

MEETING  
STATE OF CALIFORNIA  
AIR RESOURCES BOARD

RIVERSIDE COUNTY ADMINISTRATIVE CENTER  
BOARD OF SUPERVISORS CHAMBERS  
FIRST FLOOR  
4080 LEMON STREET  
RIVERSIDE, CALIFORNIA

FRIDAY, MARCH 23, 2018

8:36 A.M.

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

A P P E A R A N C E S

BOARD MEMBERS:

Ms. Mary Nichols, Chair

Ms. Sandra Berg, Vice Chair

Dr. John Balmes

Mr. Hector De La Torre

Mr. John Eisenhut

Senator Dean Florez

Supervisor John Gioia

Ms. Judy Mitchell

Supervisor Phil Serna

Dr. Alex Sherriffs

Professor Daniel Sperling

Ms. Diane Takvorian

STAFF:

Mr. Richard Corey, Executive Officer

Ms. Edie Chang, Deputy Executive Officer

Mr. Kurt Karperos, Deputy Executive Officer

Ms. Ellen Peter, Chief Counsel

Ms. Veronica Eady, Assistant Executive Officer

Ms. La Ronda Bowen, Ombudsman

Ms. Emily Wimberger, Chief Economist

Ms. Michelle Buffington, Manager, Off-Road Agricultural Strategies and Incentives Section, Mobile Source Control Division(MSCD)

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

STAFF:

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

Ms. Shannon Dilley, Attorney, Legal Office

Mr. Mike Fitzgibbon, Branch Chief, Atmospheric Science and  
Climate Strategies Branch, RD

Mr. Glenn Gallagher, Staff Air Pollution Specialist, RD

Mr. Pamela Gupta, Manager, Greenhouse Gas Reduction  
Strategy Section, RD

Ms. Deborah Kerns, Senior Attorney, Legal Office

Mr. Jack Kitowski, Division Chief, MSCD

Ms. Lucina Negrete, Branch Chief, Innovative Strategies  
Branch, MSCD

Ms. Erin Uchida, Air Resources Engineer, Innovative  
Strategies Branch, MSCD

ALSO PRESENT:

Ms. Lori Apodaca, California Citrus Mutual

Mr. Joseph Ayerza, Fresno Equipment Company

Mr. Todd Ayerza, Campos Brothers Farms

Mr. Louie Brown, Kahn, Soares and Conway

Mr. Paul Buttner, California Rice Commission

Ms. Colleen Cecil, Butte County Farm Bureau

Ms. Noelle Creamers, California Farm Bureau Federation

Mr. Manuel Cunha, Nisei Farmers League

Mr. Matt Dessert, Imperial County Air Pollution Control  
District

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

ALSO PRESENT:

Mr. Harvey Eder, Public Solar Power Coalition

Ms. Genevieve Gale, CVAQ, Coalition for Clean Air

Mr. Kevin Hamilton, Central California Asthma  
Collaborative

Mr. Mary Humboldt

Ms. Devon Jones, Mendocino County Farm Bureau

Mr. Tom Jordan, San Joaquin Valley Air Pollution Control  
District

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

Mr. Jaime Lemus, Sacramento Metropolitan Air Quality  
District

Mr. Kevin Messner, Association of Home Appliance  
Manufacturers

Ms. Brea Mohammed, Imperial County Farm Bureau

Mr. Darrin Monteiro, California Dairies, Incorporated

Mr. Tom Morris, Honeywell

Ms. Kay Pricola, Coalition of Labor, Agriculture and  
Business Imperial County, Imperial Valley Vegetable  
Growers

Mr. Dan Pronsolino, Cortina Hulling and Shelling, Western  
Ag Processors Association

Mr. Mikhael Skvarla, UTC-Carrier

Mr. Joseph Tona, Tehama County Air Pollution Control  
District

Mr. James Wagoner, Butte County Air Quality Management  
Division

Ms. Helen Walter-Terrinoni, Chemours

I N D E X

	PAGE
Call to Order	1
Pledge of Allegiance	1
Roll Call	1
Item 18-2-8	
Chair Nichols	2
Executive Officer Corey	4
Staff Presentation	5
Mr. Lemus	18
Mr. Wagoner	19
Mr. Jordan	21
Mr. Dessert	22
Mr. Isom	23
Mr. Pronsolino	25
Mr. Tona	27
Mr. Monteiro	28
Ms. Creamers	28
Ms. Cecil	29
Mr. Buttner	31
Ms. Pricola	32
Ms. Mohamed	32
Ms. Jones	33
Mr. Eder	35
Ms. Gale	36
Mr. Hamilton	38
Mr. Brown	39
Ms. Cunha	40
Mr. Todd Ayerza	43
Mr. Joseph Ayerza	43
Ms. Lori Apodaca	44
Board Discussion and Q&A	47
Motion	52
Vote	52
Item 18-2-9	
Chair Nichols	53
Executive Officer Corey	54
Staff Presentation	55
Mr. Messner	64
Mr. Eder	68
Mr. Hamilton	69
Mr. Morris	73
Ms. Walter-Terrinoni	75
Mr. Skvarla	77

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

	PAGE
Item 18-2-9(continued)	
Board Discussion and Q&A	78
Motion	80
Vote	80
Public Comment	81
Adjournment	86
Reporter's Certificate	87

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

2 CHAIR NICHOLS: Good morning, everybody. Welcome  
3 to the March 23rd, 2018 public meeting of the California  
4 Air Resources Board. We will now come to order. And  
5 let's begin with the Pledge of Allegiance.

6 (Thereupon the Pledge of Allegiance was  
7 recited in unison.)

