us three years to sell them off. They're gone.
25 Thank you very much.

1 Well, I have a couple card locks left. I have
2 not done one yet. I have not gotten one permit yet. I've
3 talked to San Joaquin County. I've talked to the City of
4 Stockton. Friend of mine, gas station dealer, Shell,
5 independent operator. Hard costs: Permits, 5,000 bucks;
6 12 sets submitted to the City of Stockton. Five thousand
7 bucks. That did not include engineering. And that was a
8 lot of volunteer time by the guy's perspective contractor.
9 He might get to work one of these days. But 5,000 bucks
10 for permits. I mean, jeez. You know, we're talking 60,
11 100,000 bucks here for these programs. Okay?

12 Everybody's talked about deadlines and everyone's
13 thanked the staff, so I'll thank the staff and the Board
14 for listening to me.

15 But, you know, it's just everybody's going to
16 have to do it. I've gotten letters from San Joaquin
17 Valley Unified Air Pollution Control. They talk about
18 regulation and penalties. Their letter comes out - well,
19 jeez, their standard letters - \$10,000 per day, per
20 incident, per violation. In other words every time
21 someone picks up a noncomplying nozzle and puts it in
22 their car, that could be interpreted as a \$10,000 a day
23 fine -- 10,000 per transaction per day. So they estimate
24 the number of transactions, so then they can go right to
25 whatever millions of dollars they want to right from the

1 get-go. That's the first letter you get from San Joaquin
2 Valley Unified, the first.

3 CHAIRPERSON NICHOLS: Can you wrap up, Mr.
4 Atwater. You've used up your time.

5 MR. ATWATER: I know I have.

6 So, anyway, we've got a problem here. Okay? The
7 banking crisis, the real estate crisis. You've heard it
8 all before. I don't know how you're going to do it, but
9 the ball's going to be in your court.

10 Thank you very much.

11 CHAIRPERSON NICHOLS: Thank you, sir.

12 Bonnie.

13 And while you're coming up, we have two people
14 who've signed up under "open comment." But I'm guessing
15 that you're really here on this item. If I'm wrong, raise
16 your hand. But if you want to come in on this item, just
17 come forward. It's Brian Hill and Bob Brown.

18 You want to testify on this particular item,
19 right?

20 Okay. We'll just put you on the list. No
21 problem.

22 MS. HOLMES-GEN: Good afternoon. It's hard to
23 believe it's 4:30.

24 Bonnie Holmes-Gen with the American Lung
25 Association of California.

1 And we are here to comment that we believe that
2 the Air Board has done a very good job in developing and
3 implementing this Enhanced Vapor Recovery Phase II
4 regulation and conducting outreach. We believe strongly
5 that you should not delay or change the enforcement
6 programs for this regulation. We believe the 2009
7 implementation deadline must be met.

8 As you know, this regulation is very important to
9 our state smog control efforts, and we really need all of
10 those 25 tons of VOC reductions in order to reduce smog,
11 meet our state and federal goals, but just to improve
12 public health. And we strongly believe that the public
13 health benefits of this regulation far outweigh the costs,
14 as is the case with most -- with all of the regulations
15 that are coming forward to you. But this is really
16 critical from a public health perspective, not just for
17 smog reduction but also to reduce air toxics. And you
18 heard about the reductions in benzene, other air toxics
19 that are also achieved by this regulation.

20 So I just wanted to comment that we believe that
21 the Air Board has done due diligence in demonstrating that
22 the equipment is available, the contractors are available.

23 And we believe that in terms of this last phase,
24 this final year of the program, that, you know, if the
25 State Board and the air districts can continue their very

1 good coordination and do everything possible to maximize
2 the assistance that can be given to these stations to make
3 sure that all these station owners are very well aware of
4 the RUST program funds and we get those funds utilized for
5 grants and loans, I mean that would be the direction that
6 we would urge you to go in this final year of the program,
7 and not to consider any weakening or changes in the
8 enforcement effort.

9 You know, there are grants and loans available.
10 And if we could increase the funds available, that would
11 be great. But let's make sure we get those funds used and
12 complete this program.

