MEETING

STATE OF CALIFORNIA

AIR RESOURCES BOARD

JOE SERNA, JR. BUILDING

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

BYRON SHER AUDITORIUM, SECOND FLOOR

1001 I STREET

SACRAMENTO, CALIFORNIA

THURSDAY, JULY 22, 2010

9:00 A.M.

TIFFANY C. KRAFT, CSR, RPR CERTIFIED SHORTHAND REPORTER LICENSE NUMBER 12277

APPEARANCES

BOARD MEMBERS

- Ms. Mary Nichols, Chairperson
- Dr. John R. Balmes
- Ms. Sandra Berg
- Ms. Doreene D'Adamo
- Ms. Lydia H. Kennard
- Mr. Ronald O. Loveridge
- Mrs. Barbara Riordan
- Mr. Ron Roberts
- Dr. Daniel Sperling
- Dr. John Telles
- Mr. Ken Yeager

STAFF

- Mr. James Goldstene, Executive OfficerMs. La Ronda Bowen, OmbudsmanMr. Tom Cackette, Chief Deputy Executive OfficerMr. Bob Fletcher, Deputy Executive OfficerMs. Ellen Peter, Chief CounselMs. Lynn Terry, Deputy Executive Officer
- Ms. Lori Andreoni, Board Clerk

APPEARANCES CONTINUED

STAFF

Ms. Marcella Nystrom, Starr Air Pollution Specialist, Air Quality Analysis Section, Air Quality Data Branch, Planning and Technical Support Division

Ms. Lisa Williams, Air Pollution Specialist, Control Strategies Section, Stationary Source Division

ALSO PRESENT

Ms. Diane Bailey, NRDC

Mr. Tim Carmichael, California Natural Gas Vehicle Coalition

Mr. Hank de Carbonel

Mr. Michael Gibbs, Deputy Secretary for Climate Change, CalEPA

Mr. Greg Knapp, Lehigh Hanson, Inc.

Mr. Derrick Walker, Environmental Defense Fund

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08:44:03	1	PROCEEDINGS
09:12:08	2	CHAIRPERSON NICHOLS: Good morning, ladies and
09:12:10	3	gentlemen. Welcome to the July 22nd public meeting of the
09:12:16	4	Air Resources Board.
09:12:17	5	The meeting will please come to order, and we
09:12:20	б	will begin the meeting by reciting the Pledge of
09:12:24	7	Allegiance to the flag.
09:12:25	8	(Thereupon the Pledge of Allegiance was
09:12:25	9	Recited in unison.)
09:12:50	10	CHAIRPERSON NICHOLS: Thank you.
09:12:51	11	The clerk will please call the roll.
09:12:54	12	BOARD CLERK ANDREONI: Dr. Balmes?
09:12:55	13	BOARD MEMBER BALMES: Here.
09:12:56	14	BOARD CLERK ANDREONI: Ms. Berg?
09:12:57	15	BOARD MEMBER BERG: Here.
09:12:58	16	BOARD CLERK ANDREONI: Ms. D'Adamo?
09:12:58	17	BOARD MEMBER D'ADAMO: Here.
09:12:59	18	BOARD CLERK ANDREONI: Ms. Kennard?
09:13:00	19	BOARD MEMBER KENNARD: Here.
09:13:00	20	BOARD CLERK ANDREONI: Mayor Loveridge?
09:13:01	21	BOARD MEMBER LOVERIDGE: Here.
09:13:02	22	BOARD CLERK ANDREONI: Mrs. Riordan?
09:13:03	23	BOARD MEMBER RIORDAN: Here.
09:13:04	24	BOARD CLERK ANDREONI: Supervisor Roberts?
09:13:05	25	BOARD MEMBER ROBERTS: Here.
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09:13:06	1	2 BOARD CLERK ANDREONI: Professor Sperling?
09:13:07	2	BOARD MEMBER SPERLING: Here.
09:13:09	3	BOARD CLERK ANDREONI: Dr. Telles?
09:13:10	4	BOARD MEMBER TELLES: Present.
09:13:11	5	BOARD CLERK ANDREONI: Supervisor Yeager?
09:13:13	6	BOARD MEMBER YEAGER: Here.
09:13:14	7	BOARD CLERK ANDREONI: Chairman Nichols?
09:13:16	8	CHAIRPERSON NICHOLS: Here.
09:13:17	9	BOARD CLERK ANDREONI: Madam Chair, we have a
09:13:18	10	quorum.
09:13:19	11	CHAIRPERSON NICHOLS: Thank you very much.
09:13:21	12	And welcome all, especially to those who have
09:13:23	13	descended from the mountaintop to be with us, otherwise
09:13:27	14	come back from vacation. It's great to have you all here.
09:13:32	15	A couple of brief announcements.
09:13:34	16	I think most of the people I see in the audience
09:13:36	17	are regulars here, but we are required to give you a
09:13:41	18	couple of notices.
09:13:42	19	If you want to testify, we appreciate it if you
09:13:44	20	fill out a speaker card in advance. And the Board will
09:13:46	21	impose a three-minute limit. And we appreciate it if you
09:13:50	22	submit your written testimony and just give us your
09:13:52	23	comments in your own words without reading from your
09:13:56	24	written remarks.
09:13:57	25	And we also want to make sure that everybody

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1 knows where the exits are. They are at the back of the 09:13:59 09:14:02 2 room here. If there is a fire drill or a fire alarm that 09:14:07 3 we hear, we need to evacuate the room, go down the stairs, 09:14:12 4 and out of the building until we get the all-clear signal. 09:14:15 5 We have a short meeting this morning, but a 09:14:17 couple of really important items. So I'd like to get 6 09:14:21 started. 7

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09:14:22 8 And we will begin with the status report on new 09:14:28 9 U.S. EPA requirements for monitoring near roadways. This 09:14:31 10 is just an informational item, but it's something that I 09:14:35 11 think the Board members need to be aware of.

09:14:3812And then we'll hear the proposed regulation for09:14:4413energy efficiency and co-benefits assessment at large09:14:4714industrial facilities, followed by an update on the09:14:5115Western Climate Initiative and comments from Board members09:14:5316as well as public comment. And then we will adjourn for09:14:5717lunch. Okay.

09:14:59 18 So we'll start with the status report on the EPA 09:15:03 19 requirements for monitoring. And our Executive Officer 09:15:06 20 will introduce this item.

09:15:08 21 EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman 09:15:09 22 Nichols.

09:15:12 23 U.S. EPA is in the process of reviewing the 09:15:14 24 adequacy of all federal air quality standards. In January 09:15:17 25 this year, they issued a revised NO2 standard. In this

1 presentation, staff will provide an update on revisions to 09:15:21 09:15:24 2 the NO2 standard as well as first time requirements for 09:15:26 3 near-roadway monitoring. 09:15:28 4 I'd like to turn this over now to Marcy Nystrom 09:15:30 5 of the Planning and Technical Support Division to make the 09:15:34 6 presentation. Marcy. 09:15:39 (Thereupon an overhead presentation was 7 09:15:39 8 presented as follows.) 09:15:39 STAFF AIR POLLUTION SPECIALIST NYSTROM: Good 9 09:15:39 10 morning, Chairman Nichols and members of the Board. 09:15:41 11 Today, I'll be talking about the new federal 09:15:44 12 nitrogen dioxide standard. As Mr. Goldstene said, U.S. 09:15:47 13 EPA adopted the standard earlier this year along with 09:15:49 14 first time requirements for near-roadway monitoring. 09:15:52 15 --000--09:15:52 16 STAFF AIR POLLUTION SPECIALIST NYSTROM: In the 09:15:53 17 first part of the presentation, I'll provide some 09:15:56 18 background information on the revised standard. 09:15:58 19 I'll also talk about the studies used to set the 09:16:00 20 levels. 09:16:02 21 Next, I'll discuss the new monitoring 09:16:04 22 requirements that ARB and the districts will implement 09:16:06 23 over the next several years. 09:16:09 24 Finally, I'll outline some of the implications of 09:16:11 25 the new requirements for California.

09:16:14 1

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09:16:14 2 STAFF AIR POLLUTION SPECIALIST NYSTROM: EPA
09:16:15 3 finalized the new NO2 standard in January of this year.
09:16:18 4 They established a new one-hour standard of 100 parts per
09:16:22 5 billion and retained the existing annual standard of 53
09:16:25 6 parts per billion.

09:16:27 7 The need for a short-term one-hour standard was
09:16:30 8 prompted by an assessment of newer health studies. These
09:16:33 9 studies show impacts at lower levels and shorter exposures
09:16:37 10 than previously indicated. EPA's proposal was peer
09:16:40 11 reviewed by the Clean Air Scientific Advisory Committee,
09:16:43 12 or CASAC, which advises EPA on setting standards.

09:16:53 13

09:16:5314STAFF AIR POLLUTION SPECIALIST NYSTROM: In their09:16:5315previous review of the standard, EPA found that long-term09:16:5616NO2 exposure was associated with an increase in09:16:5917respiratory illness among children. At that time, only09:17:0218limited data were available on short-term exposure, and09:17:0719EPA did not believe the studies were robust enough to09:17:1020support a short-term standard.09:17:1521Since then, the body of evidence has grown09:17:1522substantially. More current studies confirm and expand on

09:17:18 23 the previous health findings.

09:17:2024As part of their recent review, EPA looked at09:17:2325dozens of studies showing associations between short-term

	6
1	exposure and respiratory symptoms. These toxicological
2	human exposure and indoor exposure studies confirm the
3	association between short-term exposure and adverse
4	impacts, particularly in children.
5	000
б	STAFF AIR POLLUTION SPECIALIST NYSTROM: Overall,
7	the health findings show that long-term exposure is
8	primarily associated with respiratory illness in children.
9	It's also associated with the decrease in their lung
10	function growth. The annual standard is designed to
11	protect against these long-term effects.
12	Short-term impacts include respiratory symptoms,
13	an increase in emergency room visits and hospitalizations,
14	and an increased airway response in asthmatics. Based on
15	these associations, EPA added the one-hour standard which
16	protects against acute exposures.
17	000
18	STAFF AIR POLLUTION SPECIALIST NYSTROM: With
19	this background in mind, I'd like to move on to the
20	monitoring requirements that go along with the new NO2
21	standard.
22	000
23	STAFF AIR POLLUTION SPECIALIST NYSTROM: EPA
24	established the new requirements as part of the standard
	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

09:18:30 1 roadways, which are the major source of NO2.

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09:18:32 2 The new rules require near-roadway monitors in 09:18:34 3 urban areas with the highest populations and traffic 4 volumes. As a result, they're designed to protect against 09:18:37 09:18:40 5 the impacts of peak, short-term exposure. Specifically, 09:18:44 6 urban areas with a population of more than 500,000 must 09:18:49 have at least one monitor. This monitor must be located 7 09:18:52 within 165 feet or 50 meters of the roadway. 8 09:18:57 9 In addition, a small number of community-wide 09:19:01 10 monitors are required. We expect that California's 09:19:03 11 current network of NO2 monitors will meet the 09:19:06 12 community-wide requirement. 09:19:08 13 Finally, EPA requires a limited number of 09:19:11 14 monitors, nation-wide, near susceptible and vulnerable 09:19:16 15 populations. 09:19:18 16 --000--09:19:18 17 STAFF AIR POLLUTION SPECIALIST NYSTROM: EPA's 09:19:19 18 rational for near-roadway monitoring is based on their 09:19:23 19 concern that the current network may not capture the 09:19:27 20 highest concentrations. EPA estimates that concentrations 09:19:30 21 near heavily traveled roadways may be up to two times 09:19:33 22 higher than those measured at the current sites. 09:19:35 23 Given this potential difference, the near roadway 09:19:38 24 monitoring will better protect against short-term peak 09:19:41 25 concentrations.

8 09:19:45 Control programs aimed at reducing near-roadway 1 09:19:48 2 exposures will also reduce community-wide concentrations. 09:19:52 --000--3 09:19:52 4 STAFF AIR POLLUTION SPECIALIST NYSTROM: Τn 09:19:52 5 recent years, EPA has made a fundamental change in how it evaluates risk. Historically, the federal standards were 09:19:56 6 09:19:58 based on community-wide exposure. Because of this focus, 7 09:20:01 the current monitoring network was established to reflect 8 09:20:05 equivalent community-wide concentrations. 9 09:20:07 10 In contrast, the new one-hour standard focuses on 09:20:10 high, short-term exposures in areas near NO2 sources. 11 09:20:16 12 This is a similar approach that EPA took in revising the 09:20:19 13 federal lead standard. 09:20:22 14 --000--09:20:22 15 STAFF AIR POLLUTION SPECIALIST NYSTROM: The 09:20:23 16 majority of CASAC members supported EPA's addition of 09:20:29 17 near-roadway monitors. However, some members expressed 09:20:33 18 concerns with using data from these monitors to determine 09:20:36 19 compliance with the standard. 09:20:37 20 In addition, some members expressed concerns with 09:20:39 21 using health studies based on community-wide data to 09:20:43 22 establish a level of a short-term near-roadway standard. 09:20:46 23 This is because there is a variable relationship between 09:20:48 24 concentrations measured at near-roadway sites and at 09:20:51 25 community-wide sites. This variability increases the

9 1 uncertainty of using community-wide concentrations to 09:20:55 09:20:57 2 establish a short-term standard based on peak exposure. 09:21:04 --000--3 09:21:04 4 STAFF AIR POLLUTION SPECIALIST NYSTROM: The last 09:21:05 5 topic I'd like to cover is the implications of the new monitoring requirements for California. 09:21:07 6 09:21:09 --000--7 09:21:09 8 STAFF AIR POLLUTION SPECIALIST NYSTROM: While 09:21:09 9 our existing network will satisfy the community-wide 09:21:12 10 requirements, none of our current monitors satisfy the near-roadway requirements. As a result, ARB and the 09:21:15 11 09:21:18 12 districts will need to establish a total of 16 new 09:21:21 13 monitors. 09:21:22 14 As shown here, the greatest number of monitors 09:21:28 15 will be in those districts with the highest population and 09:21:31 16 traffic volumes. These include the South Coast, the San 09:21:34 17 Joaquin Valley, and the Bay Area. A smaller number of 09:21:39 18 monitors will be required in Sacramento, San Diego, and 09:21:43 19 Ventura. 09:21:47 20 --000--STAFF AIR POLLUTION SPECIALIST NYSTROM: The 09:21:47 21 09:21:47 22 near-roadway monitors must be deployed by January 2013. 09:21:49 23 Under EPA rules, the monitors must be sited to measure the 09:21:53 24 highest expected concentrations. 09:21:54 25 The first step in identifying potential sites

10 1 will be to determine the road segments with the highest 09:21:57 09:22:01 2 average daily traffic counts. In addition to the traffic 3 count, we also need to consider other factors, such as the 09:22:03 09:22:07 4 amount of congestion, the different types of vehicles on 09:22:12 5 the roadway, and the local roadway design. The optimal 09:22:16 locations will no doubt be along California's most heavily б 09:22:19 traveled freeways and freeway interchanges. 7 09:22:22 8 --000--09:22:22 9 STAFF AIR POLLUTION SPECIALIST NYSTROM: This 09:22:22 10 slide gives some examples of road segments with the 09:22:25 11 highest traffic counts in several different areas. I 09:22:28 12 expect you'll recognize the ones in your local area. 09:22:32 13 Although traffic volume will be a major factor in 09:22:40 14 determining where to locate the near-roadway monitors, as 09:22:43 15 I mentioned previously, we'll also be considering other 09:22:46 16 factors. 09:22:47 17 --000--09:22:47 18 STAFF AIR POLLUTION SPECIALIST NYSTROM: There 09:22:47 19 are a number of issues associated with establishing a 09:22:50 20 near-roadway monitoring network. These will need to be 09:22:53 21 resolved over the next several years. In addition to 09:22:55 22 cost, there are logistical issues and safety concerns as 09:22:59 23 well as the need to address variable road conditions. 09:23:02 24 --000--09:23:02 25 STAFF AIR POLLUTION SPECIALIST NYSTROM: Because

09:23:02 1 none of our current monitoring sites meet the near-roadway 09:23:08 2 requirements, each new site must be established from scratch. This comes with a substantial cost. EPA 09:23:10 3 09:23:14 estimates an initial set-up cost of about \$100,000 per 4 09:23:18 5 site. However, the cost will vary, depending on where the 09:23:22 site is located. Although we expect EPA will provide 6 09:23:25 partial funding for establishing the new sites, no funding 7 09:23:29 has been identified for ongoing site operation. 8 09:23:35 9 --000--09:23:35 10 STAFF AIR POLLUTION SPECIALIST NYSTROM: Τn addition to cost, there are potential logistical issues 09:23:35 11 09:23:39 12 and safety concerns. In many urban areas, there may be 09:23:42 13 limited space for locating a monitoring station at the 09:23:45 14 side of a freeway. And it may be difficult to obtain 09:23:49 right-of-way and access permission. 15 09:23:51 16 In addition, ARB and the local districts will 09:23:53 17 need to coordinate with other local agencies to provide 09:23:56 18 electricity and obtain the necessary operating permits. 09:24:03 19 Finally, these sites may have a greater potential 09:24:07 20 for vandalism because of their roadway location. 09:24:10 --000--21 09:24:10 22 STAFF AIR POLLUTION SPECIALIST NYSTROM: The 09:24:11 23 variability of road conditions is another concern, because 09:24:13 24 it can impact resulting concentrations. These factors 09:24:16 25 include the mix of vehicles traveling on the particular