8 CHAIR NICHOLS: The clerk will please call the  
9 roll.

10 BOARD CLERK McREYNOLDS: Dr. Balmes?

11 BOARD MEMBER BALMES: Here.

12 BOARD CLERK McREYNOLDS: Mr. De La Torre?  
13 Mr. Eisenhut?

14 BOARD MEMBER EISENHUT: Here.

15 BOARD CLERK McREYNOLDS: Senator Florez?  
16 Assembly Member Garcia?  
17 Supervisor Gioia?

18 BOARD MEMBER GIOIA: Here.

19 BOARD CLERK McREYNOLDS: Senator Lara?  
20 Ms. Mitchell?

21 Mrs. Riordan?

22 Supervisor Roberts?

23 Supervisor Serna?

24 BOARD MEMBER SERNA: Here.

25 BOARD CLERK McREYNOLDS: Dr. Sherriffs?

1 BOARD MEMBER SHERRIFFS: Here.

2 BOARD CLERK McREYNOLDS: Professor Sperling?

3 Ms. Takvorian?

4 BOARD MEMBER TAKVORIAN: Here.

5 BOARD CLERK McREYNOLDS: Vice Chair Berg?

6 VICE CHAIR BERG: Here.

7 BOARD CLERK McREYNOLDS: Chair Nichols?

8 CHAIR NICHOLS: Here.

9 BOARD CLERK McREYNOLDS: Madam Chair, we have a  
10 quorum.

11 CHAIR NICHOLS: Thank you. Just a reminder, if  
12 there's anybody who's not familiar with the process, that  
13 we ask you to fill out a request to speak form if you plan  
14 to testify, and submit it to the clerk if at all possible  
15 before the start of the item that you're wanting to speak  
16 about. I also need to point out the emergency exits at  
17 the rear of the room. In the event of a fire alarm,  
18 you're we are all required to go out through those exits  
19 and out of the building and not to return until we get the  
20 all-clear signal. I think that's it for important  
21 announcements here.

22 I'd like to begin today's meeting, second part of  
23 our two-day meeting, with the item on the Funding of  
24 Agricultural Replacement Measures for Emissions  
25 Reductions, or the so-called FARMER Program guidelines.



1 That was a really good acronym whoever came up with that  
2 one.

3 Emissions from agricultural equipment are a  
4 significant source of air pollution especially in the San  
5 Joaquin Valley. And reducing these emissions is necessary  
6 to meet federal ozone and particular matter air quality  
7 standards.

8 And although increasingly stringent new engine  
9 standards will reduce emissions, most agricultural  
10 equipment is operated for decades due to the durability of  
11 equipment, and the relatively low cost to maintain. And  
12 because of the volatility of the agricultural sector,  
13 businesses are often reluctant to purchase new equipment,  
14 unless it's absolutely necessary.

15 Unpredictable weather, varying commodity prices,  
16 farm size and other factors impact a farmer's ability to  
17 purchase new equipment as well. Thus, the natural  
18 turnover is not sufficient to meet California's clean air  
19 needs.

20 The agricultural industry, particularly in the  
21 San Joaquin Valley, has made significant private  
22 investments in an effort to turnover their equipment. But  
23 to complement these efforts State incentives are needed  
24 for purchasing the cleanest available vehicles and  
25 equipment like those that are in the proposed -- that are

1 proposed in the FARMER Program. And these emissions  
2 reductions, as I said before, are really necessary, if  
3 we're going to meet health standards in the valley. So  
4 we're hearing the guidelines today.

5 Mr. Corey, will you please introduce this item?

6 EXECUTIVE OFFICER COREY: Yes. Thanks, Chair.

7 Incentives have been critical for turning over  
8 legacy vehicles and equipment used in the agriculture.  
9 The agricultural industry and our district partners have  
10 been extremely successful with leveraging private  
11 investments to match public funds resulting in the  
12 replacement of agricultural vehicles and equipment, and  
13 which set the foundation for the FARMER Program.

14 Funding for the FARMER Program consists of 85  
15 million from the Greenhouse Gas Reduction Fund, 15 million  
16 from the Air Quality Improvement Fund, and 35 million from  
17 the Alternative and Renewable Fuel and Vehicle Technology  
18 Fund. The legislature directed the use of the money from  
19 these three funds to reduce agricultural sector emissions  
20 by providing grants rebates, and other financial  
21 incentives for agricultural harvesting equipment,  
22 heavy-duty trucks, agricultural pump engines, tractors,  
23 and other equipment used in agricultural operations.

24 The overarching implementation priority for  
25 fiscal year 2017-18 is directing agricultural investments

1 to support deployment of advanced technologies and cleaner  
2 diesel technologies needed to meet California's State  
3 Implementation Plan and climate goals. The proposed  
4 guidelines detailed CARB's plan for expending funds to  
5 reduce criteria, toxic, and greenhouse gas emissions from  
6 the agricultural sector.

7 The guidelines describe the proposed funding  
8 allocations for air districts, eligible project categories  
9 and criteria, program implementation details, and the  
10 justification for these investments.

11 I'll now ask Erin Uchida of the Mobile Source  
12 Control Division to begin the staff presentation.

13 Erin.

14 (Thereupon an overhead presentation was  
15 presented as follows.)

16 AIR RESOURCES ENGINEER UCHIDA: Good morning.

17 Today, I will be presenting our recommendations  
18 for the FARMER Program, which stands for Funding  
19 Agricultural Replacement Measures for Emission Reductions.

20 --o0o--

21 AIR RESOURCES ENGINEER UCHIDA: First, I'd like  
22 to take a moment to set the stage. As you know, CARB has  
23 a suite incentives that focus on two general types of  
24 projects. Projects that are designed to encourage the  
25 turnover of legacy vehicles and equipment to the cleanest

1 available technologies, and projects that advance  
2 technologies that propel us to a zero-emission future.

3 Today, we are going to focus on a new program  
4 designed to primarily incentivize fleet turnover in the  
5 agricultural sector, the FARMER Program. This program  
6 will provide incentives to turnover a variety of  
7 agricultural engines, while advancing zero-emission  
8 technologies where feasible.

9 For example, this is a great opportunity to fund  
10 electric agricultural utility terrain vehicles or, ag  
11 UTVs, which is an important entry point for zero-emission  
12 vehicles in the agricultural sector. The projects funded  
13 under this program will provide criteria, toxics, and  
14 greenhouse gas emission reductions.

15 --o0o--

16 AIR RESOURCES ENGINEER UCHIDA: Agriculture is a  
17 vibrant and critical contributor to California's economy,  
18 and it also has impacts on air quality. These pie charts  
19 show current emissions from farm equipment account for  
20 approximately eight percent of NOx emissions from mobile  
21 sources statewide. This is significant, but in the San  
22 Joaquin Valley, this impact is even greater, since  
23 agriculture is a large part of the economy.

24 There, in the San Joaquin valley, farm equipment  
25 accounts for approximately 22 percent of the region's NOx

1 emissions from mobile sources, which is almost three times  
2 as much as what's seen statewide.

3 --o0o--

4 AIR RESOURCES ENGINEER UCHIDA: Similar to NOx,  
5 PM2.5 emissions from farm equipment account for  
6 approximately eight percent of the State's PM2.5 emissions  
7 from mobile sources. Whereas, in the valley, farm  
8 equipment accounts for over 27 percent of the emissions.  
9 These pollutants contribute to poor regional air quality,  
10 particularly in the San Joaquin Valley. And therefore,  
11 addressing these emissions is an important part of our  
12 clean air strategy.