13 Thanks.

14 CHAIRPERSON NICHOLS: Thank you very much.

15 Kathryn Phillips from EDF.

16 Oh, she's yielding her time for now.

17 MS. PHILLIPS: I would be happy to defer to them
18 to let them go first.

19 CHAIRPERSON NICHOLS: Mr. Hill and Mr. Brown, do
20 you want to come forward, please.

21 MR. HILL: My name is Brian Hill. I'm with Toro
22 Petroleum. We're a gasoline and diesel fuel distributor
23 and retailer from Salinas, Monterey County. And I wanted
24 to come up here today to support the CLOMA position and
25 the concerns that were voiced earlier and delivered to you

1 through correspondence.

2 And one of the things that's very important to us
3 is, we service rural communities. And that's an issue
4 that's been raised by the staff earlier in this
5 proceeding. And one of the things that was going through
6 my mind as I was driving through the smoke of the fires to
7 come up here today is some of the rural communities that
8 we serve are affected by these fires. And a lot of the
9 fire response people are using these service stations that
10 will probably not be open because of the financial
11 requirements to update and upgrade their facilities.
12 They're just -- of the stations that we supply -- we don't
13 supply as many as some of the other gentlemen that have
14 spoken -- but a lot of these people are just simply going
15 to close. And I think that will disproportionately affect
16 people in rural parts of our state who -- you know, they
17 might have options to go to town, but that doesn't
18 necessarily achieve an air quality benefit if you're
19 having to drive a long way to buy a tank of gas.

20 Thank you very much.

21 CHAIRPERSON NICHOLS: Thank you.

22 Mr. Brown.

23 MR. BROWN: Thank you. My name's Bob Brown. And
24 I think you heard pretty much everything I was going to
25 say from everybody else.

1 But I would like the staff and people know that
2 we put a -- we have four retail sites that we run that we
3 operate out of San Jose. And we put in the EVR and ISD
4 about eight months ago. And I've already wrote a letter
5 asking if we can turn it off because of the false alarms
6 that we constantly get. We have to have a guy come in
7 constantly. And we're paying the bills for something that
8 doesn't seem to even operate properly. And I know that
9 they say that it's -- you know, it's working right. They
10 come in. Our tech guy looks at it. They can't figure it
11 out. The equipment is not working. We've talked to the
12 manufacture. He's been in. He's looked at it. They
13 cannot tell us why we get all those falls alarms. And
14 these alarms require that you get a third party certified
15 person come in and reset it. And so we pay to have
16 somebody come in. They get there. And the alarm's
17 already cleared itself in some cases. But yet I still
18 have to pay for the service call and for a piece of
19 equipment that's not even operating right, and nobody can
20 tell us why.

21 So I've already written a letter to our air
22 district asking if we can turn it off until April 1,
23 because I don't even want to pay anymore for it. And I
24 doubt if we'll put it in my other sites.

25 CHAIRPERSON NICHOLS: Seems like something that

1 needs to get worked out.

2 Okay. Kathryn Phillips, you're the last.

3 MS. PHILLIPS: Thank you. I'm Katherine Phillips
4 with Environmental Defense Fund.

5 And I actually found the testimony to be very
6 moving. I've told some of you before -- you've been here
7 before. You know my father was a trucker. Well, there
8 was a period of six months when I was in junior high
9 school when he decided he was going to try to find a way
10 that he wouldn't have to be on the road so much. So he
11 decided to buy a gas station. And he bought the gas
12 station because -- as you know, my last name is Phillips,
13 and it was a Phillips 66 gas station.

14 My father probably wasn't meant to be in that
15 kind of business. It's a very hard business. He was a
16 very hard worker. But it's complicated being in a
17 business like that. And after about six months he decided
18 to buy another truck and go back to trucking.

19 So I have a lot of sympathy for the people who've
20 come up here to testify about their own situation or the
21 situation of the members of their organization.

22 That being said, we need clean air in this state.
23 We also need to remember that there are a lot of people
24 that have complied with this already. And there have been
25 almost four years, not quite four years, when people have

1 had the opportunity to comply.