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12 1 roadway segment, the level of congestion, and whether the 09:24:19 09:24:24 2 roadway is sunken, elevated, or at ground level. 09:24:28 We'll also have to consider the presence or 3 4 absence of a sound wall, which could act as a barrier to 09:24:30 09:24:33 5 air flow and influence concentrations. 09:24:36 6 Finally, we'll need to consider the predominant 09:24:39 7 wind direction to ensure that we capture the highest 09:24:42 8 concentrations. 09:24:43 9 --000--09:24:43 10 STAFF AIR POLLUTION SPECIALIST NYSTROM: TO 09:24:44 11 provide some real-world experience with near-roadway 09:24:46 12 monitoring, EPA is providing equipment funding for an 09:24:50 13 early implementation study. Several California agencies 09:24:54 14 may participate in this effort. The results could provide 09:24:57 15 us with a better understanding of the factors we need to 09:25:00 16 consider in establishing a more permanent network. 09:25:05 17 The pilot program may also provide an opportunity 09:25:07 18 to collect data for additional pollutants, such as PM2.5 09:25:11 19 and carbon monoxide. These data will improve our 09:25:15 20 understanding of near-roadway exposure for these other 09:25:19 21 pollutants as well. 09:25:25 22 --000--09:25:25 23 STAFF AIR POLLUTION SPECIALIST NYSTROM: Despite 09:25:25 24 the current lack of data from a near-roadway monitoring 09:25:28 25 network, EPA plans to proceed with the NO2 designation

		1.0
09:25:31	1	13 process. Data from our existing network of monitors do
09:25:35	2	not show any violations of the new standard.
09:25:37	3	However, because data from these sites may not
09:25:39	4	represent peak concentrations, EPA will initially
09:25:44	5	designate all areas as unclassified. Given the expected
09:25:48	6	differences between NO2 concentrations at community-wide
09:25:52	7	and at near-roadway sites, it's possible the near-roadway
09:25:55	8	monitors will show some non-attainment areas. Therefore,
09:25:58	9	EPA will revisit the designations in 2016 or 2017 using
09:26:04	10	data from the new network.
09:26:09	11	000
09:26:09	12	STAFF AIR POLLUTION SPECIALIST NYSTROM: State
09:26:09	13	recommendations for NO2 designations will be based on our
09:26:12	14	current network of monitors and are due to EPA in January.
09:26:15	15	We plan to bring these recommendations to the Board at the
09:26:18	16	end of the year.
09:26:20	17	This concludes my presentation, and I will answer
09:26:26	18	any questions you have.
09:26:30	19	CHAIRPERSON NICHOLS: Thank you.
09:26:31	20	Dr. Balmes, I believe you suggested this is
09:26:35	21	something we ought to bring to the Board level, and I
09:26:38	22	would ask you to comment.
09:26:40	23	BOARD MEMBER BALMES: Thank you.
09:26:40	24	And thanks for the presentation.
09:26:42	25	I actually was on the Clean Air Scientific

09:26:45 1 Advisory Committee for NO2 that reviewed this issue. And 09:26:50 2 as you indicated, there was a fair amount of controversy 09:26:54 3 on the part of CASAC members. And I added to that 09:26:58 4 controversy.

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09:26:59 5 I had no problem with having near-roadway monitors, something we haven't done before. And that was 09:27:02 6 09:27:07 part of the reason I wanted the Board to pay attention to 7 09:27:10 this item, because it is potentially going to cause us in 8 09:27:15 California to be out of attainment for NO2, something we 9 09:27:18 haven't been for a long time, if ever. And that's number 10 09:27:23 11 one.

09:27:26 And I was one of the people who wasn't sure that 12 09:27:28 13 we were ready to apply enforcement regulations to 09:27:36 near-roadway monitoring data, because all of the health 14 09:27:41 effects data from epidemiological studies were based on 15 09:27:47 16 community monitors in this country. Though in Europe, 09:27:50 they have been doing near-roadway monitoring for a while. 17 09:27:56 So it's going to change the game. And that's what I 18 09:28:01 19 really wanted people to be aware of. 09:28:04 20 And it also gives us an opportunity to measure 09:28:07 21 other pollutants near roadways. I haven't been following 09:28:10 22 the PM CASAC deliberations as closely as I might have, but

09:28:19 23 I don't know if they're going to be asking for

09:28:21 24 near-roadway monitoring for PM2.5. Maybe somebody knows 09:28:27 25 about that.

09:28:29 1 DEPUTY EXECUTIVE OFFICER TERRY: We have been
09:28:29 2 working with the districts. And at least, at this point,
09:28:32 3 we know that the Bay Air district is planning to add PM
09:28:35 4 monitoring as well.

09:28:36 5 BOARD MEMBER BALMES: But the U.S. EPA might be 09:28:39 6 asking for that as well when they come up with a new PM 09:28:42 7 standard.

09:28:43 So basically there is a new ball game in town, 8 09:28:46 and I wanted the other Board members to be aware of that. 9 09:28:51 10 And I think it's a good idea to do near-roadway 09:28:54 monitoring. I'm upset there's not necessarily funding for 11 09:28:57 it. It's another one of the unfunded mandates that 12 09:29:01 13 Washington is passing down. But I guess there's going to 09:29:04 14 be some money for assistance for this pilot program. We 09:29:07 should take advantage of that. 15

09:29:09 16 But since we have to do near-roadway monitoring, 09:29:11 17 I think it would be good to do PM2.5 and carbon monoxide 09:29:15 18 as well.

09:29:17 19 BOARD MEMBER LOVERIDGE: Can you comment on what 09:29:18 20 you mean by new ball game?

09:29:2321BOARD MEMBER BALMES: Well, as I tried to say09:29:2822perhaps not clearly and I didn't have my microphone09:29:2823pushed, was we've not been out of attainment for NO2 for09:29:3324the annual standard anywhere in California for as long as09:29:3625I've been involved with air pollution issues. But with

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16 1 the near-roadway monitoring, concentrations get high near 09:29:40 09:29:44 2 measured freeways -- congested freeways with a lot of 3 stuck traffic especially. So we may be out of attainment 09:29:49 09:29:52 4 for the new short-term standard. 09:29:56 5 BOARD MEMBER LOVERIDGE: The consequences of 09:29:57 6 that? 09:29:58 BOARD MEMBER BALMES: Well, then we're going to 7 09:30:00 have to get tougher with our regulations, which are 8 09:30:02 9 already pretty tough. 09:30:05 10 CHAIRPERSON NICHOLS: It is -- actually, my 09:30:06 11 recollection is that California was in violation of the 09:30:09 12 NO2 standard back in the 70s and 80s. 09:30:13 13 BOARD MEMBER BALMES: Before my time. 09:30:14 14 CHAIRPERSON NICHOLS: Olden days, for some of us 09:30:19 15 anyway. 09:30:22 16 But we have to do the full implementation plan 09:30:24 17 process and show that you've got regulations in place that 09:30:28 18 will prevent those violations from occurring and that 09:30:30 19 you're meeting the standard. 09:30:35 20 BOARD MEMBER BALMES: Just to finish my response 09:30:36 21 to Mayor Loveridge, I think most of the NO2 comes from 09:30:41 22 motor vehicles. We're just going to have to have cleaner 09:30:44 23 vehicles. 09:30:46 24 CHAIRPERSON NICHOLS: Or fewer of them or 09:30:47 25 barriers or -- I mean, there are other methods. But yeah,

1 there is a limited selection of possible things that one 09:30:51 09:30:54 2 could do. And none of them seem particularly appealing. 09:30:58 So, I mean, we feel like we're doing everything 3 we know how to do at the moment in terms of emissions 09:31:01 4 09:31:04 5 control. It's a matter of whether you can demonstrate 09:31:09 that changing the fleet will get you there in time or 6 09:31:12 whether more drastic measures are required. But it 7 09:31:15 definitely raises the issue and raises the ante, so to 8 09:31:20 speak. And it will give people information, tools they 9 09:31:23 can use to think about things, like where they want to 10 09:31:26 site -- where they would like to put things that might be 11 09:31:30 closer to roadways, too. 12 09:31:31 13 This whole issue, which I know that has come up 09:31:34 14 with the Board before about locations, zoning, land use 09:31:39 related to transportation is a big issue. And it's going 15 09:31:44 16 to continue to, as this shows, I think to be very 09:31:49 17 controversial. 09:31:50 18 Other questions/comments, Board members?

09:31:53 19 Did we have anyone who signed up to speak on this 09:31:56 20 item? No.

09:31:58 21 Okay. Well, so thank you very much.

09:32:1322While the next team is assembling, the next item09:32:1623on our agenda is a regulatory item. And it's proposed09:32:2224under AB 32. It's a regulation that focuses on09:32:2925co-benefits. That is the air pollution benefits as well

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1 as the benefits in terms of greenhouse gas emissions from 09:32:32 09:32:38 2 improving energy efficiency at large industrial 3 facilities. 09:32:41 09:32:42 4 This is a proposal that's gotten a lot of 09:32:45 5 attention and a lot of interest I think from environmental 09:32:50 6 and environmental justice organizations as well as from 09:32:53 the regulated community. It's an interesting approach. 7 09:32:58 It provides the Board with information as well as, of 8 09:33:03 9 course, those who are subject to the rule. But it's a way 09:33:05 10 of providing information about opportunities for reducing 09:33:09 emissions of greenhouse gases as well as criteria 11 09:33:13 12 pollutants and toxic air contaminants. 09:33:16 13 And I'm now going to turn this item over to the 09:33:19 14 staff. Mr. Goldstene. 09:33:21 15 EXECUTIVE OFFICER GOLDSTENE: Thank you, Chairman 09:33:22 16 Nichols. 09:33:23 17 Today, we're proposing for your consideration a 09:33:25 18 regulation that will require the largest stationary 09:33:28 19 greenhouse gas sources in the state to conduct a one-time 09:33:31 20 energy efficiency assessment. The purpose of this 09:33:35 21 assessment is to determine potential opportunities for 09:33:38 22 improving energy efficiency and to identify potential 09:33:41 23 emission reduction opportunities for greenhouse gases, 09:33:44 24 criteria pollutants, and toxic air contaminants. 09:33:48 25 As you know, AB 32 requires ARB to create and

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implement measures needed to reduce current greenhouse gas 09:33:50 1 09:33:55 2 emissions to 1990 levels by 2020. The information 3 gathered from implementation of the proposed regulation 09:33:58 09:34:01 4 will be a valuable resource to inform industry, regulatory 09:34:06 5 agencies, and the public on what greenhouse gas emission 09:34:09 reduction opportunities are available from these large 6 09:34:11 industrial facilities, as well as what criteria pollutants 7 09:34:15 and toxic air contaminant emission co-benefits might be 8 09:34:20 9 realized. 09:34:20 10 This information will also help California's 09:34:22 11 largest stationary sources of greenhouse gas emissions to 09:34:25 12 consider potential co-benefits when deciding on actions to 09:34:30 13 comply with other greenhouse gas programs, like the Cap 09:34:34 14 and Trade Program. 09:34:35 15 I'd like have to Lisa Williams of the Stationary 09:34:37 16 Source Division present the proposal. Lisa. 09:34:41 (Thereupon an overhead presentation was 17 09:34:41 18 presented as follows.) 09:34:42 19 AIR POLLUTION SPECIALIST WILLIAMS: Thank you, 09:34:42 20 Mr. Goldstene. 09:34:42 21 Good morning, Madam Chairman and members of the 09:34:44 22 Board. 09:34:45 23 Today, I'll be presenting staff's proposed 09:34:46 24 regulation for energy efficiency and co-benefits 09:34:49 25 assessment of large industrial facilities.

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09:34:57 1 --000--09:34:57 2 AIR POLLUTION SPECIALIST WILLIAMS: This slide includes the topics I'll be discussing in my presentation. 09:34:58 3 09:35:04 4 --000--09:35:04 5 AIR POLLUTION SPECIALIST WILLIAMS: The proposed 09:35:05 regulation that we will present to you today is one of the 6 09:35:08 numerous measures outlined in the Scoping Plan approved by 7 09:35:10 the Board to comply with the California's Global Warming 8 09:35:12 9 Solutions Act. 09:35:13 10 --000--09:35:13 11 AIR POLLUTION SPECIALIST WILLIAMS: As envisioned 09:35:14 12 in the Scoping Plan, this measure would collect 09:35:17 13 information on the largest industrial sources of GHG 09:35:19 14 emissions in the state, identify energy efficiency 09:35:23 15 improvement opportunities which would provide greenhouse 09:35:25 16 gas emission reductions, and identify co-benefits for 09:35:27 17 other pollutants which could result from these 09:35:27 18 improvements. This would be achieved in a one-time 09:35:29 19 facility-wide assessment. 09:35:33 20 --000--09:35:33 21 AIR POLLUTION SPECIALIST WILLIAMS: Our goals in 09:35:34 22 developing the proposed regulation mirror the intent of 09:35:37 23 the Scoping Plan measure. We wanted to develop a 09:35:39 24 regulation that would determine potential opportunities 09:35:43 25 available for improving energy efficiency that could

09:35:45 1 result in reducing emissions from the largest stationary
09:35:48 2 sources in the state and provide information that will
09:35:50 3 help us identify the future actions for obtaining emission
09:35:53 4 reductions.

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09:35:546AIR POLLUTION SPECIALIST WILLIAMS: We think the09:35:557information collected will be extremely useful in09:35:578informing ARB's emission reduction programs. It will help09:36:009us to determine which projects might be implemented to09:36:0410achieve greenhouse gas emissions reductions while09:36:0711maximizing co-benefits and the best approach in making09:36:0912that happen.

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09:36:1514AIR POLLUTION SPECIALIST WILLIAMS: As part of09:36:1615developing the proposal, we held three public workshops09:36:1916where we provided draft regulatory concepts and language09:36:2117and solicited public input. All of the workshops were09:36:2518broadcast online, helping provide access to the affected09:36:2919stakeholders and the public.

09:36:3020We also met with various stakeholders through09:36:3221multiple site visits, teleconferences, and in-person

09:36:35 22 meetings.

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09:36:37 24 AIR POLLUTION SPECIALIST WILLIAMS: Now I'll 09:36:38 25 summarize the proposed regulation.

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09:36:42 2 AIR POLLUTION SPECIALIST WILLIAMS: The proposed 3 regulation would affect facilities in California with at 09:36:43 09:36:45 least one half million metric tons of carbon dioxide, or 4 09:36:50 5 CO2, equivalent emissions annually based on the 2009 09:36:55 calendar year mandatory greenhouse gas reporting. The 6 09:36:58 total CO2 equivalent emissions include emissions from both 7 09:37:02 biogenic and anthropogenic sources. We expect about 60 8 09:37:05 facilities will meet the applicability threshold and be 9 09:37:08 subject to the proposed regulation. 10

09:37:10 11 The facility types that meet this threshold are 09:37:12 12 among the largest industrial facilities in the state, and 09:37:15 13 the sectors are shown here.

09:37:17 14 The proposed requirements would also apply to 09:37:20 15 transportation fuel refineries and cement plants at an 09:37:24 16 applicability threshold of a quarter million metric tons 09:37:27 17 of CO2 equivalent emissions.

09:37:29 18 The requirements focus strictly on stationary 09:37:31 19 sources and do not include portable equipment or mobile 09:37:36 20 combustion sources.

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09:37:37 22 AIR POLLUTION SPECIALIST WILLIAMS: The proposed 09:37:38 23 regulation has three elements.

09:37:4224The first is an analysis of the facility energy09:37:4425consumption and emission sources to help identify the

09:37:47 1 energy consumers within the facility.

09:37:50 2 The next is an assessment of the energy efficiency improvement opportunities that could result in 09:37:52 3 09:37:56 greenhouse gas and co-pollutant emission reductions. 4 Tn 09:38:00 5 other words, what improvements potentially could be made. 09:38:03 6 Finally, the regulation would require a 09:38:04 comprehensive report of the first two elements to be 7 09:38:07 8 submitted to ARB.

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AIR POLLUTION SPECIALIST WILLIAMS: The first

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09:38:11 11 element is designed to collect information on the facility 09:38:14 12 processes, energy and fuel consumption, and emissions. It 09:38:17 13 requires the facility operator to provide facility process 09:38:21 14 flow diagrams, descriptions of the processes and equipment 09:38:24 15 types used, the types and amounts of energy consumed, and 09:38:29 16 emissions data.

09:38:33 Greenhouse gas emissions data would come from the 17 09:38:35 2009 mandatory greenhouse gas reporting. Criteria and 18 09:38:39 19 toxics emissions data would come from information the 09:38:42 20 source is required to provide to local air districts. 09:38:44 21 The proposed regulation does not create a new 09:38:47 22 facility emissions inventory. Instead, existing data that 09:38:51 23 has already gone through a review and/or validation 09:38:54 24 process will be utilized.