13 --o0o--

14 AIR RESOURCES ENGINEER UCHIDA: The agricultural  
15 industry has, and will continue to play, a critical role  
16 in getting the emission reductions necessary to meet State  
17 and federal air quality and climate change goals.  
18 Addressing criteria pollutant and toxic air contaminant  
19 emissions from agricultural sources, reduce near sources  
20 exposure risk both for agricultural workers and residents  
21 in nearby communities. Agricultural incentives have been  
22 extremely successful in achieving these emission  
23 reductions.

24 The California Air Resources Board, along with  
25 the districts and agricultural stakeholders have

1 recognized the value of investing in cleaner engines, and  
2 have directed funds towards these critical projects for  
3 over 20 years.

4 --o0o--

5 AIR RESOURCES ENGINEER UCHIDA: The agricultural  
6 industry has made significant private investments to match  
7 public incentives in turning over old jalopy vehicles and  
8 equipment.

9 Looking solely at funding through the Carl Moyer  
10 Program and the Natural Resources Conservation Service, or  
11 NRCS, approximately \$1 billion has been invested in ag  
12 engines over the last 20 years. Half of that came from  
13 private industry. Together, these investments have helped  
14 turn over more than 14,000 ag engines in the state.

15 --o0o--

16 AIR RESOURCES ENGINEER UCHIDA: In the San  
17 Joaquin Valley alone, over \$500 million has been invested  
18 through the Carl Moyer Program and NRCS to reduce  
19 emissions. However, when you include local funds and  
20 additional programs, the San Joaquin valley and its ag  
21 stakeholders have invested over \$1 billion to research and  
22 reduce ag emissions in the valley.

23 As you know, the San Joaquin Valley is in extreme  
24 nonattainment. Because of this, the ag industry was given  
25 an emission reduction target to meet through incentives as

1 part of the regional SIP. They stepped up and sped up the  
2 turnover of their equipment before required, matching  
3 public investments dollar for dollar and exceeding the  
4 valley's existing SIP commitment for emission reductions  
5 from ag.

6 --o0o--

7 AIR RESOURCES ENGINEER UCHIDA: Continued  
8 incentives are critical, but it's also critical that we  
9 continue to innovate with our incentives, especially to  
10 encourage participation from underserved farmers. One  
11 example of this is the Ag Trade-Up Project. Developed  
12 with the ag industry and the San Joaquin Valley Air  
13 Pollution Control District, the Ag Trade-Up Project  
14 involves a two-step transaction and is intended for  
15 growers who may not have -- who may not have been able to  
16 access incentives in the past.

17 Traditional ag equipment replacement projects and  
18 new innovative projects such as this provide crucial  
19 emission reductions from agriculture. However, to meet  
20 air quality standards and California's climate change  
21 goals, a continuing transition to the cleanest available  
22 technologies is necessary. And the FARMER Program is a  
23 great opportunity to continue the agricultural sector's  
24 emissions -- transition to the cleanest available  
25 technologies.

1                   --o0o--

2                   AIR RESOURCES ENGINEER UCHIDA: Next, I'd like to  
3 cover the funding goals of the FARMER Program.

4                   --o0o--

5                   AIR RESOURCES ENGINEER UCHIDA: Recognizing the  
6 agricultural industry's work and the past success of  
7 agricultural incentives, as well as the need for  
8 additional progress, the legislature allocated \$135  
9 million to the California Air Resources Board.

10                   The funding came through AB 134 and AB 109 to  
11 reduce emissions from agricultural engines. The funding  
12 comes from three separate sources: The Air Quality  
13 Improvement Fund; the Alternative and Renewable Fuel and  
14 Vehicle Technology Fund; and the Greenhouse Gas Reduction  
15 Fund. Each of these funding sources has its own statutory  
16 requirements. To create this new program, we are drawing  
17 from all three sets of requirements, which we will talk  
18 about in A moment.

19                   In the budget bills, the legislature directed  
20 CARB to reduce agricultural sector emissions by providing  
21 grants, rebates, and other financial incentives for the  
22 category shown on this slide.

23                   --o0o--

24                   AIR RESOURCES ENGINEER UCHIDA: As I just  
25 mentioned, the three sources of funding each have separate



1 but related goals and requirements. For example, the Air  
2 Quality Improvement Fund rec -- prioritizes criteria  
3 pollutant and toxics emission reductions, whereas, the  
4 Greenhouse Gas Reduction Fund prioritizes facilitating and  
5 achieving greenhouse gas emission reductions. Therefore,  
6 staff proposes to include project types that will reduce  
7 all of these emissions.

8           The Greenhouse Gas Reduction Fund also has AB  
9 1550 requirements, which sets the investment targets for  
10 projects within and benefiting low income -- or  
11 disadvantaged and low-income communities. For the FARMER  
12 Program, staff is applying these investment targets  
13 program wide? The targets are a minimum of 50 percent of  
14 funds for projects located within and benefiting  
15 disadvantaged communities. And five percent of funds for  
16 projects within and benefiting low-income communities.

17           The three funding sources each have various  
18 reporting requirements, and staff will combine these  
19 requirements to streamline reporting while maintaining  
20 verifiable emission reductions. The legislature directed  
21 CARB to provide incentives for agricultural vehicles and  
22 equipment.

23           Therefore, staff is proposing to focus funding on  
24 regions of the State with large numbers of agricultural  
25 equipment. This willow districts more ag equipment to

1 have the much needed ability to turnover old ag engines.  
2 FARMER Program funds must be expended by June 30th of  
3 2021. CARB staff will be closely monitoring to ensure  
4 that funds are spent quickly and efficiently.

5 --o0o--

6 AIR RESOURCES ENGINEER UCHIDA: To ensure that  
7 the program goals and requirements are met, next I'd like  
8 to discuss program administration and oversight.

9 For the FARMER Program, staff recommends  
10 allocating funds to local air districts to administer.  
11 Under this model, CARB's duties and responsibilities  
12 include distributing funds to local air districts,  
13 developing criteria for eligible projects, providing  
14 district support, and conducting program reviews and  
15 audits.

16 CARB's responsibilities also include  
17 incorporating safeguards in district grant agreements to  
18 ensure funds are spent within the allotted timeframe,  
19 including moving funding between districts as needed.