2 A little bit of my concern is are we hearing some
3 of the "my dog ate the homework" kind of testimony? I
4 really do think that we need to remember that again there
5 are people who've complied. We need to reduce air
6 pollution. This is a reasonable approach and there have
7 already been some delays. There are grants out there. We
8 can go forward.

9 And while I understand the concern about the
10 penalties, I think that I would suspect that if people are
11 in line right now to get permits, in line to get the
12 equipment, that I doubt they're going to get the \$10,000 a
13 day fine. I suspect that everybody is most interested in
14 seeing that the reductions are achieved and that they're
15 achieved in as timely a manner as possible.

16 Thank you.

17 CHAIRPERSON NICHOLS: Thank you very much.

18 That concludes the list of people who had signed
19 up to speak, unless there's someone else that we have not
20 heard from.

21 Okay. I think it's time to bring it back for any
22 final comments or reactions on the part of the Board
23 members. I think it's always good to hear from real
24 people in situations like this, those who are actually
25 affected by our rules. And it's clear this is a big and

1 complicated program and it's got some glitches going on in
2 the roll-out. I think it's also clear that staff needs to
3 be giving some thought, and I'm sure they already are, to
4 what happens if, you know, we get up to the edge here and
5 either the equipment isn't working the way it was supposed
6 to in the case of these diagnostic systems or people have
7 acted in good faith and just haven't been able to comply.

8 But there's always a tension between, you know,
9 sending the signal that you don't have to worry about it,
10 which then really I think not only rewards procrastinators
11 but undermines the people who have complied and done so at
12 considerable effort and expense, versus trying not to
13 create a sense of panic.

14 I guess the one question that I really have is
15 about the financial situation. And I would ask you, Mr.
16 Goldstene or Mr. Cackette, whether -- or Mr. Loscutoff --
17 anybody, I guess, what you know about these funds that
18 allegedly are available and whether they really are and
19 whether there's more we might be able to do to assist in
20 this situation, because that does seem to be a real
21 sticking point.

22 EXECUTIVE OFFICER GOLDSTENE: And the staff will
23 respond.

24 AIR POLLUTION SPECIALIST CASTRONOVO: This is
25 Cindy Castronovo.

1 Yeah, the RUST program that we've been talking
2 about is funded annually from fees for the Underground
3 Storage Tank Program. And in 2004 it was expanded to
4 include these vapor recovery upgrades.

5 In the past they've gotten about 2.6 million for
6 grants and about 5 million for loans. It was all used up
7 in this last fiscal year. They do have a lot of
8 applications pending, and they anticipate that the funds
9 for next fiscal year will go very quickly. How quickly,
10 it remains to be seen. And of course the state budget is
11 not finalized, so we're not sure of how much funds will
12 actually make it in.

13 CHAIRPERSON NICHOLS: But that program wasn't
14 aimed at this particular issue.

15 AIR POLLUTION SPECIALIST CASTRONOVO: No.

16 CHAIRPERSON NICHOLS: So we'd be shoehorning
17 ourselves into a fund that's already being utilized for
18 other purposes.

19 AIR POLLUTION SPECIALIST CASTRONOVO: It is
20 administered by the Water Board. They have had a series
21 of upgrades associated with their regulations. Our
22 understanding from talking to them is that they don't have
23 anything going on right now that requires upgrades they
24 anticipate in the future. So our estimate is about 75
25 percent of the grants of last year's funds were used for

1 vapor recovery upgrades.

2 CHAIRPERSON NICHOLS: Oh, I see.

3 Okay. So that -- and it is being used for this
4 purpose?

5 AIR POLLUTION SPECIALIST CASTRONOVO: Yes.

6 CHAIRPERSON NICHOLS: I think it should be
7 expanded. And it seems to me that's something we ought to
8 be talking to the Legislature and the Department of
9 Finance about how to do that. And in spite of the tight
10 budget times, you know, if we're going to be attempting to
11 push this forward, maybe even because of the tight budget
12 times, this is something we really need to make an effort
13 to try to seek something on.