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24 09:38:56 1 AIR POLLUTION SPECIALIST WILLIAMS: The second 09:38:57 2 element is the energy efficiency improvement analysis. 09:39:02 This is the primary focus of the proposed regulation. For 3 09:39:05 this element, facilities would identify all potential 4 09:39:09 opportunities to improve efficiency. It requires each 5 09:39:12 facility operator to provide information on the whole 6 09:39:15 range of projects, including those with relatively low 7 09:39:19 costs that can be implemented quickly, to those requiring 8 09:39:22 large amounts of capital that would take years to 9 09:39:25 implement, or those projects that would likely not be 10 09:39:28 considered as currently cost effective because the payback 11 09:39:33 period would be too long. 12 09:39:35 13 For each project identified, the facility would 09:39:37 assess the impacts associated with implementation, 14 09:39:39 including project costs, potential emission reductions for 15 09:39:42 16 greenhouse gas and co-pollutants, permit requirements, and 09:39:46 other associated impacts. 17 09:39:47 The assessment is intended to provide preliminary 18 09:39:50 19 information at a budgetary level versus a detailed 09:39:54 20 engineering analysis. The assessment can either be 09:39:56 conducted by the facility or by a third-party assessor. 21 09:40:04 22 --000--09:40:04 23 AIR POLLUTION SPECIALIST WILLIAMS: ARB staff who 09:40:05 24 are most familiar with the industrial sector will be 09:40:09 25 assigned to work closely with the facilities throughout

25 1 the assessment process to address implementation questions 09:40:11 09:40:14 2 and concerns as they arise and to streamline compliance 09:40:19 3 with the requirements. The third element occurs once the assessment is 09:40:21 4 09:40:23 5 complete. Each facility would submit an assessment report to ARB by December 15, 2011. A 90-day compliance 09:40:26 6 09:40:31 extension is available for facilities who can demonstrate 7

09:40:35 8 they are unable to meet the required deadline.

09:40:38 9 The assessment report will include the energy 09:40:40 10 consumption and emissions analysis, the comprehensive 09:40:42 11 energy efficiency improvement assessment, and any

09:40:46 12 additional supporting documentation.

09:40:48 13 ARB staff will review submitted reports for 09:40:52 14 completeness and request additional information from the 09:40:55 15 facilities, if necessary.

09:40:5716If staff determines that the assessment report is09:40:5917unacceptable, there are provisions in the regulation for09:41:0318staff to require an independent third-party assessment.

09:41:06 19 Additionally, we plan to select a sampling of the 09:41:08 20 reports for a third-party review. ARB will contract with 09:41:12 21 the Department of Energy certified energy experts for the 09:41:19 22 review.

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09:41:19 24 AIR POLLUTION SPECIALIST WILLIAMS: The proposed 09:41:20 25 regulation includes a requirement to make the facility

26 1 assessment reports available to the public by April 30th, 09:41:23 09:41:26 2 2012. Staff believes it is critical that the information collected be publicly available, particularly to those 09:41:30 3 09:41:33 communities that are located near the facilities. 4 09:41:35 5 It will provide the public the information 09:41:38 they'll need to participate in workshops to discuss the 6 09:41:41 data and possible approaches to achieving emission 7 09:41:44 8 reductions. 09:41:45 9 In developing the proposed regulation, ARB 09:41:47 10 staff's goal was to require information that is preliminary but comprehensive enough to guide future 09:41:52 11 09:41:55 12 decision making. 09:41:56 13 --000--09:41:56 14 AIR POLLUTION SPECIALIST WILLIAMS: After 09:41:56 collection and posting of the assessment reports is 15 09:42:00 16 completed, ARB staff will prepare and provide to the 09:42:04 public a summary report of preliminary findings based on 17 09:42:08 18 the facility assessments reports. 09:42:12 19 We will initiate dialog with stakeholders by 09:42:14 20 conducting public workshops to discuss approaches to 09:42:17 achieving further reductions of greenhouse gas and 21 09:42:19 22 co-pollutant emissions. And these approaches may include 23 voluntary measures, regulations, district requirements, or 09:42:22 09:42:25 24 a combination of actions.

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09:42:32 1 AIR POLLUTION SPECIALIST WILLIAMS: Overall,
09:42:32 2 we've been able to work through most of the concerns that
09:42:35 3 have been raised.

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09:42:35 4 One of the concerns relates to confidentiality. 09:42:37 Some stakeholders have expressed concerns that the data 5 09:42:40 provided may be confidential. As I mentioned, our goal 6 09:42:43 was to require information that would provide sufficient 7 09:42:45 detail about energy efficiency improvement projects, yet 8 09:42:50 not reveal confidential information about the facility. 9 09:42:53 As such, we expect the majority of information received 10 09:42:56 will not be confidential. 11

09:42:58 In addition, we will work closely with the 12 09:43:00 13 facility operators as they develop their reports to 09:43:03 address any confidentiality concerns. Nevertheless, in 14 09:43:06 the event an operator identifies information as 15 09:43:10 16 confidential, we will handle that data in accordance with 09:43:13 state law that governs confidential data submittals. 17

09:43:17 Another concern raised involves the applicability 18 09:43:21 19 threshold that is based on total CO2 equivalent emissions, 09:43:24 20 both biogenic and anthropogenic sources. This results in 09:43:29 about four biomass facilities being subject to the 21 09:43:32 22 proposed regulation. We believe that for this regulation, 09:43:36 23 total CO2 is the appropriate surrogate for triggering the 24 assessment. It will identify large facilities in 09:43:40 09:43:42 25 California for the purpose of exploring opportunities for

28 09:43:47 1 energy efficiency improvements that could result in 09:43:50 2 greenhouse gas emission reductions as well as reduction in 09:43:53 3 criteria air pollutants and toxic air contaminants. 09:43:58 4 --000--09:43:58 5 AIR POLLUTION SPECIALIST WILLIAMS: Next I'll 09:43:59 6 discuss the impacts of the proposal. 09:44:04 --000--7 09:44:04 8 AIR POLLUTION SPECIALIST WILLIAMS: The 09:44:04 9 approximately 60 facilities that we expect to be subject 09:44:07 10 to the proposed regulation are identified here on this 09:44:08 11 map. 09:44:10 12 In 2008, these facilities were responsible for 09:44:12 13 about 70 million metric tons of CO2 equivalent emissions, 09:44:18 14 which is about 45 percent of the total statewide 09:44:21 15 greenhouse gas emissions from the industrial sector. 09:44:25 16 --000--09:44:25 17 AIR POLLUTION SPECIALIST WILLIAMS: Staff 09:44:25 18 estimates the total cost to the affected facilities will 09:44:29 19 be about \$14 million for a 16- to 18-month period. The 09:44:33 20 estimated individual facilities costs will vary, depending 09:44:36 21 on the type and complexity of the facility. 09:44:40 22 Electricity-generating facilities and hydrogen 09:44:42 23 plants are expected to have the lowest costs, while 09:44:46 24 refineries and oil and gas extraction and transmission 09:44:49 25 facilities are expected to have the highest costs.

29 09:44:53 1 CHAIRPERSON NICHOLS: Just to clarify, these are 09:44:55 2 the costs of doing the audits? AIR POLLUTION SPECIALIST WILLIAMS: Correct. 09:44:56 3 09:44:57 4 CHAIRPERSON NICHOLS: Not of any action that 09:44:58 5 might be taken? 09:45:00 6 AIR POLLUTION SPECIALIST WILLIAMS: That's 09:45:00 correct. 7 09:45:03 8 --000--09:45:03 9 AIR POLLUTION SPECIALIST WILLIAMS: Staff 09:45:03 10 believes the benefits of the proposed regulation outweigh 09:45:05 11 the one-time facility costs associated with conducting the 09:45:08 12 assessment. 09:45:10 13 The information gathered from the facility assessments will provide valuable data which ARB, local 09:45:12 14 09:45:16 districts, and the public can use to inform greenhouse 15 09:45:19 16 gas, criteria pollutants, and toxic air contaminant 09:45:23 17 emission control program development and implementation. 09:45:25 18 This will ensure that resources are directed towards the 09:45:28 19 greatest emission reduction opportunities. 09:45:32 20 Facilities also stand to benefit as they will 09:45:35 21 likely discover efficiency improvements that can reduce 09:45:38 22 their costs. A similar program is in place in Australia. 09:45:41 23 The government released a status report this year that 09:45:45 24 indicates facilities found opportunities that would save 09:45:47 25 about 70 percent of their total energy consumption and

09:45:51 1 reduce greenhouse gas emissions. The program facilities 09:45:56 2 are voluntarily implementing about 60 percent of the 09:45:58 projects identified. 3 09:46:00 4 Lastly, as I mentioned earlier, the assessments 09:46:03 5 from staff's proposed regulation will provide the public 09:46:06 with preliminary information to meaningfully participate 6 09:46:09 in the next phase. This is especially important for 7 09:46:12 addressing localized impacts in communities that are 8 09:46:15 already adversely impacted by the air pollution. 9 09:46:19 --000--10 09:46:19 11 AIR POLLUTION SPECIALIST WILLIAMS: There are a 09:46:20 12 few 15-day changes that we are proposing. 09:46:25 13 --000--09:46:25 14 AIR POLLUTION SPECIALIST WILLIAMS: Staff is 09:46:25 proposing several minor changes to provide additional 15 clarity. For example, we are proposing to modify the 09:46:29 16 09:46:31 language to provide clarification and guidance on 17 09:46:33 18 reporting facility emissions, clarify the responsibilities 09:46:36 19 when a third-party assessment is conducted, and a few 09:46:39 20 other miscellaneous changes. 09:46:44 21 --000--09:46:44 22 AIR POLLUTION SPECIALIST WILLIAMS: In 09:46:44 23 conclusion, the proposed regulation will affect about 60 09:46:47 24 of the state's largest industrial facilities and requires 09:46:51 25 them to conduct a one-time assessment to identify

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31 09:46:55 1 opportunities to reduce greenhouse gas, criteria 09:46:59 2 pollutants, and toxic air contaminant emissions. This 3 data will inform potential future actions for reducing 09:47:02 09:47:05 4 emissions and will also benefit industrial facilities 09:47:08 5 looking for ways to improve efficiencies and reduce their 09:47:12 6 costs. 09:47:13 And finally, the regulation provides the public 7 8 with the information they need to participate in the 09:47:15 09:47:18 9 process of determining the best approaches to achieve 09:47:21 10 emission reductions. 09:47:24 11 --000--09:47:24 12 AIR POLLUTION SPECIALIST WILLIAMS: ARB staff 09:47:27 13 recommends the Board approve the regulation with proposed 09:47:31 14 15-day changes. 09:47:32 15 This concludes my presentation at this time. 09:47:34 16 We'll be happy to answer any questions. 09:47:42 17 CHAIRPERSON NICHOLS: Are there questions before 09:47:43 18 we proceed to public comment? 09:47:45 19 BOARD MEMBER RIORDAN: Madam Chair, I just want 09:47:46 20 to speak to the staff for a moment. 09:47:48 21 I was particularly interested with the letter 09:47:49 22 from the Coalition for Sustainable Cement Manufacture and 09:47:56 23 the issue of confidentiality. They're in a very 09:48:03 24 competitive business, as we all know. They're competitive 09:48:08 25 against each other as well as within the United States and

1 worldwide. And I would hope that we could work with them. 09:48:11 09:48:18 2 There's a very fine balance between a trade 09:48:21 secret and the public's right to know of certain things 3 09:48:25 and obviously our right to know. I don't think there's 4 09:48:30 any issue between the industry and confidentiality with 5 6 the staff, because I think we've always done a very good 09:48:35 09:48:39 job of working with businesses to retain confidentiality. 7 But it's that fine line that we have to walk between what 09:48:44 8 09:48:47 is open and giving such information that somebody can 9 09:48:56 derive some economic benefit from that by just simply 10 09:49:00 11 reading it.

09:49:0112So I want to underscore that and my concern for09:49:0513that, because obviously in the area that I serve, those09:49:1114cement plants are located. And so I think it's important09:49:1615for us to work through that. And it's going to take some09:49:2116time and effort on staff's part.

09:49:2417And Madam Chair, I think it's one of those things09:49:2618we need to do and do it right. So if I might put an09:49:3119underline there and say we just need to be very careful09:49:3420about how we do this.

09:49:36 21 CHAIRPERSON NICHOLS: Thank you.

09:49:37 22 Dr. Telles, did you have your hand up?

09:49:40 23 BOARD MEMBER TELLES: Just a question.

09:49:43 24 In the report, it mentions there's minimum cost

09:49:47 25 incurred in administrating this. How much does it cost to

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09:49:51 1 administrate this? What does ARB have to pay to

09:49:55 2 administrate this?

09:50:05 3 TECHNICAL ANALYSIS SECTION MANAGER TARICCO: We 09:50:07 4 expect to cover this with the existing resources with the 09:50:09 5 staff we have.

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09:50:10 6 BOARD MEMBER TELLES: But you have to direct some 09:50:10 7 resources there. There has to be a budget. Just out of 09:50:11 8 curiosity.

09:50:15 9 EMISSIONS ASSESSMENT BRANCH CHIEF DONOHOUE: Dan 09:50:16 10 Donohoue.

09:50:17 11 During the initial phase right now, most of the 09:50:21 12 work associated with that post adoption would be the 09:50:25 13 normal rulemaking process. And that's probably going to 09:50:28 14 require an additional PY to do that.

09:50:32 15 During the initial phases of working with the 09:50:38 16 companies on their development of the thing, we anticipate 09:50:43 there's probably going to be two to three PYs with respect 17 09:50:47 to that phase. And the next phase as we go out with 18 09:50:52 19 workshops on the results on that, there's probably going 09:50:54 20 to be an additional two PY associated with that. 09:50:57 21 I would point out that a number of the resources 09:50:59 22 associated with that, particularly with the people who 09:51:01 23 would be working with the sectors, there are other 09:51:05 24 programs and other expectations of us to bring forward 09:51:11 25 additional emission reductions for criteria and greenhouse

1 gas emission reductions. So actually many of these people 09:51:15 09:51:18 2 are doing that type of work as it is. And this will be 09:51:22 part of that process in providing them that information. 3 09:51:29 4 CHAIRPERSON NICHOLS: I think the interesting 09:51:30 point that your question raises is as we transition from 5 09:51:35 essentially the planning stages for AB 32 into 6 09:51:38 implementation, I know that our Executive Officer and 7 09:51:42 senior management are looking at some of the issues about 8 09:51:47 consolidation and organization of staff. Because the 9 09:51:50 distinction between what is climate change and what is 10 other pollutants gets smaller and smaller, as we realize 09:51:54 11 09:51:58 many of these measures -- hopefully most of them -- are 12 09:52:01 13 measures that really are things that really we're doing 09:52:05 14 for both purposes. So there's quite a bit of thinking 09:52:08 15 going on about how that's going to work in the future. 09:52:12 16 But for the moment we have to kind of try to 09:52:15 17 separately budget everything, especially because of the 09:52:19 requirement ultimately for being able to pay for this 18 09:52:22 19 program through fees. So it's interesting recordkeeping 09:52:27 20 questions that are being thrown at us. 09:52:31 21 Yes, Ms. D'Adamo. 09:52:33 22 BOARD MEMBER D'ADAMO: Just a couple of 09:52:34 23 questions.

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09:52:34 24 I, too, am a little concerned about public 09:52:37 25 disclosure of trade secrets and would like staff to just

35 walk us through a hypothetical situation. In the event a 09:52:41 1 09:52:46 2 company believes that information that ARB is requesting, 09:52:53 they would like to guard that, what would the process be? 3 09:52:57 Would they not provide it and just flag that there's 4 09:53:00 information they are choosing not to submit or would they 5 09:53:03 submit it, flag it to you, and then -- what process would 6 09:53:08 you go through in order to determine whether or not the 7 09:53:11 information would need to be disclosed? 8 09:53:17 9 AIR POLLUTION SPECIALIST WILLIAMS: First of all, 09:53:18 like I mentioned in the presentation, we think we designed 10 the requirements so they don't have to provide the 09:53:20 11 09:53:23 12 confidential information. And we do plan to work with 09:53:24 13 them through that process. So as they're developing their assessments, if they come up with stuff they think is 09:53:28 14 09:53:30 trade secret, we'll discuss it with them. We'll try to 15 09:53:33 16 address it at that point so they're not providing us with 09:53:36 confidential information. We think it should be general 17 09:53:38 they're not having to go to any detail that would be trade 18 09:53:41 19 secret. 09:53:42 20 But if in the end when they submit their report to us they do still feel some of the information is 09:53:44 21

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confidential, they still submit it to us, but they

09:53:54 24 confidential, do not release to the public at that point.