20 Air districts would be expected to conduct  
21 outreach, implement projects, and comply with all  
22 administrative requirements.

23 --o0o--

24 AIR RESOURCES ENGINEER UCHIDA: Staff's proposed  
25 distribution is based on legislative direction and public

1 feedback. For district funding allocations, staff  
2 proposes to allocate 80 percent of FARMER Program funding  
3 to the San Joaquin Valley Air Pollution Control District.  
4 This is due to the district's high agricultural activity,  
5 extreme nonattainment with air quality standards, and  
6 significant portion of farmlands that are designated as  
7 disadvantaged communities in CalEnviroScreen 3.0.

8 For the remaining 20 percent of FARMER Program  
9 funding, staff is proposing a formula to distribute the  
10 funds among local air districts. To help ensure the funds  
11 are distributed equitably among the districts, the formula  
12 distributes the remaining funds on two factors. The first  
13 factor is each district's contribution to statewide  
14 emissions from farm equipment to address near-source  
15 exposure.

16 The second factor is each district's air quality  
17 and attainment status with national ambient air quality  
18 standards to address regional air quality. This results  
19 in most districts receiving between 600,000 and just over  
20 \$2 million. For districts with less than one percent of  
21 the statewide emissions from farm equipment, staff is  
22 proposing to combine their allocations into a shared pool.

23 This shared pool with five and a half million  
24 dollars would be administered by one air district or the  
25 California Air Pollution Control Officers Association.

1           During the public process, much of the  
2 conversation focused on the funding distribution. The  
3 original distribution formula used district people  
4 populations as an overlay. However, in almost every  
5 workshop, we received feedback that the agricultural  
6 funding distribution should be based on ag equipment  
7 emissions.

8           Taking these comments under consideration, we  
9 revised the formula to focus primarily on ag equipment  
10 emissions, but also incorporate each district's air  
11 quality and attainment status. We believe our revised  
12 formula strikes a balance between legislative direction,  
13 public feedback, and regional air quality concerns.

14                           --o0o--

15           AIR RESOURCES ENGINEER UCHIDA: Next, I would  
16 like to discuss staff's recommendations for eligible  
17 project categories.

18                           --o0o--

19           AIR RESOURCES ENGINEER UCHIDA: To ensure that  
20 funds are spent quickly and efficiently in the first year,  
21 we are recom -- we recommend directing investments  
22 primarily to agricultural projects that have been  
23 successfully implemented in other incentive programs, such  
24 as the Carl Moyer Program and Air Quality Improvement  
25 Program.

1           We are looking for a balance of between projects  
2 that get the greatest emission reductions and projects  
3 that will assist small growers who may be unable to  
4 purchase new vehicles and equipment even with assistance  
5 from incentives.

6           Staff proposes including the following project  
7 categories: on-road heavy-duty trucks used in agricultural  
8 operations; and off-road mobile diesel agricultural  
9 equipment, which includes both track -- traditional  
10 tractor replacements and the Ag Trade-Up Project in the  
11 San Joaquin Valley. The proposed project categories also  
12 include off-road mobile large-spark ignition equipment  
13 used in agriculture; agricultural irrigation pump engines;  
14 and electric ag UTVs. To ensure emission reductions are  
15 permanent, projects require the old vehicle equipment or  
16 engine to be scrapped.

17                           --o0o--

18           AIR RESOURCES ENGINEER UCHIDA: In addition to  
19 the project categories just described, staff recommends  
20 that the Board grant CARB's Executive Officer authority to  
21 approve additional categories or modify existing project  
22 categories as needed.

23           For instance, during the workshops, staff  
24 received comments to modify criteria for on-road  
25 heavy-duty trucks, which are not currently receiving much

1 incentive funding in other programs, and can be expensive  
2 to replace. In response to stakeholder requests, we are  
3 committed to continue working together to develop or  
4 modify the on-road truck category to provide a truck  
5 incentive tailored to agricultural businesses.

6 Providing CARB's Executive Officer the ability to  
7 approve or modify project categories as needed would  
8 unable us to respond to new information while providing a  
9 mechanism to ensure funds are spent expeditiously.

10 --o0o--

11 AIR RESOURCES ENGINEER UCHIDA: Upon Board  
12 approval of these guidelines, our next step would be to  
13 enter into grant agreements with districts this spring and  
14 summer. Under this timeline, staff anticipates that funds  
15 will be available to farmers and agricultural businesses  
16 this summer through their local air districts. Staff will  
17 also continue working with interested stakeholders to  
18 modify or expand the project categories, such as the  
19 on-road truck category just discussed, through a public  
20 process then seek EO approval.

21 The FARMER Program provides a fantastic  
22 opportunity to continue the agricultural sector's  
23 transition to the cleanest available technologies, while  
24 also promoting and enhancing our partnerships with both  
25 the ag industry and local air districts.

1 Staff recommends that the Board approve the  
2 proposed FARMER Program guidelines.

3 Thank you for your time. And if you have any  
4 questions, we'd be happy to answer them.

5 CHAIR NICHOLS: Thanks, Erin. I don't have any  
6 questions, but I see that Board Member Eisenhut has his  
7 mic on. So I'm going to call on you if you have any  
8 comments at this time.

9 BOARD MEMBER EISENHUT: I do, Chair Nichols.  
10 That was intended to be after the public comment.

11 CHAIR NICHOLS: Oh, okay.

12 BOARD MEMBER EISENHUT: Sorry.

13 CHAIR NICHOLS: You're just getting in early then  
14 okay. Great.

15 (Laughter.)

16 CHAIR NICHOLS: You are the first in line.

17 (Laughter.)

18 CHAIR NICHOLS: Okay. We have a list of 20  
19 witnesses. Are they posted yet or ready to be posted, so  
20 people know where they are in the queue?

21 And I see that many of them are here in support,  
22 so that's nice. I'm going to ask you to keep your  
23 comments brief. We allow three minutes, but we have  
24 another item this morning as well. So if you can possibly  
25 make it 2, I would appreciate it very much. And we will

1 begin with Mr. Lemus from the Sacramento Metropolitan Air  
2 Quality Management District.

3 MR. LEMUS: Good morning, Chair Nichols, and to  
4 CARB Board, and staff. My name is Jaime Lemus and I'm a  
5 senior manager with the Sacramento Metropolitan Air  
6 Quality Management District. I would like to take a  
7 moment to thank the Board for the opportunity to speak to  
8 all of you today in support of the proposed FARMER Program  
9 guidelines.