14 BOARD MEMBER RIORDAN: Excuse me.

15 CHAIRPERSON NICHOLS: Yes.

16 BOARD MEMBER RIORDAN: Madam Chair, maybe there
17 are some fines or forfeitures monies that just come at
18 one -- that are one-time funds that the state has that
19 might be used for that, because this is a one-time effort.
20 Sometimes those monies are more available than actually an
21 ongoing source.

22 One thing that I do think I heard, Madam Chair --
23 and if I might -- I think it was brought up by maybe Craig
24 Moyer. I do think the staff needs to think about before
25 April what constitutes a good faith effort. And when we

1 get to the point of no return -- because I think the Board
2 is pretty committed to this program. It's an important
3 program. But what in the scheme of things looks like a
4 good faith effort but maybe they're not quite to the point
5 of installation, I think we do we need to think about that
6 before we have a problem at the end. And it may be you
7 don't think there's a good faith effort that can be
8 defined. And that needs to be said. Or, yes, these are
9 the criteria that, you know, we'll accept or encourage the
10 districts to accept what it is, is really probably the
11 districts to accept that.

12 And hopefully, if Barbara Lee is successful at
13 getting the districts to interface between some of these
14 permitting agencies for these applicants, they're going to
15 understand that there needs to be something. Because I
16 just know how building and safety departments work. And,
17 Madam Chair, they can be -- it can be a very long process.
18 And some of it is legitimate. They may have -- because of
19 the economic turndown, they may have limited the number of
20 people that read plans, that approve plans. And so their
21 building and safety departments may be undermanned at this
22 point in time.

23 So I think there has to be some realism about
24 what might happen next April.

25 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: I

1 certainly think that's true. We have been discussing
2 with -- as Barbara Lee said, we're really working closely
3 on this. Ultimately of course it's going to be a
4 district-by-district decision on a case-by-case basis.
5 But I think, you know, they all share and understand the
6 challenge that's there right now. They're all -- you
7 could see from the steps they've taken, they're trying to
8 make things happen quicker so they don't get into that
9 position.

10 Ultimately there will be some who wait and, you
11 know, will be a district decision about whether that's a
12 penalty situation or not. There'll be other ones that
13 it's, you know, kind of out of their hands, you know, it
14 was a permit delay or whatever. And I think districts are
15 quite capable of doing that. I can't guarantee they'll
16 all do it exactly the same way. But we'll certainly have
17 a lot of discussions about it before the April deadline
18 comes.

19 BOARD MEMBER RIORDAN: But it would be nice if
20 they were similar in nature. I realize all these
21 districts won't come up with the same criteria. But if we
22 had some sense of what we thought was fair and we could
23 communicate that to our districts, I think that would be
24 helpful.

25 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Yeah,

1 we'll certainly share our views with them on that.

2 CHAIRPERSON NICHOLS: And that would be the usual
3 courtesy.

4 AIR POLLUTION SPECIALIST CASTRONOVO: Madam
5 Chair?

6 CHAIRPERSON NICHOLS: Yes.

7 MR. MCKEEMAN: May I speak?

8 CHAIRPERSON NICHOLS: Please go ahead.

9 MR. MCKEEMAN: Thank you.

10 CHAIRPERSON NICHOLS: Yeah, we're being pretty
11 informal here.

12 MR. MCKEEMAN: One of the things that I think we
13 need to look at in the RUST program is the eligibility
14 criteria. And that's something that we should look at
15 immediately while we have a chance to do something about
16 it before, you know, the Legislature shuts down. So I'd
17 be happy to work with staff in looking at that and making
18 sure that that doesn't become an artificial barrier to --

19 CHAIRPERSON NICHOLS: I think that's an excellent
20 idea, and we appreciate the offer and we will follow up on
21 it. We agree with you.