09:53:57 25 There may be additional legal process after that, but

identify it as confidential, and then we treat it as

09:54:00 1 that's the process that happens with them and us. 09:54:05 2 EMISSIONS ASSESSMENT BRANCH CHIEF DONOHOUE: 09:54:05 3 Aron, could you respond to the next step? 09:54:08 4 SENIOR STAFF COUNSEL LIVINGSTON: This is Aron 09:54:08 5 Livingston, staff counsel.

09:54:10 6 The next step would be that whoever -- if there 09:54:13 is a Public Records Act request for that information, then 7 09:54:18 the person who gave us the information would have to 8 09:54:21 justify the need for the confidentiality. And ARB staff 9 09:54:26 10 would then either except that or not. And if we did and 09:54:32 the requester still wants the information, it would go 11 09:54:35 through a court process and an in camera review in court. 12 09:54:39 13 But it seldom gets to that point.

09:54:45 14 STATIONARY SOURCE DIVISION CHIEF COREY: This 09:54:47 15 Richard Corey.

09:54:48 16 Before it gets to the level Aron described, as 09:54:49 17 Lisa, said if we've gotten to the back and forth, some of 09:54:52 18 the issues raised by the cement, one of the things we'd 09:54:55 19 look at is aggregation. Is there an opportunity to do some level of aggregation and still have useful 09:54:58 20 09:55:00 information that's informative, that deals and speaks with 21 09:55:03 22 some of the confidentiality? So we're clearly sensitive 09:55:06 23 to this, this balance Mrs. Riordan pointed out, but think that we can get to a comfortable place working with the 09:55:11 24 09:55:16 25 industry.

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37 09:55:17 1 BOARD MEMBER D'ADAMO: Okay. And then I'm glad 09:55:21 2 to see the random audit, but there's not much information 09:55:23 in what you presented. How many? 3 09:55:29 4 AIR POLLUTION SPECIALIST WILLIAMS: We were 09:55:30 looking at ten percent or one facility from each sector. 5 09:55:32 So some of the larger sectors would have two or three. 6 09:55:35 7 BOARD MEMBER D'ADAMO: Did you consider a 09:55:36 8 periodic update? 09:55:43 9 EMISSIONS ASSESSMENT BRANCH CHIEF DONOHOUE: This 09:55:43 10 is Dan Donohoue. 09:55:44 11 The Scoping Plan specified this as a one-time 09:55:46 12 requirement. So we have not. It's one time based on 2009 09:55:52 13 emissions inventory. And we have not done anything in here for anything other than the one time. 09:55:56 14 09:55:59 15 BOARD MEMBER D'ADAMO: It just seems to me -- I 09:56:00 16 don't know enough about these sectors. But as costs come 09:56:04 down with implementation across California of the energy 17 09:56:11 18 efficiency improvements, it just seems that a periodic 09:56:15 19 update might perhaps give us better news about more 09:56:18 20 cost-effective measures. 09:56:22 EMISSIONS ASSESSMENT BRANCH CHIEF DONOHOUE: One 21 09:56:23 22 thing I think is important to note I think most of these 09:56:27 23 facilities are going to fall under other requirements, including the Cap and Trade Program. So they are going to 09:56:32 24 09:56:32 25 have to be being looking at and continuing to make ongoing

09:56:34 1 efforts there. The refining facilities will comes under 09:56:38 2 RES. Unfortunately, they're not here today. And there is 09:56:44 3 a lot of other requirements that is going to necessitate 09:56:50 4 action. So there is going to be ongoing effort, ongoing 09:56:55 5 improvement.

09:56:57 6 STATIONARY SOURCE DIVISION CHIEF COREY: Again, 09:56:58 7 Richard Corey.

09:56:58 8 The point I would add to that is we would have 09:57:00 the opportunity through the implementation of reporting 9 09:57:05 10 the information that comes out of this program post implementation of cap and trade as well as other climate 09:57:09 11 measures really to report back to the Board in terms of 09:57:11 12 09:57:14 13 here's the experience. Here's what we learned from the 09:57:16 14 effort. Here's the actions that were ultimately 09:57:18 15 implemented. And that may inform whether it would be 09:57:20 16 useful to have subsequent steps.

09:57:2817DEPUTY EXECUTIVE OFFICER FLETCHER: Just to pile09:57:2918on here, the other consideration is these facilities don't09:57:3019change very much from year to year, and we will have all09:57:3220the information we need. As costs come down, we can09:57:3621re-evaluate what those measures look like.

09:57:3922But I think we'll have all of the information09:57:4123that we would need coupled with the mandatory reporting to09:57:4524make that ongoing adjustment

09:57:48 25 CHAIRPERSON NICHOLS: I guess the point is

39 they'll have the information, too. And the key to this 09:57:48 1 09:57:51 2 whole regulation really is that we have reason to 3 believe -- and I think what we'll obviously find out, but 09:57:54 09:57:58 we certainly have I think solid information that there are 4 09:58:03 5 cost-effective measures that could be used to reduce energy consumption that aren't being -- people are not 09:58:06 6 09:58:10 availing themselves of simply because they're not aware of 7 09:58:14 what those opportunities are. So this is a way of 8 09:58:16 bringing that information to the floor. 9 09:58:18 10 It's maybe surprising, given how expensive electricity is, that people aren't doing absolutely 09:58:23 11 09:58:26 everything they can. But they don't know what's available 12 09:58:30 13 or haven't thought about what could be done in a 09:58:33 14 cost-effective way. 09:58:35 15 So I think it's going to be -- we are going to 09:58:37 16 gain a lot of useful information from this, but I hope 09:58:40 17 that this is one of those regulations that really is a 09:58:43 18 win-win for those who are going to be part of this effort 09:58:47 19 as well. 09:58:48 20 Okay, if there are no questions or comments, 09:58:52 21 we'll go to the public. 09:58:53 22 Our first witness is Greg Knapp. 09:59:00 23 Mr. KNAPP: Good morning, Chairman Nichols, 09:59:13 24 members of the Board. 09:59:14 25 My name is Greg Knapp from Lehigh Hanson, a

09:59:16 1 California cement manufacturer and also part of the
09:59:20 2 Coalition of Cement Manufacturers this has been working
09:59:23 3 actively with ARB and staff on many issues of AB 32. We
09:59:29 4 appreciate that interaction we've had. We think it's been
09:59:31 5 very beneficial.

09:59:33 6 Just a couple of comments this morning on this
09:59:35 7 rule. Again, we as an industry have submitted comments
09:59:39 8 and feel that they speak pretty clearly of what our
09:59:42 9 concerns are.

09:59:44 10 Fundamentally, we essentially support the goals
09:59:46 11 of this regulation. Improving energy efficiency is
09:59:51 12 something that our plants and the industry constantly do.
09:59:54 13 It's a key motivator for us certainly.

09:59:5814We do have concerns though with the09:59:5915confidentiality of some of the data that are required. We10:00:0516appreciate the concern expressed by Board Members Riordan10:00:0717and D'Adamo this morning. I could not express our10:00:1118concerns better than Board Member Riordan did just10:00:1419previously.

10:00:16 20 I just would like to punctuate that with the 10:00:19 21 concept or the idea that some of this information that 10:00:21 22 would be required, we, as members, of the industry, are 10:00:26 23 not allowed to discuss or disclose due to federal 10:00:30 24 anti-trust laws. And obviously that is a very sensitive 10:00:33 25 situation, and we pay very close attention to that.

10:00:38 1 As we move through this process with ARB staff,
10:00:40 2 we will identify those types of information and hope that
10:00:43 3 we can certainly come to a way to meet the intent of the
10:00:46 4 law and the regulation, but also protect the sensitive
10:00:52 5 information.

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10:00:53 6 That's all I have.

10:00:54 7 CHAIRPERSON NICHOLS: Dr. Balmes.

10:00:578BOARD MEMBER BALMES: So sir, if I may. I'm just10:00:599trying to get a sense of how -- obviously, you've10:01:0310expressed concern about releasing confidential10:01:0611information. I'm trying to get a sense of the type of10:01:0812information that you're concerned about disclosing.10:01:1413MR. KNAPP: Generally anything that deals with

10:01:16 14 cost and competitiveness is sensitive.

10:01:18 15 CHAIRPERSON NICHOLS: The cement industry has a 10:01:20 16 long history of having faced federal anti-trust lawsuits 10:01:26 17 for practices of many years ago where certainly I think 10:01:29 18 it's fair to say that companies used to get together and 10:01:32 19 talk about what things cost and focused at least under 10:01:39 20 court orders about not sharing that kind of information, 10:01:41 21 because it was seen as being anti-competitive. They have 10:01:45 22 a lot of sensitivity about cost information.

10:01:4923BOARD MEMBER BALMES: Okay. Because I was -- in10:01:5124terms of emissions and chemicals, didn't seem like there10:01:5525was an obvious concern. Now I understand.

10:01:59 1 CHAIRPERSON NICHOLS: I hope that was a fair
10:02:01 2 characterization of the situation. It was ancient history
10:02:04 3 of course.

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10:02:064MR. KNAPP: Definitely before my time. Thanks.10:02:085CHAIRPERSON NICHOLS: Thank you.

10:02:11 6 Diane Bailey of NRDC.

10:02:15 7 MS. BAILEY: Good morning, Chairman Nichols,

10:02:23 8 members of the Board, and staff.

10:02:25 9 My name is Diane Bailey. I'm a senior scientist 10:02:28 10 with the Natural Resources Defense Council. And I'm here 10:02:30 11 today in strong support of this measure with some of the 10:02:33 12 improvements that staff presented.

10:02:35 13 We really appreciate the hard work of staff on 10:02:37 14 this measure. The industrial sector, including its power 10:02:40 use, is responsible for fully one-third of the greenhouse 15 10:02:43 16 gas emissions in California. So we commend ARB for moving 10:02:48 forward with this audit measure to reign in the global 17 10:02:51 18 warming pollution from one of the very largest sectors in 10:02:54 19 the state. This is a really important step forward for 10:02:56 20 the implementation of AB 32.

10:02:5921I want to highlight some of the important aspects10:03:0122of the measure that we strongly support. We support the10:03:0623inclusion of all of the major refineries and cement kilns,10:03:1124as well as the other major industrial facilities, over10:03:1125half a million metric tons of CO2 equivalence. And we

10:03:15 1 believe that the focus on these very largest facilities is
10:03:18 2 appropriate given their contribution to almost half of the
10:03:23 3 emissions from this large sector.

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10:03:26 4 We strongly support the requirement to track and 10:03:28 report criteria and air toxic pollutant emissions 5 10:03:32 alongside of the greenhouse gas emissions and the 6 10:03:34 opportunities to reduce these pollutants. This is 7 10:03:38 paramount in a sector where the largest greenhouse gas 8 10:03:42 emitters also have tremendous impacts on air quality and 9 10:03:45 10 community health throughout the state.

10:03:47 11 We appreciate the discussion that's gone on this 10:03:50 12 morning about CBI, the confidential information, and 10:03:54 13 trying to maintain public access to the data and keep the 10:03:57 14 measure transparent. That's important to us.

10:04:00 15 We strongly recommend and support the 10:04:02 16 improvements to the measure on oversight, namely efforts 10:04:07 17 to institute random re-audits on some of the reports to 10:04:10 18 ARB. And this will go a very long way to assure that the 10:04:15 19 data is accurate.

10:04:1720Finally, I want to echo and state strong support10:04:1921for the intent in the presentation encouraging facilities10:04:2322to act upon the measures identified by their audits. I10:04:2723think it's very important for the facilities to make every10:04:3024effort to move forward with all of the cost-effective10:04:3325measures identified by their audits.

10:04:35 1 So thank you very much for the efforts on this
10:04:36 2 measure. And we look forward to working with staff.
10:04:41 3 CHAIRPERSON NICHOLS: Thank you, Ms. Bailey.
10:04:45 4 Hank de Carbonel.

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10:04:49 5 MR. DE CARBONEL: Good morning, Board and staff. 10:05:02 My name is Hank de Carbonel. I am with the б 10:05:04 concrete pumpers. And I'm here to say that I, no 7 10:05:10 surprise, don't support AGW in any way, shape, or form. I 8 10:05:14 think it's a fraud. It makes Mr. Madoff's efforts look 9 10:05:17 10 piddly by comparison.

10:05:19 I'd like to read a little couple of sentences 11 10:05:21 12 from a fellow named Dr. Ivory. He's a UN senior staffer 10:05:26 13 of scientists and a former university professor. On the subject of AGW, "The claim to so-called greenhouse gases 10:05:31 14 10:05:38 chiefly the "-- "the claim to so-called greenhouse gases, 15 10:05:43 16 chiefly the natural biological products of carbon dioxide 10:05:47 methane, and nitrous oxide are the cause of global warming 17 10:05:50 is only a theory. It is not a factor unequivocal truth. 18 10:05:56 19 Even though the proportions of the theory -- the 10:05:59 proponents of the theory would want to claim the science 20 10:06:02 21 behind their theory is beyond debate and supported by an 10:06:06 22 overwhelming majority of scientists." 10:06:09 23 He also goes on to say, "however, the most

10:06:12 24 damming evidence against greenhouse gas induced global 10:06:15 25 warming is the fact there was a significant global cooling

1 between about 1940 and 1975 -- " there were a lot of 10:06:18 10:06:23 2 troubles in the world during that time, which would be 10:06:27 contrary to the so-called facts -- "associated with the 3 10:06:30 decreasing radiation levels, even though there was a 4 10:06:34 three-fold increase in burning of that fossil fuels and 5 10:06:37 the greenhouse gas emissions during this period." 6 10:06:41 So we're talking about World War II and a number 7 10:06:44 of other disturbances. And somehow it got cooler. 8 10:06:49 9 The bottom line is that there was no unequivocal 10:06:52 scientific evidence that global warming is caused by 10 10:06:56 greenhouse gases. And to continue to pursue this 11 10:07:01 enormously expensive and costly in terms of people's 12 10:07:04 13 livelihood and their very lives at a time when real 10:07:08 scientists have real issues with real things that could be 14 10:07:11 15 done to improve the lives of everybody in California as 10:07:14 16 well as this country and the world to me is just 10:07:17 absolutely obscene. 17 10:07:19 18 Thank you. 10:07:20 19 CHAIRPERSON NICHOLS: Okay. I can't resist not 10:07:26 20 responding to that comment because it was not germane to the issues before us, but I had meant to do this at 10:07:29 21 10:07:33 22 another time. 10:07:35 23 I would encourage not only Mr. de Carbonel but 10:07:38 24 anybody in the audience who's interested in the issue of 10:07:42 25 the science of global warming to read the obituary that

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10:07:47 1 was in the New York Times yesterday for Dr. Steven 10:07:55 2 Schneider, Professor at Stanford, who passed away in 10:07:57 3 London quite unexpectedly. He was one of the leading 10:08:03 4 climate scientists. He was indefatigable in his travels 10:08:09 5 and his efforts.

10:08:10 I encountered him when I was at UCLA and he was б 10:08:14 at Stanford and we served on a panel for the National 7 10:08:18 Academy of Sciences together. But what's interesting 8 10:08:21 about the obituary -- and there are many of them now 9 10:08:25 online that can be pursued -- is that, you know, this was 10 10:08:28 a scientist who was one of the people who could very well 11 10:08:35 have spent his life in comfort just writing books and not 12 10:08:39 13 having to get out and engage in the public. And the fact 10:08:41 that he died while in pursuit of his mission of continuing 14 10:08:45 to educate people about it without any efforts to shy away 15 10:08:51 16 from the uncertainties or the difficulties of science but 10:08:54 still to be out there in the public sector taking these 17 10:08:58 18 issues on was something really admirable.

10:09:0219And so I'd just like to raise that issue for the10:09:0720Board members, because the kind of comment that we just10:09:1221heard is, as I think we all know, it's part of the10:09:1622process. And we have to keep engaging in it. It's just10:09:1923very -- it's tough I think to be involved in making policy10:09:2524in an area where the science continues to evolve.10:09:2925But I think those of us who are here and part of

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47 10:09:32 1 this administration and obligated to administer AB 32 by 10:09:37 2 the oath of office that we take have to continue to be 3 aware of the science and following its development. But 10:09:41 4 we also have an obligation to recognize that the science 10:09:45 10:09:48 5 on this issue has now been resolved by the Legislature and 10:09:53 6 we have a law to carry out. And that's what we're doing. 10:09:56 All right. Are there any other witnesses who 7 10:09:58 wish to appear on this item? That was the list that I 8 10:10:01 9 had. 10:10:03 10 If not, I think we close the record at this point 10:10:07 11 and go back to the staff if there is any additional 10:10:12 12 comments. 10:10:14 13 EXECUTIVE OFFICER GOLDSTENE: No. 10:10:15 14 CHAIRPERSON NICHOLS: Okay. Yes, Ms. Berg. 10:10:19 15 BOARD MEMBER BERG: I just have one clarifying 10:10:21 16 question. 10:10:23 17 I believe I heard when you were talking about the 10:10:25 18 facilities that this is applicable to that there would be 10:10:28 19 a group of people that would be participating at a quarter 10:10:34 20 of a million metric tons. 10:10:38 21 AIR POLLUTION SPECIALIST WILLIAMS: Correct. 10:10:38 22 That's transportation fuel refineries, so petroleum 10:10:41 23 refineries that release transportation fuels into commerce 10:10:43 24 and cement plants. 10:10:45 25 BOARD MEMBER BERG: So all the cement plants are

10:10:48 1 about that level?