10 As mentioned in the letter from our Sacramento  
11 Valley Basin-Wide Air Pollution Control Council to the  
12 ARB, the Sacramento Metro Air District and our four  
13 regional partner districts believe that the transition of  
14 the agriculture industry to cleaner technologies is  
15 critical to achieving key climate change and public health  
16 objectives, air quality, employment and GHG reduction  
17 goals statewide.

18 Continued funding is needed for realizing  
19 additional emission reductions from this sector, in order  
20 to support these important objectives in our region. The  
21 Sacramento Metro Air District supports this year's  
22 proposed FARMER Program guidelines and revised funding  
23 distributions as we believe they are more aligned with the  
24 FARMER -- with the farm equipment emission inventory in  
25 our region.



1 I should point out our support for the proposal  
2 comes in spite of the net reduction of funding to our  
3 district, and in favor of more funding for our partners in  
4 our region. We'd also like to commend the CARB Board and  
5 staff for continuing to commit grant dollars to  
6 agriculture, one of the State's most important industries.

7 In the Sacramento Valley, we have been able to  
8 modernize hundreds of pieces of heavy-duty farm equipment  
9 simply by making the clean equipment cost effective for  
10 farmers, and we are ready to do more of this with ARB's  
11 help. The FARMER Program is an excellent opportunity, and  
12 we look forward to working with CARB to put these funds to  
13 work for our regional agriculture industry and community  
14 to reduce emissions and keep California at the cutting  
15 edge of clean low-carbon transportation energy.

16 Once again, I would like to thank you for the  
17 opportunity to speak today.

18 CHAIR NICHOLS: Thank you, Mr. Lemus.

19 Mr. Wagoner.

20 MR. WAGONER: Good morning, Chair Nichols and  
21 Board members. My name is Jim Wagoner. And I'm the Air  
22 Pollution Control Officer at the Butte County Air Quality  
23 Management District. I want to thank you for considering  
24 today this very important program that will be getting  
25 emission reductions specific to the ag sector. And I

1 think that's a very important milestone that we're  
2 reaching today.

3           My board is supportive of this program and  
4 submitted a letter of support for the record. It should  
5 be with your materials. We support allocating funds  
6 significantly towards the emission inventory of this  
7 sector, which is what the revised proposal does. My  
8 district has a current robust Carl Moyer Program in  
9 effect. And we've had it in effect for 19 years. The ag  
10 sector has been a very active participant in this program  
11 of ours, and it's been very much over subscribed, so we  
12 know we can do the projects.

13           We look forward to participating in this program  
14 and making it a success. We hope it will continue in  
15 future years.

16           Going forward, we hope that working with staff  
17 and CAPCOA, that CAPCOA can -- we work a way that CAPCOA  
18 can be an administrator for the \$5.5 million that are set  
19 aside for the districts that are not getting a direct  
20 allocation.

21           And also we've talked to staff about we think  
22 there's a need to go and review the inventory of the ag  
23 sector equipment just to make sure that we have the most  
24 current information. Again, going in future years, we  
25 feel that allocation should be based substantially on the

1 inventory in the districts.

2 Thank you again.

3 CHAIR NICHOLS: Thank you.

4 MR. JORDAN: Good morning, Chair Nichols, members  
5 of the Board. I'm Tom Jordan, with the San Joaquin Valley  
6 Air District here to speak in support of the guidelines  
7 and to thank ARB for recognizing the huge need in the  
8 valley for these funds, and in the allocations.

9 This is a key component as we move forward to  
10 attain federal standards for PM and ozone. It's one of  
11 the largest categories along with trucks in the valley  
12 that -- for NOx. We've partnered with the ag industry  
13 over the years, which is -- as was mentioned in the staff  
14 presentation, replaced over 5,000 tractors, with over  
15 30,000 tons of NOx reduced.

16 Similar programs partnering with the ag industry  
17 with ag pumps, we've also replaced 7,000 agricultural  
18 irrigation pumps, mostly with electric. So this is --  
19 this program has been a huge success story in how we can  
20 move forward with industry and get large emission  
21 reductions

22 So I want to thank you for the allocation, and we  
23 are staffed up ready to go. We actually have applications  
24 in hand that total more than that allocation is. So we  
25 hope to be able to put those dollars to work quickly

1           Thanks again.

2           CHAIR NICHOLS: That's great. Thank you.

3           MR. DESSERT: Good morning, Board Chair. Matt  
4 Dessert, Air Pollution Control Officer for Imperial  
5 County. We look forward to participating in this program  
6 and greatly appreciate the revised allocations. We are a  
7 big ag community, big in acres, big in water, low in  
8 population. This program specifically will work well for  
9 our cattle industry, which is the number one economy in ag  
10 industry for Imperial County.

11           The feed yards have many water trucks designated  
12 as ag with low mileage. We're looking at targeting those.  
13 We already have a pretty good allocation of projects  
14 entirely to take care of this funding amount. As an  
15 additional benefit, we believe that those new water  
16 trucks, or the tractors that will pull those water wagons,  
17 will be used more, and additionally to help us with PM10  
18 non-attainment issues.

19           So there's additional benefits to it. Thank you  
20 again for the opportunity. We've -- are in our 20th year.  
21 We've just -- working on our 19th year for Mr. -- Carl  
22 Moyer Program. It's a very successful program, and we  
23 look forward to additional opportunities in the future.

24           Thank you.

25           CHAIR NICHOLS: Thank you.

1 MR. ISOM: Good morning, Madam Chair, members of  
2 the Board.

3 CHAIR NICHOLS: Good morning.

4 MR. ISOM: Step back a little bit. Maybe I don't  
5 need it.

6 Good morning. Roger Isom, California Cotton  
7 Ginners and Growers Association and Western Agricultural  
8 Processors Association.

9 I want to start by just addressing some of the  
10 opening comments by the Chair. One important item that we  
11 have to remember about ag is the inability to pass along  
12 the cost. It's the difference between the construction  
13 folks and the trucking is that we can't that. We're  
14 subject to a world market. And so that's what -- that's  
15 the difficult. I don't know that I would call our  
16 equipment jalopies, Erin --

17 (Laughter.)

18 MR. ISOM: -- but it is old, and it's difficult  
19 for us to replace it.

20 But today, we should be -- we should be  
21 celebrating. This is a monumental item for us for the  
22 agricultural industry and for everybody really. In every  
23 instance, where ag has been brought to the table, we have  
24 not only met our goals, we've exceeded our goals. We can  
25 go back to the conservation management practices for PM10,

1 where we exceeded what the goal was. We could talk about  
2 the tractors as the staff brought up.