22 This has been a very useful hearing.

23 BOARD MEMBER TELLES: I have a couple questions
24 and comments.

25 CHAIRPERSON NICHOLS: Go ahead.

1 BOARD MEMBER TELLES: I'm from the San Joaquin
2 Air Pollution Control area and probably the most polluted
3 area in -- one of the most polluted areas in the state,
4 and I'm very much concerned about the pollution there.
5 But I also grew up in a town that when I grew up there was
6 about 1500 people and we had service stations that were
7 out in the rural areas, you know, just in the corner in
8 farm communities that were supplying just enough gasoline
9 for just a local community of maybe, you know, 3 or 400
10 people. I'm just beginning my comments with this
11 description of my background.

12 But I have just a couple points of clarification
13 here. Are there no exemptions for the small operator, or
14 no grants available? Is that what I'm hearing?

15 AIR POLLUTION SPECIALIST CASTRONOVO: We talked
16 about the EVR Phase II and the ISD, the in-station
17 diagnostics, the stations that have low throughput, less
18 than 600,000 gallons per year, are exempt from the ISD
19 portion, which costs more than \$10,000. So they do have
20 some relief there.

21 Also the RUST grants, even though they are
22 limited, they have a throughput limit as well. So to
23 qualify for a grant you need to be less than 900,000
24 gallons per year.

25 CHAIRPERSON NICHOLS: So it's actually focused on

1 the small businesses --

2 AIR POLLUTION SPECIALIST CASTRONOVO: Yes.

3 BOARD MEMBER TELLES: But those grants aren't
4 available if there's no money available.

5 AIR POLLUTION SPECIALIST CASTRONOVO: Well, not
6 at this time.

7 BOARD MEMBER TELLES: Well, then it's not an
8 available --

9 EXECUTIVE OFFICER GOLDSTENE: But they will be.
10 They will be once the fiscal years --

11 BOARD MEMBER TELLES: I have a couple more points
12 here that is really of concern to me.

13 The playing field here is very diverse. I think
14 probably the biggest retailer of petroleum in California
15 right now is Costco. And Costco subsidizes their
16 gasoline. They're basically selling it under price
17 because they just want to attract people to their store.
18 And then you compare that to a guy like Mr. Wiggins at the
19 Wiggins Trading Post, who sells less than \$100,000 of
20 gasoline a year. And then it seems -- I'm just having a
21 hard time seeing that the same rule fits everybody, where
22 you have a fellow who is just trying to survive and doing
23 a service for his local community. And I'm very much
24 familiar with some rural areas in Fresno County where
25 there's only a gas station every 30 miles, and they're

1 less than 10,000 gallons a month type gas stations. But
2 they do serve a purpose. And I don't think they're going
3 to be able to afford this.

4 When I filled up my tank last night, I just asked
5 my own service station attendant what he thought about
6 this. And he paid \$170,000 to get his pumps -- his eight
7 pumps up to speed. And it seems like it's a lot more than
8 what's estimated in this.

9 And one of my concerns too would be, as the
10 deadline is getting closer, there's no constraint on what
11 the contractor is going to necessarily charge, because
12 he's going to -- you know, when you're more desperate you
13 can charge more and get more. The cost of this will be
14 more and be prohibited perhaps for some of these small
15 stations.

16 I just -- I'm having a hard time trying to figure
17 out what to do here. You know, we have some small
18 stations, which are probably in jeopardy or financial --
19 jeopardy or financial survival versus other people that
20 are going to be able to deal with this very well.

21 And then the small stations are probably not
22 contributing a huge amount to the pollution issue here. I
23 know they contribute some. But a station that's pumping
24 less than 100,000 gallons a year versus a Costco who's up
25 in the 2 or 3 million gallons a year type area is going --

1 it's a huge difference.

2 CHAIRPERSON NICHOLS: I think -- as you know,
3 this is not an action item on today's Board agenda. But I
4 think it's a valuable discussion. And I think your points
5 are well taken, and I suspect these are all thoughts that
6 all of us have had from time to time about this program.
7 I just want to make a couple of observations.