10:10:50 2 AIR POLLUTION SPECIALIST WILLIAMS: Yeah.

10:10:51 3 There's correct. They're above that level.

10:10:53 4 BOARD MEMBER BERG: Okay. Thank you.

10:10:55 5 CHAIRPERSON NICHOLS: Other Board comments? 10:10:57 6 Yes, Mayor Loveridge.

10:11:00 7 BOARD MEMBER LOVERIDGE: This is more a question 10:11:01 8 than a comment. But it is somewhat startling given what 10:11:04 9 is before us that only two people -- three people here to 10:11:07 10 testify today.

10:11:10 11 I guess I would ask staff why is it? This is 10:11:13 12 important. I know it's summer. And is this going to come 10:11:23 13 back in a more difficult way to the Board? But it is --10:11:27 14 given the discussion, it is interesting only there's two 10:11:30 15 people here today.

10:11:32 16 EMISSIONS ASSESSMENT BRANCH CHIEF DONOHOUE: 10:11:32 17 We've actually worked on this for two years. I think a 10:11:35 18 lot of credit also goes to the regulated community and to 10:11:39 19 the environmental community. Nobody got quite what they 10:11:41 20 wanted in this regulation. There were long hours done going out and looking at the facilities and understanding 10:11:47 21 10:11:51 22 what's happening there. There was a lot of conversation 10:11:55 23 done on various elements. There were compromises made on 10:12:00 24 all parts. It was a long process.

10:12:02 25 I can show you a couple of the whip marks, but I

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10:12:05 1 won't.

10:12:06 2 So I think it's really a complement to the
10:12:09 3 regulated community, to the environmental community for
10:12:12 4 working with us on it, and to the staff who put this
10:12:17 5 together.

10:12:20 6 BOARD MEMBER LOVERIDGE: Let me just offer my 10:12:22 7 kudos to the three.

10:12:26 8 CHAIRPERSON NICHOLS: Thank you.

10:12:28 9 Yes, Dr. Balmes.

10:12:30 10 BOARD MEMBER BALMES: Well, going back to our 10:12:33 11 discussions prior to adopting the Scoping Plan, we don't 10:12:38 12 have a target for the industrial sector, as I recall. And 10:12:43 13 Ms. Bailey's comments that 30 percent of the greenhouse 10:12:46 14 gas emissions come from the industrial sector I've always 10:12:50 15 wondered why we don't. And maybe somebody from the staff 10:12:53 16 could explain that to me, because we could actually tie 10:12:58 17 results from these audits to a target for the industrial 10:13:03 18 sector in terms of metric tons.

10:13:09 19 STATIONARY SOURCE DIVISION CHIEF COREY: I'll go 10:13:11 20 to part of that.

10:13:1221One, back to the point the very large businesses10:13:1622that are subject to the programs, many under the Cap and10:13:2123Trade Program. So that ultimate reg in terms of10:13:2324continuing to lower emissions for that sector, that's one10:13:2525element. There have been some focused targeted

10:13:29 1 regulations at the sector as well that have gotten to

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10:13:33 2 opportunities for further reductions.

So the way I look at this is this effort is 10:13:36 3 10:13:39 complementary, particularly complementary to the cap and 4 10:13:42 5 trade effort to further discover additional opportunities 10:13:45 6 for reductions. The characterization is that they're not 10:13:48 on the hopeful reductions. They're under the cap and 7 10:13:52 there's focused measures. So they are part of the 8 10:13:55 solution. They've been called out accordingly. 9 10:13:58 10

10:13:58 10 EMISSIONS ASSESSMENT BRANCH CHIEF DONOHOUE: Dan 10:13:58 11 Donohoue.

10:13:58 12 I just wanted to add a thing on that. As we went 10:14:01 13 through the process and we looked at this, we looked at 10:14:04 14 the opportunities. Is there a possibility to establish 10:14:06 15 some requirement those things that were cost effective 10:14:08 16 would immediately be implemented should we have some 10:14:12 17 overall cap?

10:14:13 18 The problem we kept coming up with is we couldn't 10:14:16 19 do that until we got this data. So now we have a process 10:14:20 where we're getting that data and we're going to be able 20 to much better not arbitrarily establish what those things 10:14:22 21 10:14:27 22 should be and make sure their cost effectiveness, but that 10:14:30 23 they're not out there and subject us to the potential for litigation and all that. 10:14:34 24

10:14:36 25 So we've got the first step in the process

51 10:14:38 1 getting this information to figure out exactly what we 10:14:40 2 need to do to follow up on your step. 10:14:45 BOARD MEMBER BALMES: I bet more people would 3 10:14:46 4 show up if this --10:14:51 5 EMISSIONS ASSESSMENT BRANCH CHIEF DONOHOUE: We 10:14:52 6 can get more. 10:14:55 7 CHAIRPERSON NICHOLS: Okay. Could I have a 10:14:57 8 motion to approve this measure? 10:15:00 Dr. Telles. 9 10:15:03 10 BOARD MEMBER TELLES: I just have a little 10:15:05 11 uneasiness. 10:15:06 12 CHAIRPERSON NICHOLS: Oh, that wasn't a motion. 10:15:07 13 All right. Okay. 10:15:09 14 BOARD MEMBER LOVERIDGE: So moved. 10:15:10 15 BOARD MEMBER YEAGER: Second. 10:15:10 16 CHAIRPERSON NICHOLS: We have a motion and a 10:15:11 17 second. Okay. Thank you. Go ahead. 10:15:15 18 BOARD MEMBER TELLES: About this process, it 10:15:17 19 seems to me that some of this is to ask industry to come 10:15:24 20 up with ideas on how to reduce greenhouse gas emissions, 10:15:30 21 which is a good goal. That's what we're here for. 10:15:33 22 But I don't see the benefits of having them jump 10:15:36 23 through hoops and to kind of write a report and give it to 10:15:42 24 you, because it's going to be driven primarily by the 10:15:45 25 other regulations and cap and trade thing which are

10:15:49 1 driving it more so than this.

10:15:52 2 And this seems to me government asking industry 10:15:57 to do things which are really not necessary because 3 10:16:00 they're going to do them anyway because of other things 4 10:16:03 which are coming down the line, especially the cap and 5 trade thing. And I would think that the industry knows 10:16:07 6 10:16:11 their business better than the staff. And there's going 7 10:16:15 to be some processes coming up which will be probably new 8 10:16:19 and be patented and don't even exist yet. I don't think 9 10:16:24 industry is going to be putting those in a report, because 10 10:16:27 it's proprietary information isn't even out there yet. I 11 10:16:31 just have a hard time seeing what the real benefit of this 12 10:16:35 13 is. I don't know if the rest of you on the Board are 10:16:38 14 feeling anything about government is stepping on a little 10:16:42 15 bit too bureaucratic here.

10:16:47 16 DEPUTY EXECUTIVE OFFICER FLETCHER: Well, I'll 10:16:48 17 take a crack at that.

10:16:49 One of the questions you asked earlier was the 18 10:16:52 19 resources it was going to take us to implement this 10:16:55 measure. And I think one of our considerations here is 20 10:16:59 that as part of our work under AB 32, we have staff that 21 10:17:03 22 are dedicated to each of these sectors. So we do know a 10:17:07 23 lot about these sectors. We are in a position to be able 10:17:11 24 to evaluate the plans when they come in. We do track new 10:17:14 25 and innovative technologies as well as the industry. So

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in the past, many of our regulations have been technology 10:17:20 1 10:17:22 2 forcing because we have been on top of the technologies. 10:17:27 But I think that it is a good business practice 3 10:17:29 what they're doing, which is I think one of the reasons 4 10:17:33 why we haven't gotten a lot of comments. These are things 5 the industries ought to be looking at for any number of 10:17:37 6 10:17:40 reasons. 7

10:17:41 8 We do have some responsibility under AB 32 to 10:17:44 9 make a determination of what are the co-benefits of the 10:17:46 10 actions that are taken and to look at the local community 10:17:49 11 impacts. So one of the reasons that we're doing this is 10:17:52 12 to really generate that sort of local data.

10:17:57 13 In the Cap and Trade Program with trading and 10:17:58 14 things of that nature, it's possible that the businesses 10:18:02 15 would find -- that they may find that participating in the 10:18:06 16 market program is somewhat less expensive than taking 10:18:11 17 actions at their own facilities and that we have the 10:18:15 18 potential to forgo any localized criteria and toxic 10:18:19 19 benefits from actions that would be taken on site. 10:18:22 20 So we're hoping through this measure to get 10:18:23 21 enough information to be able to really, as we said 10:18:27 22 before, have the facilities realize that there are 10:18:29 cost-effective reductions that maybe they hadn't thought 23 about in the past as well as to provide us with 10:18:33 24 10:18:36 25 information that would look at the potential criteria

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10:18:40 1 toxic benefits that would have local community impacts, 10:18:44 2 whereas GHG is more of a regional consideration. So 10:18:48 3 that's why we think it's an important measure to take 10:18:51 4 here.

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10:18:52 5 CHAIRPERSON NICHOLS: Dr. Balmes. BOARD MEMBER BALMES: Well, I believe I had a 10:18:53 б 10:18:55 little bit of a role in even having this rule in the 7 10:19:00 Scoping Plan, because I was expressing concern to staff as 8 10:19:05 they were briefing me prior to our adopting the Scoping 9 10:19:09 Plan about co-benefits in terms of reducing toxic 10 10:19:13 pollutants and criteria pollutant emissions. And I felt 11 10:19:16 much more reassured about adopting the Scoping Plan after 12 10:19:20 13 this proposed rule was put into the Scoping Plan. 10:19:26 So Dr. Telles, I agree on the efficiency side of 14 10:19:29 things that maybe we don't have to be telling industry 15 10:19:33 16 what's the best thing for them to be doing. But on the 10:19:38 17 potential co-benefits in terms of toxic and criteria 10:19:40 18 pollutants, I'm not so sure that's the case. 10:19:43 19 CHAIRPERSON NICHOLS: If there is no further 10:19:44 20 questions or comments, I think we can call the question. 10:19:47 21 We do have a motion from Mayor Loveridge and a second Mr.

10:19:52 22 Supervisor Yeager. All in favor, please say aye.

10:19:55 23 (Ayes)

10:19:55 24 CHAIRPERSON NICHOLS: Any opposed?

10:20:00 25 Abstentions?

10:20:00 1 All right. Thank you very much. 10:20:12 2 We have a report on what's going on at the Western Climate Initiative, another AB 32 related item. 10:20:13 3 This is a very interesting project. It's not a new 10:20:19 4 10:20:30 governmental entity. It is an interesting process in 5 which a number of states and Canadian provinces have been 10:20:33 6 10:20:36 sharing information, collaborating on analyses, and trying 7 10:20:38 to develop policy initiatives together, sharing 8 10:20:42 information about how best to reduce greenhouse gas 9 10:20:46 10 emissions. 10:20:47 11 And our lead on this effort has been Michael 10:20:52 12 Gibbs from Cal/EPA and his support here, his wingman is 10:21:02 13 Kevin Kennedy, the head of our Office of Climate Change. 10:21:07 14 And the two of them are going to give us an update on 10:21:10 15 what's going on at the Western Climate Initiative. So 10:21:13 16 welcome. 10:21:20 17 Do you want to introduce this item? 10:21:22 18 EXECUTIVE OFFICER GOLDSTENE: Well, you did such 10:21:23 19 a good job. 10:21:26 20 By working as a region, the WCI hopes to develop 10:21:29 21 and demonstrate effective strategies to achieve greenhouse 10:21:32 22 gas emission reductions. 10:21:34 23 Since 2007, members of ARB staff have 10:21:37 24 participated in this highly valuable regional 10:21:40 25 collaboration alongside staff from the California Public

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1 Utilities Commission, Energy Commission, and the Attorney 10:21:42 10:21:46 2 General's Office. Throughout, the California Environmental 10:21:48 3 10:21:49 4 Protection Agency has led California's input to this 10:21:52 5 effort and coordinated the work of California's 10:21:56 6 representatives. 10:21:58 Michael Gibbs, Deputy Secretary for Climate 7 10:22:00 8 Change at Cal/EPA, is here today to update the Board on 10:22:03 9 efforts of the WCI. He is the lead deputy for Cal/EPA's 10:22:09 10 climate change initiatives and serves currently as 10:22:11 11 co-chair of the WCI. 10:22:13 12 Michael. 10:22:16 13 (Thereupon an overhead presentation was 10:22:16 14 presented as follows.) 10:22:17 15 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: Thank 10:22:17 16 you very much. 10:22:17 17 And good morning, Madam Chairman and members of 10:22:19 18 the Board. 10:22:20 19 It's my pleasure to be here this morning to give 10:22:23 20 you an update on the Western Climate Initiative. I do 10:22:27 21 have a brief presentation, and then I'll be happy to take 10:22:30 22 any questions and comments. 10:22:32 23 It has been my privilege to help represent 10:22:35 24 California to the Western Climate Initiative, or WCI. 10:22:39 25 California is also represented by Dr. Kennedy here from

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1 the Office of Climate Change, and Executive Officer

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10:22:45 2 Goldstene.

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10:22:46 And as Mr. Goldstene has indicated, the ARB staff 3 10:22:51 4 along with staff of other agencies have helped to support 10:22:56 5 the Western Climate Initiative.

10:22:57 Next slide. б

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10:22:59 8 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: The 10:23:01 9 WCI is a collaboration of states and provinces who are 10:23:05 10 jointly developing recommendations for our climate 10:23:09 program. The initiative was started in 2007 with a 11 10:23:13 12 Memorandum of Understanding signed by five Governors and 10:23:16 13 was since expanded to a total of seven states and four 10:23:21 14 Canada provinces.

10:23:22 15 We also have a set of observers who are listed 10:23:25 16 here and who can and in some cases do participate in the 10:23:29 17 discussions and in the work, but it is the partners who 10:23:33 18 actually make the recommendations.

10:23:36 19 As is the case with these types of projects, 10:23:39 20 there have often been comments about the level of 10:23:43 21 participation from various states and provinces. And I 10:23:46 22 just wanted to make sure everyone was aware that all 10:23:48 23 eleven partners in the program in the initiative are 10:23:52 24 actively engaged in the process.

10:23:55 25 There have been some media reports recently about

1 Arizona and their participation. Their Governor's 10:23:58 10:24:02 2 Executive Order directed them to stay in the Western 3 Climate Initiative. And they have done that and they 10:24:05 10:24:08 4 remain actively engaged in the discussions, although they 10:24:11 5 have said they will not be starting a Cap and Trade Program in 2012. I'll speak more about cap and trade in a 10:24:14 6 10:24:18 7 moment. 10:24:19 8 --000--10:24:19 9 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: On 10:24:19 10 the next slide, we just have a map here. The partners are 10:24:23 11 in green and the observers are in blue. 10:24:26 12 And on the left-hand side of the chart here, we 10:24:29 13 see some statistics about the seven states and four 10:24:31 14 partners and the portion of the population and economy 10:24:36 that is covered by these partners in their respective 15 10:24:40 16 countries of the United States and Canada. 10:24:43 17 I think one of the things of note here is that 10:24:44 18 the four Canada provinces, in fact, represent more than 10:24:49 19 three-quarters of the population and economy in country of Canada. As a consequence, represents the overwhelming 10:24:55 20 10:25:00 21 majority of Canada. 10:25:03 22 --000--10:25:03 23 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: On 10:25:03 24 the next slide, I include a quote here, some material from 10:25:07 25 the Global Warming Solutions Act, AB 32, which directs

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10:25:12 1 international and regional work. This section includes 10:25:16 2 direction to -- and I'll quote here from the last part, "to facilitate the development of integrated and 10:25:19 3 10:25:22 4 cost-effective regional, national, and international 10:25:25 5 greenhouse gas reduction programs." So the WCI is one of the activities that is underway in support of this 10:25:29 6 10:25:33 requirement of AB 32. 7

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10:25:37 9 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: The 10:25:38 10 Memorandum of Understanding specifies the scope of the 10:25:41 11 initiative specifically defined in the MOU to identify, 10:25:46 12 evaluate, and implement ways to reduce greenhouse gas 10:25:51 13 emissions collectively and to achieve related co-benefits. The specific outputs or deliverables from the Initiative 10:25:54 14 10:25:58 15 include: Setting a regional emissions reduction goal 10:26:00 16 which has been done; join a multi-state greenhouse gas 10:26:06 registry, which has been completed; and to design a 17 10:26:09 regional multi-sector market-based mechanism, which has 18 10:26:13 19 taken the form of recommendations for a Cap and Trade 10:26:16 20 Program.

10:26:19 21 In addition to those outputs, the Memorandum 10:26:21 22 specifies the group to work jointly to promote clean and 10:26:25 23 renewable energy, increase energy efficiency, advocate for 10:26:29 24 regional and national climate policies, and to identify 10:26:32 25 measures to adapt the climate changes. These activities

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10:26:35 1 are currently ongoing in the WCI.