3 We not only met the goal, we exceeded it before  
4 the date -- before the rule ever would have went into  
5 effect. And the thing to remember is we've never stopped  
6 since that point. We have continued to seek out  
7 additional funds. This very deal right here was ag's  
8 pressure to try to bring more funds to the district, and  
9 to the entire state.

10 This reallocation helps spread that across the  
11 state, and continue this funding as we move forward. It  
12 is also important to recognize that this not only  
13 addresses the criteria pollutants, which for us is the  
14 most important item, it is going to help on the  
15 greenhouses gas side of it as well.

16 So it's a historic moment. These numbers that  
17 we're talking about today is going to replace a lot of  
18 equipment. And it's going to do it before you even  
19 adopted the SIP. This SIP is going to be later this year.  
20 This money is going to be spent, reductions are going to  
21 be generated, and we're already working on subsequent  
22 year's budgets to try to make sure that this is continued.

23 So again, this is a time we should celebrate.  
24 Thank you guys for the opportunity to comment, and just  
25 encourage you to support as proposed.

1 Thank you.

2 CHAIR NICHOLS: Thank you.

3 MR. PRONSOLINO: Good morning. My name is Dan  
4 Pronsolino with Cortina Hulling and Shelling and the  
5 Western Ag Processors Association. Cortina operates two  
6 large almond hullers in the Sacramento Valley.

7 And I'm here just to add two additional points.  
8 One about the Sacramento Valley specifically being in  
9 attainment and the critical role that these programs play  
10 in keeping these air districts that currently are in  
11 attainment in attainment.

12 Replacing this equipment takes time, and we want  
13 to make sure that we preserve the good air quality that we  
14 do have in some of these districts. And while we  
15 completely support the decision to allocate a majority of  
16 these funds to the Sac -- to the San Joaquin Valley to  
17 deal with their nonattainment issues, we do want to  
18 emphasize the importance of still supporting other air  
19 districts that currently have better air quality, so that  
20 we can preserve that air quality and stay ahead of the  
21 curve so to speak, and not fall into some of the  
22 nonattainment issues that have been faced in the San  
23 Joaquin.

24 Also, to comment on something Roger mentioned,  
25 the global economy that we all face, particularly with

1 almonds, we sell our crop -- a majority of our crop in  
2 export, at least with our company, and we do compete about  
3 other producers, particularly Australia and the  
4 Mediterranean region. And our industry is extremely  
5 capital intensive. I know in my career the first time  
6 that we bought a large front-end loader in the late  
7 nineties, it was a large Caterpillar loader, it cost  
8 \$128,000. The most recent one we bought cost a little  
9 over \$300,000.

10           And that's largely due to the emissions  
11 technology that's outfitted on these machines, as well as  
12 some other modernization, but that's -- that's a big  
13 driving factor.

14           I'm currently consulting on a large project in  
15 Australia. They were able to purchase some Chinese  
16 manufactured machines that are virtually identical to the  
17 Caterpillars, but they're outfitted with tier zero  
18 engines, and they were sold for 68,000 Australian dollars  
19 new just in this last month.

20           So the cheap equipment that they're able to  
21 purchase with no emissions equipment gives them an extreme  
22 advantage. And while I'm not advocating for that at all,  
23 these type of funding programs help us to compete with  
24 some of these foreign competitors who are able to purchase  
25 equipment that is significantly cheaper, because they are



1 not complying with these same air emission standards.

2           So thank you very much for putting this proposal  
3 out. It's critical to helping our industry modernize and  
4 keep these air quality standards in the Sacramento Valley  
5 that we've been able to enjoy.

6           Thank you.

7           CHAIR NICHOLS: Thank you.

8           MR. TONA: Good morning, Chair Nichols and  
9 members of the Board. My name is Joseph Tona, and I'm the  
10 Air Pollution Control Officer for the Tehama County Air  
11 Pollution Control District.

12           I'd like to thank you for the opportunity to come  
13 down here today to support the FARMER Grant Program, that  
14 if approved and implemented would result in reductions in  
15 emissions from the agricultural operations throughout the  
16 State.

17           Districts are passionate about assisting the  
18 agricultural sector in achieving emissions reductions.  
19 The Carl Moyer Program and other incentive programs enjoy  
20 significant public support by our local communities.  
21 Programs like these allow districts to fund projects in a  
22 way that is transparent and provide quantifiable emissions  
23 reductions to help meet the state's criteria toxic and  
24 greenhouse gas emission reduction goals.

25           Year after year, the Tehama County Air Pollution

1 Control District's Carl Moyer Program is oversubscribed by  
2 about 100 to 200 percent. The FARMER Grant Program would  
3 enable us to achieve greater emissions reductions for our  
4 local communities and the state. We look forward to  
5 working with the CARB staff on this program in the future.  
6 Thank you again for this opportunity to comment.

7 CHAIR NICHOLS: Thank you.

8 MR. MONTEIRO: Good morning. Darrin Monteiro  
9 with California Dairies, Incorporated. I'm the director  
10 of government relations.

11 I want to thank you for our comments earlier,  
12 Chair Nichols. You echoed kind of the dairy sentiment  
13 right now, right? I mean, dairies are operating right now  
14 about 25 percent below the cost of production. And they  
15 want to partner in this effort. And the only way to do so  
16 is through incentive fundings.

17 We have dairy liquidation sale happening almost  
18 weekly. So without incentive funding, they -- they would  
19 not be able to compete in help -- in achieving some of the  
20 reductions in emissions that -- that are required of them.

21 I'd like to thank you for the option to speak  
22 today, and in support of this program.

23 Thank you.

24 CHAIR NICHOLS: Thank you.

25 MS. CREAMERS: Good morning Noelle Creamers with

1 the California Farm Bureau Federation.

2 I want to start by thanking Air Resources Board  
3 staff. I know generally when you have new programs, you  
4 have a longer time period to be able to implement them.  
5 And this has very specific deadlines for when that money  
6 has to get out the door. And I really appreciate ARB  
7 staff's effort on getting these guidelines before the  
8 Board.

9 This is so important, as you've heard from many  
10 speakers, to provide funding to help our farmers and  
11 ranchers to purchase new equipment and help clean the air.  
12 We are absolutely supportive of the new allocation and  
13 appreciate the changes so that more money can get into the  
14 districts where the farmers are residing and this  
15 equipment is. And we look forward to working with the  
16 districts to get that money out the door and get cleaner  
17 equipment on the road.