8 First of all, the very small station exclusion I
9 think helps some. The fact that the smaller -- the
10 stations in rural communities tend to be somewhat more
11 isolated, I don't think necessarily means that they're not
12 relevant in terms of the smog problem or in terms of the
13 competition problem, because gasoline pricing is so
14 competitive, unfortunately or fortunately, depending how
15 you look at it. It's actually a very cutthroat business.
16 So that, you know, although I don't think it's likely to
17 happen this way, if somebody were actually in a position
18 to undercut, you know, by a penny a gallon based on not
19 having to meet these kinds of retrofit requirements,
20 people would drive out of their way to go fill up at a
21 station like that, and that would kind of defeat the
22 purpose of this whole regulation.

23 So, you know, my focus would be on trying to
24 alleviate the hardships where we find them. And that
25 would be primarily in terms of getting funding into this

1 account so that it actually can do some good, which we
2 would be able to do by the end of the year, at least by
3 the time the next fiscal year starts, if we can get
4 working on it right now. And then by focusing, as several
5 people have suggested they already are planning to, on
6 this issue of what would constitute a kind of good faith
7 effort that could be an excuse if there was a -- if it
8 came to the point where enforcement action was being
9 contemplated. At least that would seem to me to be where
10 we ought to be focusing our priorities.

11 But it's always -- you know, it's a tough
12 situation. It's a complicated market out there. And I
13 think we need to just be keeping our eyes on it.

14 And the other thing I think is that working with
15 the districts to get the information out there is really
16 critical.

17 EXECUTIVE OFFICER GOLDSTONE: Well, we'll move
18 forward on those fronts, working on making sure there's
19 funding for the RUST program and work with the industry
20 representatives to see if there's a way to expand
21 eligibility or not. And we'll also make sure this
22 discussion is included in our report this fall, giving the
23 Board an update on where the program is.

24 CHAIRPERSON NICHOLS: Okay. That would be
25 helpful.

1 BOARD MEMBER BERG: And, Madam Chair, I'd just
2 like a point of clarification on the four years that was
3 testified to. In fact, have they had four years on the
4 certified devices to install?

5 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Yes.
6 There's been four years since the first device was
7 certified. The argument that's being made is that there
8 are two types of device, there are two types of systems at
9 service stations. And if you had system 1, then there was
10 one available four years ago - and it will be four years
11 from April - and if you had the other kind, it will only
12 be two years from next April. But why that's not as much
13 a concern is that switching between these two systems is
14 not very complicated and the compliance cost is about the
15 same. So just like they switched from the suction type to
16 the balanced type for ORVR, you can switch back and that's
17 about the same compliance costs as if you stay with the
18 same system. So I don't think it's that relevant of a
19 point, because people have had since April -- or since
20 2005 they've had the equipment available to them.

21 BOARD MEMBER BERG: Thank you.

22 And could just explain to me so that I
23 understand. There's some discussion that the districts
24 have some ability to enforce and to determine what
25 criteria may or may not be a good faith effort. We set

1 the regulation but the individual districts are
2 responsible for enforcing it and they have the authority
3 to pick it up at some point?

4 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Yes.

5 BOARD MEMBER BERG: Okay. Thank you.

6 CHAIRPERSON NICHOLS: All right. Any additional
7 comments or questions?

8 If not, we want to thank everybody for coming and
9 educating the Board. I think it's been useful and it will
10 lead to some response. So we appreciate that.

11 And if there are no further items -- there were
12 no people who signed up for public comment.

13 So I believe we are ready to adjourn.

14 Thanks, everybody.

15 (Thereupon the California Air Resources Board
16 adjourned at 4:49 p.m.)

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1 CERTIFICATE OF REPORTER

2 I, TIFFANY C. KRAFT, a Certified Shorthand
3 Reporter of the State of California, and Registered
4 Professional Reporter, do hereby certify:

5 That I am a disinterested person herein; that the
6 foregoing hearing was reported in shorthand by me,
7 Tiffany C. Kraft, a Certified Shorthand Reporter of the
8 State of California, and thereafter transcribed into
9 typewriting.

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

13 IN WITNESS WHEREOF, I have hereunto set my hand
14 this 10th day of July, 2008.

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