10:26:38 2 --000--DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: On 10:26:38 3 10:26:39 4 the next slide, I list several of the benefits of 10:26:41 5 collaboration which I think have borne out to be true as we've worked through this project. 10:26:45 6 10:26:47 Developing a regional Cap and Trade Program 7 10:26:50 results in larger total emissions reductions, reduces 8 10:26:54 overall cost to the program, and reduces the risk of 9 10:26:57 leakage of jobs and emissions by creating a larger region. 10 10:27:02 Coordinating on the broader climate program 11 10:27:04 12 creates a larger marketplace for low carbon technologies. 10:27:08 13 And finally, I listed here increased influence on 10:27:10 14 federal and international efforts. I think this is 10:27:12 15 particularly noteworthy because the initiative as a group 10:27:16 16 has shared perspectives with our federal governments in 10:27:20 17 the United States and Canada, including commenting on U.S. 10:27:25 18 EPA proposed regulations, commenting on legislative 10:27:27 19 proposals in Congress, and including briefing Congress on 10:27:30 the hill last year. So when we are able to speak as a 20 group from such a diverse set of states, it enhances our 10:27:34 21

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10:27:38 22 influence on our federal governments.10:27:42 23 A few of the outputs as I've mentioned on the

10:27:44 24 next slide --

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10:27:45 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: 1 The 10:27:46 2 goal is 15 percent reduction below 2005 levels by 2020. 10:27:53 This is the sum of the WCI partners' individual goals 3 which each has adopted the goals economy wide and is to be 10:27:55 4 10:28:00 achieved not solely by cap and trade, but cap and trade 5 10:28:03 with other policies similar to approach that's been taking 6 10:28:06 here in the Scoping Plan. 7 10:28:08 The goal realizes the need for greater long-term 8

10:28:11 reductions. The goal that's been adopted in WCI is 9 10:28:14 approximately the same as included in the California's AB 10 10:28:17 32 2020 emissions target, which is to return to 1990 11 10:28:22 levels. Turns out when you do the math, a 15 percent 12 10:28:24 13 reduction below 2005 levels for the WCI partners is a return to approximately 1990 levels. So they're quite 10:28:29 14 10:28:32 15 consistent.

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10:28:34 17 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: On 10:28:34 18 next slide, I report on the status of the work on the Cap 10:28:39 19 and Trade Program design. Through a very open and 10:28:40 transparent process, the WCI has held public meetings, 20 10:28:44 written white papers, developed recommendations that were 21 10:28:48 22 in draft, and then final recommendations, held stakeholder 10:28:52 meetings and conference calls, all creating a literature 23 24 on the issues and perspectives necessary to develop a set 10:28:57 10:29:00 25 of recommendations for Cap and Trade Program.

10:29:04 1 All this work is informed by the ARB staff
10:29:07 2 deliberations who worked on various aspects, along with
10:29:11 3 the staff of the other agencies that Executive Officer
10:29:15 4 Goldstene mentioned.

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10:29:17 5 And in September of 2008, there was a milestone achieved in WCI when it released a set of policy 10:29:20 6 10:29:25 recommendations for the program outlining the broad 7 10:29:29 objectives and the policy outlines for how the program 8 10:29:32 would come into being. And just this month in about a 9 10:29:35 week or so, the initiative will be releasing a more 10 10:29:39 detailed set of recommendations addressing the topics that 11 10:29:42 12 are listed here in bullet form.

10:29:45 13 These recommendations will form a road map really 10:29:48 14 for the jurisdictions to use in developing our individual 10:29:51 programs. The recommendations from the WCI are then able 15 10:29:59 16 to be used by each of the jurisdictions to look at what 10:30:02 works best for them and to adopt the program individually 17 10:30:08 in each of the jurisdictions. 18

10:30:1019There's five partners currently using their10:30:1220authority to write regulations to move forward with the10:30:1221program. The five partners represent about 70 percent of10:30:2222the emissions in WCI. So although the actual adoption of10:30:2523the program in each of the jurisdictions may vary slightly10:30:2824from the actual details that are put forward by WCI, the10:30:3325expectation is that we'll be able to stay with the core

1 principles of the program and enable the individual 10:30:38 2 programs and the jurisdictions to link together to create 10:30:41 a link to regional programs. 3

10:30:44 4 One of the recent milestones also achieved in WCI 10:30:47 5 on the next slide --

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DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: --10:30:49 7 10:30:49 8 was the release of an updated economic analysis of the 10:30:52 program. The original economic analysis was produced in 9 10:30:56 10 2008. The update incorporates a variety of improvements 10:30:59 and updates that were recommended by stakeholders. And 11 10:31:02 12 the results continue to show that the WCI program can 10:31:06 13 reduce emissions with very modest savings to the economy. 10:31:10 14 The savings were estimated at two-tenths of one percent of 10:31:14 15 GDP. Basically, a wash in terms of what the costs and 10:31:18 16 savings may be.

10:31:21 17 A variety of sensitivity analysis was performed. 10:31:23 18 In some cases, the costs are a little higher. In some 10:31:26 19 cases, the savings were higher. But overall, the impacts 10:31:29 20 are quite modest.

The analysis includes policies that are 10:31:31 21 10:31:33 22 implemented with cap and trade and show they help reduce 10:31:39 23 emissions and limit cost. And overall, the study has 10:31:42 24 results that are similar to the ARB study that was 10:31:44 25 presented to the Board here in March. And a couple of

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1 those conclusions or findings include that complementary 10:31:48 10:31:52 2 policies are important. They help reduce emissions and 10:31:55 3 reduce costs. That compliance flexibility is important. 10:31:59 In particular, the banking of allowances or the ability to 4 10:32:05 5 save allowances and use them in the future, as well as a limited number of offsets used for compliance. 10:32:06 6 10:32:11 --000--7 10:32:11 8 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: There 10:32:12 is a graph that shows the reference case of emissions in 9 10:32:15 10 terms of percent change from 2005. The reductions in emissions that are estimated due to the program, including 10:32:18 11 10:32:22 12 breaking out those reductions in terms of reductions from 10:32:24 13 capped sectors and emissions reductions from offsets. You 10:32:29 14 recall I said that the emissions reduction goal was a 15 10:32:31 15 percent reduction, and you'll see here that we don't quite 10:32:34 16 get there in this graph. On the next page --10:32:37 17 --000--10:32:37 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: -- I 18 10:32:38 19 explained what that is. That is there's extra early 10:32:41 20 compliance in the program which enables allowances to be 10:32:45 21 saved early and then used later. So that gives us faster 10:32:47 22 emission reductions early and a little bit less emissions 10:32:52 23 reductions later. 10:32:53 24 On this slide, the blue line shows what the 10:32:55 25 program cap would actually require in terms of emissions.

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1 And the red line shows what the analysis estimated in 10:32:57 10:33:01 2 terms of how the industries would respond. And you see 10:33:04 3 that early on the emissions are less than what's required. 10:33:07 4 So there's extra reductions over compliance. And then 10:33:11 5 those allowances are saved for later, and there is a 10:33:14 little bit less reduction later. This basic flexibility 6 10:33:18 reduces the cost of complying with the program. 7 10:33:23 8 --000--10:33:23 9 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: The 10:33:24 10 next slide shows a pie chart showing the emissions reductions achieved in each of the sectors. These are the 10:33:27 11 10:33:30 12 emissions reductions relative to the reference case. 10:33:34 13 Some might ask why there's relatively modest 10:33:35 14 emissions reductions in the passenger vehicle section 10:33:39 you'll see here. That's because the vehicle standards, 15 10:33:42 16 the so-called Pavley requirements, are included in the 10:33:45 17 reference case. So those are already included. And these 10:33:47 18 are additional emissions reductions below that, so we 10:33:51 19 don't double count them here. Those are already included in the reference case. 10:33:53 20 10:33:56 21 --000--10:33:56 22 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: On 10:33:56 23 the next slide, I just wanted to emphasize a couple of 10:33:59 24 findings of the analysis and again say that allowance 10:34:02 25 banking and offsets are important flexibility mechanisms

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66 1 along with others in the program. Complementary policies 10:34:05 10:34:08 2 are estimated to be significant and are important. 10:34:12 And finally, that adaptability to changing 3 10:34:14 conditions appears to be important. It isn't always the 4 10:34:17 5 case that everything works out exactly as we expect. And 10:34:20 some conditions can occur where costs are higher than we 6 10:34:23 expect or costs are lower than we expect and having the 7 10:34:26 ability to adapt when those things occur is important. 8 10:34:30 9 --000--10:34:30 10 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: So just wrapping up here the presentation, the ongoing 10:34:31 11 10:34:35 activity is continuing to develop recommendations for the 12 10:34:39 13 details to implement the program, continuing to evaluate 10:34:44 complementary policies, working closely with stakeholders 14 10:34:48 to get review and comments on the activities. 15 10:34:51 16 And I think also importantly are discussions that 10:34:53 17 we've initiated with the other regional initiatives in 10:34:57 North American, the Regional Greenhouse Gas Initiative, 18 10:35:01 19 which is up and running, and the Midwest Greenhouse Gas 10:35:05 20 Reduction Accord. 10:35:06 21 Talking about our common interests and looking at 10:35:08 22 several issues, one of which is defining criteria to 10:35:12 23 assure that offsets that are used across these programs 10:35:15 24 are all of high quality and that could be recognized as 10:35:20 25 such across all the programs. The three groups have

67 1 already issued a paper together on offset quality which we 10:35:23 10:35:28 2 find is gaining some traction and influence in the 10:35:33 3 national debate on how to develop an offset program. 10:35:37 4 Finally, the WCI remains in discussions with our 10:35:42 5 federal governments, both the U.S. EPA and Environment Canada. Both USA and Environment Canada participate in 10:35:45 6 10:35:51 our WCI meetings as well. 7 10:35:53 8 --000--10:35:53 9 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: So on 10:35:54 10 the last slide, just for more information, of course, WCI 10:35:57 11 has a website at which we can see all the WCI partner 10:36:01 12 representative information, all the documents and 10:36:04 13 stakeholders comments and a list serve that's available 10:36:07 14 for announcements. 10:36:10 15 So I'm happy to take any questions or comments at 10:36:11 16 this time. Thank you. 10:36:12 17 CHAIRPERSON NICHOLS: Thank you very much. 10:36:13 18 I just wanted to comment, because this is a 10:36:16 19 somewhat unusual process. I guess I had some experience 10:36:21 20 with it when I was at U.S. EPA and groups of states would get together at the regional level without any specific 10:36:24 21 10:36:27 22 mandate to do so, but with the common agreement that they 10:36:31 23 wanted to work together on a project. 10:36:35 24 WCI doesn't have any legal status. The people 10:36:38 25 who participate are there voluntarily. They are high

68 level political appointees, such as yourself, or very 10:36:41 1 10:36:46 2 senior technical staff in the agencies that are involved. 10:36:50 And clearly, they have continued in this effort over time, 3 10:36:55 because they share a common concern about trying to 4 10:36:59 develop really strong and viable climate protection 5 10:37:05 programs. And they're now at the point where they're 6 10:37:08 putting forth some very specific recommendations and 7 10:37:10 hoping to get some reaction from their government entities 8 10:37:17 and to try to move the process forward. 9 10:37:21 If we are successful at the level of the 10 United States government in producing a climate program, 10:37:25 11 10:37:30 it will be very largely due to the efforts of the states 12 10:37:34 13 like WCI and RGGI and the other groups that have come 10:37:39 together and just done so much of the raw work that has to 14 10:37:44 be done to develop these kinds of complicated programs. 15 10:37:49 16 So I'm just really impressed by what WCI has been 10:37:55 able to produce so far and the level of thinking and the 17 10:37:59 level of agreement that has been hammered out. These are 18 10:38:03 19 not easy things to bring together. And so it's going to 10:38:08 be very interesting to see if it precedes on to the next 20 10:38:11 step, given the fact that, you know, there is elections 21 10:38:14 22 going on, certainly in this country. And there will be 10:38:17 changes at the top of all states, including this one, you 23 know, whether something like this can proceed. But it 10:38:22 24

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10:38:26 25 seems there's a lot of weight behind it. And I think
10:38:32 1 whatever happens, the products that they're putting out
10:38:36 2 are going to get serious attention and have influence
10:38:40 3 going forward.

10:38:42 4 So I just thought it could be interesting for the
10:38:46 5 Board members to get a glimpse of all of this that we're
10:38:48 6 helping to support with our staff.

10:38:53 7 I guess the question of resources always comes up
10:38:55 8 in situations like this. How has this effort been funded?
10:38:59 9 Because there's obviously been a lot of work that's gone
10:39:02 10 into it.

10:39:06 11 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: Sure. 10:39:07 12 Thank you for the question.

10:39:08 13 There's a couple different aspects of the work of 10:39:11 14 WCI that require resources. Most of the actual technical 10:39:14 15 work is done by staff from the different states and 10:39:18 16 provinces.

10:39:21 17 In California, as we mentioned, we've had staff
10:39:23 18 from the Air Resources Board, the Public Utilities
10:39:26 19 Commission, the Energy Commission, and the Attorney
10:39:28 20 General's Office all providing their expertise as part of
10:39:32 21 the work.

10:39:3522And I would say that's the majority of the10:39:3823resources that go into the effort is the technical10:39:4024expertise from the staffs from all the states and10:39:4325provinces, each of which seem to bring their own unique

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10:39:47 capabilities and contributions to that discussion. 1 10:39:52 2 In addition, we have had some consultants and 10:39:55 experts brought on under contract through our project 3 10:39:59 manager who happens to reside at the Western Governors 4 10:40:03 5 Association. So the funding for that comes in part from 10:40:09 voluntary funding that comes from again each of the states 6 10:40:12 and provinces that have put money essentially into that 7 10:40:15 pot to enable to fund those things. But also from some 8 10:40:20 foundations that have funded specific projects and 9 10:40:23 specific things that we've done, including I would say the 10 10:40:26 most significant pot of funding coming to support the 11 10:40:31 12 economic analysis, which was not surprisingly a large 10:40:34 13 technical piece of work that we used a contractor for that 10:40:39 14 had some models that we're able to apply here. And that 10:40:42 15 money came from foundations. 10:40:44 16 So it's been a variety of sources. And we really 10:40:46 17 appreciate all the support that has gone into that and 10:40:50 18 enabled the work to proceed. 10:40:52 19 CHAIRPERSON NICHOLS: Thank you. 10:40:53 20 We do have one person who signed up to speak to us on this item, and that's Derrick Walker from the 10:40:56 21 10:41:00 22 Environmental Defense Fund. 10:41:06 23 Good morning, Derrick. 10:41:08 24 MR. WALKER: Good morning, Chair Nichols and 10:41:09 25 members of the Board.

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I couldn't say it any better than the Chair just 10:41:10 1 10:41:12 2 said about the importance of the WCI. But I wanted to reinforce it as a stakeholder that's been working on WCI 10:41:15 3 10:41:19 issues with Michael, Kevin and others since the very 4 10:41:22 beginning back in 2008. This is a quintessential example 5 of California's leadership magnifying itself across the 10:41:26 6 10:41:29 region and having an impact on the discussions that are 7 10:41:32 occurring nationally here in the U.S. and in Canada, as 8 well as I've been with some of the members of the 10:41:36 9 10:41:38 administration at some of the international meetings the 10 10:41:42 UN meetings, and the WCI is a topic of interest there. 11 10:41:46 I think there's great economies of scale. I 12 10:41:48 13 think there's great opportunities to share knowledge and technology, especially on things like the electricity 10:41:51 14 10:41:53 sector where we share a common transmission system with 15 10:41:57 16 other western states. I think there is great synergies, 10:42:00 and just both the dialogue and some of the commitments 17 10:42:03 18 that have been discussed with the Western Climate 10:42:05 19 Initiative are absolutely critical. 10:42:07 So I would urge the Board to remain attentive and 20 10:42:10 supportive to this important program. And thank you for 21 10:42:13 22 your attention. 10:42:14 23 CHAIRPERSON NICHOLS: Thank you very much. 10:42:17 24 Okay. Any other questions or comments by members 10:42:20 25 of the Board? Yes.