18 Thank you.

19 CHAIR NICHOLS: Thank you.

20 MS. CECIL: Good morning. My name is Colleen  
21 Cecil. And I'm the executive director of the Butte County  
22 Farm Bureau, a nonprofit agricultural organization in  
23 Northern California. It's my honor to represent the  
24 farmers and ranchers of Butte County today, who annually  
25 provide the foundation for our local economy with farm

1 gate value agricultural production upwards of \$800 million  
2 each year, when we farm such crops as almonds, walnuts,  
3 rice, cattle, olives, and olives which are used for canned  
4 black olives and green olives, and everyone's favorite  
5 California olive oil.

6 I want to thank you for the opportunity to  
7 provide comments on the revised funding allocation for the  
8 FARMER Program. The Butte County Farm Bureau supports the  
9 allocation of funding with 80 percent being directed to  
10 the San Joaquin Valley Air District and the remaining 20  
11 percent being shared with counties like Butte, where  
12 agricultural emissions are greatest.

13 In Butte County, you can be certain the funding  
14 will be put to good use. Our county has benefited from  
15 other programs like Carl Moyer, and we're are confident  
16 more of our farmers will participate once the pro -- this  
17 program becomes available.

18 Our area is made up of many small- to  
19 medium-sized farming operations with individual owners  
20 who, on average, farm 80 to 100 acres. As groundwater is  
21 a major source of our irrigated agricultural, irrigation  
22 pump engine replacement will continue to be a priority.  
23 And as the entire agricultural industry, up and down the  
24 state, struggles with finding adequate labor, the FARMER  
25 Program will help replace aging and slower harvesting

1 equipment with newer and more efficient equipment.

2           As a membership advocacy organization, the Butte  
3 County Farm Bureau has already committed to the Butte  
4 County Air Quality Management District our support to  
5 assist them in getting the word out to our 1300 members,  
6 as well as to the agriculture community as a whole about  
7 the availability of the FARMER Program, and we are eager  
8 to get started.

9           Besides my role at the Butte County Farm Bureau,  
10 I, too, am a farmer alongside my husband where we have a  
11 small young walnut orchard in neighborhood Glenn County,  
12 where ag is also the primary economic driver. As a  
13 young-ish couple, we both work full-time jobs off the farm  
14 to be able to maintain our small orchard, where we are  
15 raising our two young boys. And it's programs like the  
16 FARMER Program that will allow us to farm our 20-acre  
17 parcel ourselves, instead of contracting with someone to  
18 do it for us, and at the same time passing on a passion  
19 for farming to our boys.

20           We thank the staff for listening to our concerns  
21 and appreciate your efforts to see the funds, directed by  
22 the legislature to help farms and ranches reduce  
23 emissions, be put to work quickly in our agricultural  
24 communities.

25           Thank you.

1 MR. BUTTNER: Good morning. Paul Buttner with  
2 the California Rice Commission.

3 For all the reasons mentioned by my fellow ag  
4 colleagues, I'm just here to support the regulation and  
5 appreciate staff's efforts to come up with a good proposal  
6 for us today.

7 Thank you.

8 CHAIR NICHOLS: Thanks.

9 MS. PRICOLA: Good morning. Kay Day Pricola. I  
10 represent -- I'm the executive director of two  
11 organizations, the Coalition of Labor, Agriculture and  
12 Business in Imperial County, and also the Imperial Valley  
13 Vegetable Growers.

14 I'm going to pretend this is the Oscars and  
15 there's a jet ski for the shortest speech.

16 (Laughter.)

17 MS. PRICOLA: First of all, thank -- we'd like to  
18 thank the staff for coming to our remote part of the  
19 world, and then I'd like to thank everybody for listening.  
20 We are the 10 large -- 10th largest ag community. And we  
21 thought we deserved a little bit more for the need.

22 Thank you.

23 MS. MOHAMED: Good morning, Chair Nichols and  
24 Board. My name is Brea Mohamed. I'm the executive  
25 director of the Imperial County Farm Bureau.

1           First of all, I would like to take[SIC] staff for  
2 taking the time to listen to and address concerns brought  
3 up during workshops regarding the funding allocation  
4 method. Also, thank you for bringing a workshop to the  
5 Imperial County where we too were able to have our voices  
6 be heard.

7           During the workshop in Imperial County and during  
8 other workshops too, concerns were brought up regarding  
9 the formula used to allocate funding for the FARMER  
10 Program. We were very thankful that those concerns were  
11 heard by staff and the new formula is primarily based off  
12 of emissions from ag equipment. This allocation allows  
13 funds to be distributed towards productive agricultural  
14 areas and provides significant assistance to areas with  
15 the most engines that would benefit -- that would benefit  
16 from this help.

17           The FARMER Program funds will be very beneficial  
18 to help farmers invest in new trucks and off-road  
19 equipment, so that older higher-emitting engines can be  
20 removed from use. We appreciate the Board and staff's  
21 efforts to getting this program in place and funds  
22 available to help farmers and ranchers quickly proceed.  
23 Thank you.

24           MS. JONES: Good morning. Devon Jones, Mendocino  
25 County Farm Bureau. So again, I won't reiterate. We

1 appreciate staff listening to our concerns from  
2 agriculture. And looking at supporting the funding of the  
3 allocations from the FARMER Program based on ag equipment  
4 inventory.

5 I have a little bit of a different perspective  
6 though from what you've heard this morning is I'm from one  
7 of the 18 districts in the one percent. We do have a lot  
8 of agriculture in these one percent counties. And the  
9 Board is well aware that regulations and compliance  
10 requirements are applied across the board whether you're  
11 one percent or the other 99.

12 So for that, I do appreciate the 5.6 million  
13 being reallocated and increased for the one percent  
14 districts, but I will ask today that a process be  
15 established and moved forward so that those districts  
16 within the one percent have a clear direction on how to  
17 apply for those monies. We do have projects available.  
18 For example, in the next couple of years, 100 plus  
19 stationary diesel irrigation pumps in Mendocino County are  
20 due to be replaced, and they're not cheap.

21 The average cost for one of our farmers is  
22 between \$25,000 to \$55,000 for a single engine. And for a  
23 family farm, most of my members have anywhere from three  
24 to eight pumps I'd say on average, so that's not a small  
25 cost.