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10:42:31 1 BOARD MEMBER LOVERIDGE: One just very, very 10:42:33 2 quick question. 10:42:35 Slide 12, help me out on what the reference 3 10:42:40 cases -- you mentioned it, but it has no reference. So I 4 10:42:44 was trying to figure out what the --5 10:42:48 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: Sure. 6 10:42:48 Thank you very much, Mayor, for the question. 7 10:42:51 8 The reference case -- actually, I think it's 10:42:53 perhaps shown on the slides before. Backwards. Is that 9 10:42:59 10 the reference case you're referring to? 10:43:02 11 BOARD MEMBER LOVERIDGE: On slide 12, it says 10:43:04 12 "share reductions below reference case." 10:43:08 13 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: On 10:43:08 14 the pie chart. These are all emissions reductions below what is 10:43:09 15 10:43:13 16 called in this economic analysis type of modeling exercise 10:43:16 17 a reference case, which is the case of what would happen 10:43:19 18 without your policies in place. And the reference case in 10:43:22 19 this example includes several policies that are considered 10:43:27 settled, that they're in place. So they're part of the 20 10:43:31 existing environment of policy you might say, and now 21 we're looking at what we might do to go beyond that. 10:43:34 22 10:43:38 23 So in this example, the Pavley regulations are 10:43:40 24 considered part of the reference case. They're already in 10:43:43 25 place, and all their impacts are already considered. So

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10:43:46 1 these changes here that we see, for example, the ten
10:43:49 2 percent reduction in passenger, does not reflect the
10:43:53 3 emissions reductions associated with Pavley because those
10:43:56 4 are already counted. So we would not count them again.
10:44:01 5 CHAIRPERSON NICHOLS: Question, Ms. D'Adamo and
10:44:03 6 then Dr. Telles.

10:44:05 BOARD MEMBER D'ADAMO: If we could go to slide 3. 7 10:44:08 I just want to get a sense of who's left out there. If we 8 10:44:13 were to combine RGGI and WCI, what part of the country? 9 10:44:24 10 Is it just the middle part of the country that's left out of the picture? And what's being done on east and west 10:44:27 11 10:44:30 coast to expand membership so that the entire country is 12 10:44:35 13 covered?

10:44:38 14 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: 10:44:38 15 Right. As I mentioned, there's three initiatives that are 10:44:41 16 active in the United States -- well, in North America 10:44:44 17 really. RGGI, which is the northeast has ten states, and 10:44:47 they cover from Maine down to Maryland, not including 18 10:44:52 19 Pennsylvania. I can list them if you'd like: Connecticut, Delaware, Maine, Maryland, Massachusetts, New 10:44:55 20 10:45:00 21 Jersey, New York, New Hampshire, Rhode Island and Vermont. 10:45:03 22 That covers the northeast.

10:45:0623The midwest has assembled a group to develop a10:45:0824proposed Cap and Trade Program. They're not starting10:45:1225their program right now, but have put out a specific set

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10:45:17 1 of design recommendations. That includes six states and 10:45:19 2 one Canadian province: Iowa, Illinois, Kansas, Michigan, 10:45:26 3 Minnesota, and Wisconsin. And then Manitoba also 10:45:30 4 participates there as well with WCI. So that is really 10:45:32 5 the upper midwest.

10:45:33 6 What's not currently to the best of my knowledge
10:45:37 7 included in a regional initiative of this type is the
10:45:40 8 southeast and moving over into the south.

10:45:47 9 CHAIRPERSON NICHOLS: So at one point there was a 10:45:49 10 group of southeastern governors that were talking about 10:45:53 11 pulling together some form of regional initiative. But I 10:45:56 12 think various distractions have taken away the energy 10:46:00 13 behind that.

10:46:02 14 BOARD MEMBER D'ADAMO: Is there any effort by 10:46:06 15 RGGI or the upper midwest to move into that territory, 10:46:10 16 help organize them somehow?

10:46:13 17 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: Well, 10:46:14 18 I can't speak about all the discussions and RGGI and the 10:46:17 19 midwest.

10:46:18 20 What I can say is in the Western Climate
10:46:21 21 Initiative, which although it's still called western, if
10:46:24 22 we look at the map, we go all the way to eastern Canada.
10:46:26 23 We have continued to reach out and to try to expand our
10:46:30 24 membership, including into the midwest and south. And one
10:46:36 25 of the things we're working on now is as we put out our

10:46:40 1 recommendations on cap and trade, focusing on other 10:46:42 2 elements of our comprehensive program, particularly around 10:46:45 3 the other policies, and trying to expand the partnership 4 around those things, around energy efficiency, renewable 10:46:48 10:46:53 5 energy, and other things that really help in a whole 10:46:58 variety of ways. And we're hopeful we'd be able to expand 6 10:47:02 the partnership. And that may be one avenue for expanding 7 10:47:07 in that direction. 8 BOARD MEMBER D'ADAMO: Thank you. 10:47:10 9 10:47:11 10 CHAIRPERSON NICHOLS: Sorry. Dr. Telles. 10:47:12 11 BOARD MEMBER TELLES: Thank you. 10:47:14 12 I had a few questions about the goals. The WCI 10:47:23 13 represents it looks like two-thirds of -- California representatives about two-thirds of the population in the 10:47:29 14 10:47:33 15 Western Climate Initiative. What is the difference in 10:47:39 16 goals set by each state? 10:47:41 17 When I was reviewing the renewable portfolio 10:47:44 18 standard information, there was quite a bit of difference 10:47:46 19 in renewable portfolio standards in the states which are 10:47:49 20 members. And California has a certain goal. And what is 10:47:55 21 the actual goals by the other states? 10:47:59 22 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: 10:47:59 23 Thanks. 10:48:00 24 I don't actually know them all off the top of my 10:48:02 25 head. Each of the states and provinces has adopted a

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specific goal for the economy-wide emissions reductions by 10:48:05 1 10:48:09 2 2020. Some are more stringent or significant than 10:48:14 3 California has adopted. For example, the state of 10:48:18 Washington has in their statute an emissions goal to 4 10:48:22 5 reduce emissions by 2020 to 10 percent below 1990 levels, 10:48:28 whereas our goal is to return to 1990 levels. So that's 6 10:48:32 more stringent. 7

10:48:34 Similarly, British Columbia's goal I think is the 8 10:48:36 9 most ambitious among the WCI partners, which is a 30 10:48:40 10 percent reduction below 1990 levels. Plus, they have additional goals, such as carbon neutral government 10:48:43 11 10:48:46 12 operations by 2012 I think it is. So there is a range. 10:48:53 13 New Mexico's goal, my recollection, is more 10:48:55 14 similar to ours, 1990 -- return to 1990 emissions by 2020. 10:49:02 15 So there is a range.

10:49:0416When we added them all up to create the regional10:49:0817goal, it turned out to be approximately California's goal10:49:1118in part because actually across all of WCI California is10:49:1619about 40 percent of the total in terms of emissions. So10:49:2020we were influential in that calculation, but nonetheless,10:49:2521some were more and some were less.

10:49:2822BOARD MEMBER TELLES: Another question. Do any10:49:2923of the other states have a Cap and Trade Program that's10:49:3324ready to launch?

10:49:35 25 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: As I

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mentioned, there's five partners, including California, 10:49:35 1 10:49:38 2 that are currently writing regulations to launch the 10:49:41 program in 20120. These five are: Quebec, Ontario, 3 10:49:45 British Columbia, and New Mexico -- New Mexico recently 4 10:49:49 5 published their draft regulations similar to what we've done here in California for their Cap and Trade Program. 10:49:51 6 10:49:55 Those five partners represent about 70 percent of the 7 10:49:59 total emissions in WCI. Again, California being the 8 10:50:02 largest among them. 9

10:50:04 And just to provide some perspective, those 10 emissions of those five partners in a Cap and Trade 10:50:07 11 10:50:11 Program would be about three times the size of RGGI. So 12 10:50:15 13 the emissions that would be covered in those five partners would be about three times the size of the emissions 10:50:18 14 10:50:20 covered in the RGGI program. 15

10:50:22 16 CHAIRPERSON NICHOLS: Michael, I think there is 10:50:23 17 an update on British Columbia in terms of their moving 10:50:26 forward. They did adopt a cap and trade requirement, but 18 10:50:29 19 now they're about to do the regulations; is that correct? 10:50:35 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: 20 10:50:35 That's correct. They actually adopted the Cap and Trade 21 10:50:38 22 Program as policy and are now writing regulations in a 10:50:41 23 manner similar to the process that we're going through 10:50:43 24 here to write regulations and bring them forward for 10:50:47 25 consideration.

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10:50:48 1 CHAIRPERSON NICHOLS: And my understanding is 10:50:49 2 that their cabinet is meeting next week to review the 10:50:54 3 regulations. So they're at least as far as long as we 10:50:57 4 are in the process.

10:50:59 5 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: Ι think they're actually the furthest along. And we 10:50:59 6 10:51:02 actually here in California were the first to publish a 7 10:51:05 draft reg, which was last fall. And now New Mexico has 8 10:51:09 also published their draft regulation, and Ontario and 9 10:51:12 Quebec are working very hard on theirs. We have a side 10 working group who work on the regs from the different 10:51:16 11 10:51:20 partner jurisdictions who have calls to talk about the 12 10:51:23 13 status, the issues they're coming up with, how they're writing things. And this document we'll be releasing next 10:51:27 14 10:51:31 week will represent a lot of that discussion and the 15 10:51:33 16 recommendations that come out of WCI.

10:51:35 BOARD MEMBER TELLES: One final question is for 17 10:51:36 18 the states and provinces that go out first, will there be 10:51:40 19 any banking of credits? I mean, put their economy on the line first as far as trying to get to these goals. Is 10:51:46 20 10:51:49 there any banking that's going to be recognized by the 21 10:51:53 22 WCI?

10:51:5523DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: I'm10:51:5524not exactly sure what you mean by banking in this context.10:52:0125BOARD MEMBER TELLES: They'll reduce their

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1 emissions at a faster rate than some of the other members 10:52:02 10:52:04 2 and probably faster rate than the rest of the 3 United States. And whether it be some kind of credit for 10:52:07 10:52:11 reducing your emissions earlier and the WCI and also, of 4 10:52:19 5 course, there's no national program now. But is there a discussion at some kind of national level to get some 10:52:22 6 10:52:26 credit for reducing their emissions earlier? 7 10:52:30 DEPUTY SECRETARY FOR CLIMATE CHANGE GIBBS: 8 10:52:30 Right. So I think there is a couple aspects to that 9 10:52:33 question. 10

10:52:33 11 One is assuming we move forward in WCI and the 10:52:39 five get started and others join later, what does it mean 12 10:52:42 13 for others to be joining later? And the principle thing 10:52:45 14 is they would still have their same emissions target to 10:52:48 achieve by 2020, so their emissions ramp-down would be 15 10:52:52 16 steeper if they start later. So in a sense, that makes it 10:52:56 more difficult for them by delaying in their start. But 17 10:53:00 we certainly welcome others to start and join with us as 18 10:53:05 19 we go.

10:53:06 20 We're hopeful as those of us who are able to get 10:53:10 21 started first can demonstrate how the program works and 10:53:12 22 that it works well that others will join. I think that's 10:53:17 23 something we want to encourage.

10:53:1724We also have in the United States, of course, the10:53:1925hope I would say and perhaps even expectations that at

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some point there will be a comprehensive federal program 10:53:22 1 10:53:25 2 and part of the discussion has been ensuring that any transition from a state or regional program into the 10:53:30 3 10:53:34 federal program would not disadvantage those who went 4 10:53:37 first, and in fact should advantage those who went first. 5 10:53:40 6 And part of that is the transition of the actual 10:53:43 compliance instruments themselves, so-called emissions 7 10:53:46 allowance and ensuring those who acquired them through the 8 10:53:50 regional and state programs, in fact, continue to be 9 10:53:53 recognized for those allowances and those compliance 10 instruments. So that's been in the federal proposals. 10:53:58 11 10:54:01 Of course, RGGI is up and running and has paid 12 10:54:03 13 very close attention to that element of a federal program and WCI also paid attention to that. 10:54:06 14 10:54:12 15 CHAIRPERSON NICHOLS: There's no action called on 10:54:13 16 here, but hopefully it's been an opportunity for people to 10:54:18 catch up with what's been going on in this very 17 10:54:22 interesting project. And it will be relevant as we move 18 10:54:25 19 forward this year on further discussions. So thank you. 10:54:29 Thanks very much, everybody. We have time on our 20 agenda for Board members to raise issues as well as for 10:54:34 21 10:54:37 22 general public comment. And I know that Supervisor Roberts had a question he wanted to raise. 10:54:42 23 10:54:46 24 BOARD MEMBER ROBERTS: Thank you, Madam Chair. 10:54:47 25 I was wondering if maybe the staff could share

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10:54:49 1 with us just a brief status report of where we are with
10:54:53 2 the diesel truck rules and schedule wise and programmatic
10:55:01 3 wise what is going on there now.

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10:55:03 4 EXECUTIVE OFFICER GOLDSTENE: Thank you, 10:55:04 5 Supervisor Roberts.

10:55:06 6 As you know, we plan to come back to the Board in 10:55:09 September with an update on the truck and off-road rules. 7 10:55:12 And we're finding some challenges with being able to make 8 10:55:14 that date. And I wanted to give Tom Cackette and Lynn 9 10:55:18 Terry an opportunity to give you an update on where you 10 are. Most likely, we're going to move the item to the 10:55:21 11 10:55:24 12 November Board meeting.

10:55:27 13 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: When we 10:55:29 14 discussed the status with you earlier this year, some of 10:55:33 15 the challenges that we were working on was a major update 10:55:37 16 to the emission inventory, because there had been a lot of 10:55:40 17 new information presented both for on-road trucks and 10:55:43 18 off-road trucks.

10:55:4419As you know, we've had the discussion about the10:55:4720sort of health risk of science that would support this.10:55:5221And we're producing a new report on that that we've10:55:5622discussed with you before. Both of those items are10:56:0023looking like they would be publicly available sometime10:56:0424next month. So that's a little too close to the September10:56:0825Board meeting for us. So that's why we need a little

10:56:11 1 extra time.

10:56:12 2 We did go out and have workshops in June and July 10:56:17 3 with all the stakeholders. And one of the messages that 10:56:20 4 came back strongly was they wanted some time after we put 10:56:25 5 these documents or findings out to be able to comment on 10:56:29 6 them before we use that information to inform the final 10:56:34 7 regulations.

10:56:34 8 So we have shared regulatory concepts somewhat 10:56:40 9 more developed than what we shared with you in the last 10:56:43 10 year and early this year, but we do not have yet a actual 10:56:48 11 draft regulation, because it will be to some degree --10:56:52 12 quite a bit of degree informed by the new inventory and 10:56:55 13 the health data.

10:56:57 So when you put the sequence of events together, 14 10:56:59 we'll get this work done probably in the August time 15 10:57:03 16 frame. We'll have some public review time available to 10:57:08 take inputs on the new scientific information and put the 17 10:57:13 18 draft regulations together. It basically means November. 10:57:19 19 BOARD MEMBER RIORDAN: Madam Chair, if I may --10:57:21 20 excuse me.

10:57:22 21 BOARD MEMBER ROBERTS: Go ahead.

10:57:23 22 BOARD MEMBER RIORDAN: I have attended the two 10:57:25 23 workshops in El Monte, and I can tell you there is great 10:57:29 24 deal of interest. The attendance was excellent. People 10:57:32 25 were there. Staff interacted very well with the attendees

10:57:37 1 and heard from them.

10:57:40 2 I think to have the extra month is a wise thing. 10:57:45 It may allow for some more interaction, more workshop 3 10:57:50 opportunities. In a workshop setting, you have people who 4 10:57:55 are very sophisticated who have been at our hearings 5 throughout the whole process. And then you have people 10:57:59 6 10:58:02 who have suddenly realized that yes, this is something 7 10:58:05 that's going to happen. I better get there. So the staff 8 10:58:08 has really had to educate in the process of the meeting 9 10:58:12 and the workshop. And so I think to have an extra month 10 10:58:16 is a wise, wise thing -- or two months. 11 10:58:21 12 CHAIRPERSON NICHOLS: Two months really. 10:58:23 13 So the concern obviously that we need to balance

10:58:27 14 with this is whether the industry is going to be so 10:58:33 15 anxious about what's happening since we've given them an 10:58:36 16 indication there was going to be some relief here, but 10:58:39 17 we're not telling them what it is, that this would put 10:58:42 18 them in an unfair position while we're perfecting the 10:58:46 19 regulation.

10:58:4820I agree that perfection is a goal, but we should10:58:5221really be concerned about what kind of message we're10:58:5622sending to the regulated community. And the staff has10:58:5823assured me that at least at the level of the people that10:59:0124attend the workshops that they would rather have us get it10:59:0525right than the extra two months and that nobody is really

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10:59:09 1 facing any penalties as a result of our taking more time.10:59:13 2 But I think we'd like to have that said for the record if10:59:17 3 at all possible.

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10:59:18 4 Can you add something to that?

10:59:21 5 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: No. 10:59:22 There's exactly right. The overwhelming response I think 6 10:59:26 from the stakeholders was get it right. Let us -- I mean 7 10:59:31 the stakeholders -- look at what we've done and see if we 8 10:59:34 believe you've got it right and then go ahead with the 9 10:59:37 10 regulation.

10:59:37 11 And part of the reason why I think there's not a 10:59:40 12 great concern about the existing reg right now is that we 10:59:43 13 did indicate that even though some deadlines are looming, 10:59:46 14 like for the truck rule January 1 of 2011, that since we 10:59:52 15 had originally proposed we're going to make some changes 10:59:55 16 in March or April, that we would shift those deadlines 10:59:59 administratively -- in other words, would be enforce them 17 11:00:03 18 to reflect the longer time we're taking to resolve the 11:00:06 19 underlying science inventory and things like that. 11:00:08 20 So I think people know that and were committed to 11:00:11 21 do that. So those deadlines aren't really looming as 11:00:16 22 strong as one might think if you just read the reg. 11:00:20 23 CHAIRPERSON NICHOLS: Supervisor. 11:00:22 24 BOARD MEMBER ROBERTS: When do you participate 11:00:24 25 the draft rule will be available for review?

85 11:00:27 1 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: It's a 11:00:27 2 regulation. It's the usual 45 days. So I believe it's 11:00:30 just at the end of September for a November hearing. It's 3 11:00:37 a little bit early because of Thanksgiving. 4 11:00:41 5 BOARD MEMBER ROBERTS: So sometime possibly late 11:00:43 September we'll see something and people will have a 6 11:00:46 chance to review that. 7 11:00:48 8 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: We'll 11:00:48 9 have another workshop on some of the underlying facts 11:00:50 10 again in August. 11:00:54 11 BOARD MEMBER ROBERTS: Okay. 11:00:58 12 CHAIRPERSON NICHOLS: I called on Dr. Balmes. 11:00:59 13 BOARD MEMBER BALMES: It's okay. 11:01:03 14 BOARD MEMBER RIORDAN: Such a nice gentleman. 11:01:05 15 Could you put that on your website and clearly 11:01:09 16 sort of summarize what you just said so that people are 11:01:13 17 really aware? I mean, you may have already done this, but 11:01:16 18 I think that's a wonderful way to get the message out 11:01:19 19 clearly about what to expect if you are a participant in 11:01:25 20 this process. 11:01:26 21 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Yes, we 11:01:27 22 plan to do that as sort of today the Board hears it, 11:01:32 23 tomorrow the world. 11:01:34 24 BOARD MEMBER RIORDAN: Thank you, Dr. Balmes. 11:01:35 25 Now I'll be quiet.

86 11:01:37 1 BOARD MEMBER BALMES: I just wanted to clarify 11:01:39 2 one point. 11:01:39 First of all, I support taking some time to get 3 11:01:43 4 it right. So I have no problem with the delay that you 11:01:47 5 mentioned. 11:01:49 6 And I also support releasing the PM mortality 11:01:55 report. I think I was the one who moved that we redo the 7 11:01:59 report. 8 11:02:01 9 But just to be clear, we're adapting -- we have 11:02:06 10 adapted diesel truck regulations to meet our SIP 11:02:09 11 requirements with regard to PM2.5. The PM mortality 11:02:15 12 document is a supporting document for that effort, and we 11:02:18 13 would be dealing with the truck rule whether we had that 11:02:21 14 report or not. Just to be clear. 11:02:25 15 CHAIRPERSON NICHOLS: Say "yes," don't just nod. EXECUTIVE OFFICER GOLDSTENE: Yes. 11:02:29 16 11:02:30 17 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Yes. 11:02:36 18 CHAIRPERSON NICHOLS: I could see you nodding, 11:02:38 19 but perhaps the audience couldn't. All right. 11:02:43 20 Is that sufficient discussion for the moment 11:02:45 21 then? 11:02:46 22 BOARD MEMBER BERG: I would just like to make one 11:02:48 23 comment. 11:02:49 24 CHAIRPERSON NICHOLS: Ms. Berg. 11:02:50 25 BOARD MEMBER BERG: We are still doing

implementation workshops, and there are other companies 11:02:51 1 11:02:54 2 out there trying to help get the word out. I think it 11:02:58 3 would be really helpful from -- and I did attend a meeting 11:03:02 4 yesterday where there was 150 people at this meeting. And 11:03:09 5 CARB did a great job in giving a presentation. 11:03:14 But I think it would be helpful in our 6 11:03:17 presentations if we were to look at and to say this is 7 11:03:20 8 exactly what you need to do now, whatever, the reporting, 11:03:24 9 we are doing the idling, the things that we are enforcing. 11:03:29 10 And then instead of doing the normal presentation, which 11:03:34 is this is what the rule is, this is what we're looking to 11 11:03:39 12 change because when people look at that, they leave as 11:03:44 13 confused as when they came. 11:03:45 14 I think during this interim spot, as Mrs. Riordan 11:03:50 suggested, we need to be very specific in what the 15 11:03:54 16 regulated community needs to do, what is "on hold" and 11:04:00 17 then what we're going to be addressing then in November. 11:04:05 18 Does that make sense? EXECUTIVE OFFICER GOLDSTENE: Yes. I'm nodding 11:04:07 19 and I will say yes. Excellent idea. We'll try to 11:04:08 20 11:04:13 21 incorporate as much as that --11:04:14 22 CHAIRPERSON NICHOLS: It's nice to see that you 11:04:16 23 respond so quickly. 11:04:18 24 EXECUTIVE OFFICER GOLDSTENE: I want to make sure 11:04:19 25 Tiffany gets it in the record.

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11:04:20 1 We'll try to be as clear as we can even in the 11:04:23 2 announcement which we hope to put out tomorrow or early 11:04:25 3 next week.

11:04:26 4 CHAIRPERSON NICHOLS: I think that's an important 11:04:27 5 suggestion.

11:04:28 6 BOARD MEMBER ROBERTS: Where will the workshop be 11:04:30 7 in August?

11:04:32 8 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: It'll 11:04:32 9 be multiple ones again. I can't remember the exact 11:04:37 10 number. I think it was four. We'll probably be doing 11:04:41 11 something similar, southern, at least northern and 11:04:44 12 possibly some other areas, valley.

11:04:47 13 CHAIRPERSON NICHOLS: Okay. And I hope you'll 11:04:50 14 advise the Board members of the locations of those 11:04:52 15 workshops. I gather several of them have been following 11:04:55 16 them, but I think probably everybody would like to know. 11:04:58 17 So if you could get that information out, that would be 11:05:01 18 great.

11:05:02 19 Okay. If there are no other items that Board 11:05:07 20 members want to put before us, we would go to public 11:05:11 21 comment at this time. We have one person who signed up, 11:05:16 22 Tim Carmichael representing CNGBC.

11:05:2223MR. CARMICHAEL:Good morning, Chairman Nichols,11:05:2224members of the Board.

11:05:22 25 Tim Carmichael with the California Natural Gas

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11:05:25 1 Vehicle Coalition.

11:05:27 2 I just wanted to bring to your attention earlier 11:05:29 3 this week, the Air Board with U.S. EPA hosted a workshop 11:05:32 on heavy-duty diesel trucks at your El Monte facility 4 11:05:36 5 focused on the SCR, selective catalytic reduction systems. 11:05:42 I won't get into the background, but at that workshop, 6 11:05:46 Navistar engine company presented their research on four 7 11:05:48 new diesel engines running with SCR and showed to the 8 11:05:55 audience that the systems do not de-rate, that is perform 9 11:06:01 less than they should, when the SCR system runs out of the 10 11:06:06 11 urea.

11:06:07 12 And, in fact, they also showed that you can put 11:06:10 13 water in the system and continue to run it. And the truck 11:06:14 14 thinks it's running on an emission reduction system and 11:06:17 15 it's just running on water.

11:06:20 16 They tested the emissions and found that the 11:06:21 17 emissions are 10 to 30 times higher when the SCR, the urea 11:06:27 18 runs out.

11:06:2919So this is really serious. It's not an active,11:06:3320if you will, like the defeat device tampering that we saw11:06:3721a decade ago. But it's a passive non-compliance with the11:06:4322federal and State engine standards for 2010 heavy-duty11:06:4723engines.11:06:4924So my request -- my first thing is I want to

11:06:52 25 bring it to your attention, because we think this is

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11:06:54 1 really serious. At that workshop, Coalition for Clean
11:06:57 2 Air, Environment Now, and Navistar made a request of ARB
11:07:01 3 and EPA staff to act on this. And the staff's response
11:07:05 4 were we're not authorized to act on this. This is new
11:07:07 5 information to us.

11:07:08 6 My request to the Board is that you ask staff to 11:07:12 work expeditiously to confirm these results. And if they 7 11:07:18 are, in fact, correct, that you immediately stop funding 8 11:07:22 9 new diesel engines until this is corrected and that you 11:07:26 initiate recall in conjunction with EPA of the -- I think 10 11:07:30 it's 10- to 20,000 of these engines that are already out 11 11:07:33 12 there. This is a big deal.

11:07:37 13 That's it.

11:07:38 14 CHAIRPERSON NICHOLS: Thank you.

11:07:40 15 This item came to my attention first as a result 11:07:43 16 of some litigation where ARB was sued along with U.S. EPA 11:07:50 17 by Navistar --

11:07:52 18 MR. CARMICHAEL: Real quickly on that, the 11:07:54 19 workshop was a result of settling that litigation. In 11:07:59 20 exchange for dropping the litigation, the agencies agreed 11:08:03 21 to hold this workshop to hear out the concerns of one 11:08:08 22 engine manufacturer that's using a different technology 11:08:11 23 saying this is not fair, because you're allowing these 11:08:13 24 engines to operate with this technology, and it's not 11:08:17 25 working.

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11:08:18 1 CHAIRPERSON NICHOLS: Right. 11:08:19 2 So, well, obviously holding a workshop was the 11:08:22 required thing to do, but the information suggests there 3 11:08:26 might be some further action called for. 4 11:08:29 5 Does the staff have any response at this time? 11:08:32 Should I ask you to get back to us? 6 11:08:34 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: Yes, 7 11:08:35 let me know if more background is needed on how we got 8 11:08:38 here. But I've not seen the video yet because of 9 11:08:45 10 technical difficulties. I couldn't make my computer show 11:08:47 it yesterday. 11 11:08:49 But I did talk to my staff about it, and I don't 12

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11:08:51 13 think that the video accurately portrays the performance 11:08:54 14 of these vehicles. There was sort of an implication that 11:09:01 15 one of the trucks was simply not complying with the rules, 11:09:04 16 which have this detection capability to make sure that the 11:09:08 17 urea that makes the SCR systems work is on board and being 11:09:13 18 used by the vehicle.

11:09:14 19 And if that's the case -- I don't know that to be 11:09:17 20 the case -- but we will certainly take enforcement action 11:09:20 21 immediately as soon as we can confirm that.

11:09:23 22 I think the general sense of my staff's review of 11:09:25 23 it is that the video part is a bit selective in what it's 11:09:30 24 showing. And we are in the process right now of looking 11:09:35 25 at it very carefully and trying to figure out.

11:09:37 1 You can imagine that all of the engine
11:09:39 2 manufacturers other than Navistar who all use SCR had the
11:09:45 3 hair up on the back of their neck saying, wait a minute.
11:09:47 4 We don't agree with this. So we want to hear from both
11:09:50 5 sides of the story here.

11:09:53 The context of all this is that when urea 6 11:09:58 first -- SCR with urea first came out, we have a national 7 11:10:06 uniform standard for heavy-duty trucks. We have it on our 8 11:10:09 books, but the standards are the same as the federal 9 11:10:12 government. And how the assurance of urea being on board 10 11:10:16 and being used to make the SCR reduce NOx was an issue of 11 11:10:20 debate. And EPA came out with some guidance. And because 12 11:10:22 13 of the national aspect, we decided to go ahead and follow their guidance. And the Navistar lawsuit occurred because 11:10:25 14 11:10:31 Navistar, the only one that doesn't use SCR, believed the 15 11:10:36 16 guidance was too lax.

11:10:38 So we went through a debate of that. And I think 17 11:10:40 18 the long-term intention was always to tighten it up over 11:10:43 19 time. But the initial certain was, well, will the urea be 11:10:48 available enough places so we needed to have some periods 20 11:10:51 21 of time when if you run out you could perhaps keep 11:10:53 22 operating your vehicle before they found the urea. That's 11:10:57 rapidly being solved, because urea is at more and more 23 11:11:01 24 truck stops. It was our plan anyway to tighten up on this 11:11:05 25 action, but the lawsuit settlement is sort of accelerating

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11:11:08 1 it.

11:11:09 2 That's what the workshop was about, how do we
11:11:11 3 tighten this up a little bit so that there's a minimal
11:11:15 4 amount of time when any one truck would be out of urea but
11:11:18 5 still operating.

11:11:20 The video is much more of an attack on the 6 11:11:23 fundamental effectiveness of SCR, and we remain convinced 7 11:11:29 that that technology is a really good one and being used, 8 11:11:33 like I said, on everybody but Navistar's engines. Used 9 11:11:37 10 throughout Europe for years now. And if there is any 11:11:40 indication that we've misjudged this, we'll certainly get 11 to the bottom of it. But I think it's a matter of a 11:11:44 12 11:11:47 13 transitory tightening up of the rules to make sure that 11:11:51 14 it's non-functional for as few miles as possible.

11:11:55 15 CHAIRPERSON NICHOLS: Well, it's a good week for 11:11:58 16 reminding ourselves about how videos can be selectively 11:12:01 17 edit and misused. But I think the underlying point which 11:12:07 is the apparent need to tighten up the rules is the key 18 11:12:10 19 thing here. And I guess the question is do you have any 11:12:15 20 time schedule in mind for this? I don't want to commit 11:12:19 21 you to anything.

11:12:20 22 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: No. We 11:12:21 23 do, yes. And the settlement agreement essentially -- and 11:12:25 24 we concurred in this. The settlement agreement basically 11:12:29 25 says that the day after we do this workshop -- this was

11:12:32 1 sort of the trigger event -- that any 2011 certifications
11:12:38 2 for heavy-duty diesel trucks will follow the guidance, the
11:12:44 3 new guidance. And so that basically is the tightening up
11:12:47 4 of the rules.

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11:12:48 5 CHAIRPERSON NICHOLS: I see.

11:12:50 CHIEF DEPUTY EXECUTIVE OFFICER CACKETTE: So 6 11:12:50 everything that comes to us for approval from now on will 7 11:12:53 have a much more stringent set of goals, which ultimately 8 11:12:58 9 what it means is the truck when it is detected that 11:13:05 10 there's not urea or false urea like water in the tank has enough operation, enough to get it to another station and 11:13:10 11 11:13:13 12 get it off the road safely -- at that point, the truck 11:13:16 13 won't go faster than five miles an hour. It essentially 11:13:19 14 stops, and they have to put urea in it, and the systems 11:13:23 15 are designed to detect it's urea. We're trying to tighten 11:13:26 16 up on that.

11:13:28 There were examples under the original guidance 17 11:13:30 18 where it could go 500 miles or even some circumstances a 11:13:32 19 thousand miles before this de-rating of the engine would 11:13:35 20 occur that would force the installation of a new tank of 11:13:40 21 urea. And that was clearly too lax, especially given that 11:13:47 22 the urea network is now quite substantial across the 11:13:51 23 country. So you can get it at most truck stops. 11:13:55 24 CHAIRPERSON NICHOLS: Okay. If there no further 11:13:57 25 comments on this item --

11:13:59 MR. CARMICHAEL: Can I just clarify one thing? I 1 11:14:01 2 just want to make sure the Board understood. 11:14:04 I was not here saying SCR doesn't work. I was 3 saying that from this workshop there are concerns raised 11:14:07 4 11:14:10 about systems where the SRC stops working and the vehicle 5 11:14:14 keeps running and the emissions go way up, because the SCR 6 11:14:18 system is not working, as Tom was elaborating on. I just 7 11:14:22 8 want to clarify that distinction. I'm not here saying SCR 11:14:26 9 doesn't work when it's working properly. These systems 11:14:30 10 seem to be allowing the SCR system to stop working and the 11:14:32 11 engine to keep running. That's not okay. 11:14:35 12 CHAIRPERSON NICHOLS: Thank you. 11:14:36 13 I have no other witnesses who signed up for 11:14:37 14 public comment today. So I think it's time to entertain a 11:14:42 15 motion to adjourn. 11:14:43 16 BOARD MEMBER LOVERIDGE: So moved. 11:14:46 17 BOARD MEMBER RIORDAN: So moved. 11:14:47 18 CHAIRPERSON NICHOLS: And seconded. We will be 11:14:50 19 adjourned. 14:04:12 20 (Thereupon the Air Resources Board meeting 14:04:12 21 adjourned at 11:14 a.m.) 2.2 23 24 25

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14:04:12	1	CERTIFICATE OF REPORTER
14:04:12	2	I, TIFFANY C. KRAFT, a Certified Shorthand
14:04:12	3	Reporter of the State of California, and Registered
14:04:12	4	Professional Reporter, do hereby certify:
14:04:12	5	That I am a disinterested person herein; that the
14:04:12	6	foregoing hearing was reported in shorthand by me,
14:04:12	7	Tiffany C. Kraft, a Certified Shorthand Reporter of the
14:04:12	8	State of California, and thereafter transcribed into
14:04:12	9	typewriting.
14:04:12	10	I further certify that I am not of counsel or
14:04:12	11	attorney for any of the parties to said hearing nor in any
14:04:12	12	way interested in the outcome of said hearing.
14:04:12	13	IN WITNESS WHEREOF, I have hereunto set my hand
14:04:12	14	this 4th day of August, 2010.
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14:04:12	22	TIFFANY C. KRAFT, CSR, RPR
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