1           And so the sooner we have that process in place,  
2 we can do staggered applications, we can prepare them in  
3 time to start working on those replacements.

4           So for that, I will be quick. I just want to  
5 thank the Board for listening to our concerns today, and  
6 appreciate getting the program in place. Thank you.

7           CHAIR NICHOLS: Thank you.

8           MR. EDER: Good morning, Board. Harvey Eder,  
9 speaking for myself and for the Public Solar Power  
10 Coalition. On the list today it only lists me. This was  
11 true yesterday. Public Solar Power Coalition was not  
12 cited with my name, and this isn't right.

13           Anyway. Support helping farmers and agriculture.  
14 I lived on a farm in Iowa when I was 15 for the summer,  
15 and I was in the Pardes Matallin[phonetic] in '68, the  
16 citrus orchards in northern Israel. My brothers -- and  
17 we've got three generations of commercial fisherman in our  
18 family up in Oregon.

19           And I think that our rural areas need to be  
20 assisted as much as possible, and that solar should be  
21 used. No natural gas or fossil fuels, et cetera. It's  
22 against State policy, and we need to work on this and  
23 implement this ASAP, as soon as possible.

24           The fact that you've got more land available is  
25 good. Prices on solar from 2010 to 2016 has gone down

1 like 73 percent. And we're close to -- and looking at  
2 future numbers for storage as well. It's come down quite  
3 a bit, both battery electric other types of storage as  
4 well as thermal storage, which had been dealt with in the  
5 past, but is coming up now.

6 So I would like to encourage CARB to work also  
7 with the PUC, and the CEC, and the Office of Planning and  
8 Research, the Governor's office, and working on these  
9 plans for immediate total solar conversion.

10 We've got Senate Bill 100, de León. He said that  
11 he wished he'd gone for 100 percent in 2030 a few years  
12 ago. And that going for 100 percent by 45 a couple months  
13 ago, Governor Brown was quoted in the New York Times as  
14 saying we could do it by 2040.

15 Jacobson and Delucchi out of Stanford and UC  
16 Berkeley have published by 2030 100 percent from wind,  
17 water, and solar and have done -- this was in the November  
18 '09 cover article of the Scientific American the month  
19 before Copenhagen in '09.

20 All right. Thank you. Bye.

21 CHAIR NICHOLS: Bye.

22 Genevieve Gale.

23 MS. GALE: Good morning, Board members.

24 Genevieve Gale, CVAQ and I'm also representing the  
25 Coalition for Clean Air today.

1 I'm in strong support of this program and also  
2 your excellent staff that have been leading this effort.  
3 I also want to thank the valley's agricultural industry  
4 for bringing money to the region. And also give props to  
5 the San Joaquin Valley Air District. They do run a  
6 well-oiled incentive program machine. And they're ahead  
7 of the pack when it comes to program innovation.

8 I'm in strong support of the act -- of Ag  
9 Trade-Up Program. And I must mention they've just  
10 implemented a new Truck Trade-Up Program that I think is  
11 going to do some great things for the valley.

12 Mr. Corey, you have the opportunity to include  
13 additional project types. So I'd like to suggest electric  
14 tractors, and solar pumps and on-farm solar  
15 infrastructure. And if perhaps we could think a little  
16 more creativity -- creatively, what equipment is needed to  
17 reduce agricultural burning in the San Joaquin Valley. Do  
18 we need chippers? Do we need equipment to reincorporate  
19 wood waste into the soil? Perhaps, we can think a little  
20 more broadly there.

21 But, in general, I'm in support. And perhaps  
22 working with the district in the future, we can target  
23 some of this outreach and technical assistance to small  
24 farmers and farmers of color, and also the upper -- the  
25 owner/operators of small trucks.

1           But thank you all for this.

2           CHAIR NICHOLS: Thank you.

3           MR. HAMILTON: Good morning, members of the  
4 Board. Kevin Hamilton, Central California Asthma  
5 Collaborative.

6           I wanted to echo and affirm Ms. Gale's comments.  
7 I'm not going to repeat them. I think these are great  
8 programs. I want to support the measure as proposed. I  
9 appreciate giving the Executive Director the leeway to be  
10 able to adjust as we move along with these things. That's  
11 often not available, and I think it's critical.

12           I do want to reiterate the piece about when we're  
13 talking about pumps, there's a lot of issues around  
14 electrifying pumps that have to do with PUC standby  
15 charges and the extreme cost associated with that. It's  
16 caused a lot of our farmers to move back to diesel pumps  
17 because it's just -- they can't make it pencil out. So  
18 this idea of solar islands for pumps should be explored,  
19 piloted, and determined if that can be cost effective and  
20 work in this situation.

21           I do want to reiterate also that we need to do  
22 the outreach to small farmers. I want to thank staff for  
23 traveling down to Fresno to meet with the EJ group that we  
24 put together at our offices, and to take comments on this  
25 and to work -- commit to working constructively with us on

1 this moving forward to make sure we get that money out  
2 there to our small farmers as Commissioner Eisenhut has  
3 mentioned in the past. We have poorer farmers out there,  
4 Latino farmers, Hmong farmers who are small at -- are  
5 farming small pieces of acreage and using tier 0 equipment  
6 that has been around for five generations, and we need to  
7 help them plus-up and get into some newer stuff.

8           So thank you very much. Appreciate your time  
9 today.

10           CHAIR NICHOLS: Thank you.

11           MR. BROWN: Madam Chair, members of the  
12 Committee. Louie Brown with Kahn, Soares & Conway. We  
13 represent a number of the ag organizations that testified  
14 today and others that weren't able to make it here to ask  
15 for your support of the resolution, to thank staff, and to  
16 realize that this is the third piece of a comprehensive  
17 greenhouse gas reduction financial strategy put forth by  
18 the administration.

19           We've already seen the implementation of funding  
20 for methane digesters to reduce methane emissions in the  
21 dairy industry. Our food processing seg -- sector is  
22 working with the California Energy Commission to improve  
23 their practices and reduce their emissions, and then  
24 today's funding piece will bring all of that together by  
25 allowing the San Joaquin Valley and other agricultural

1 areas within the State to continue these strong and  
2 important incentive programs that result in real  
3 emissions, and really move us forward in achieving our  
4 goals.

5           So again, recognize the hard work that staff has  
6 done to put this together in a very short period of time  
7 and we ask for your support on the resolution today.

8           Thank you.

9           CHAIR NICHOLS: Thank you.

10           MR. CUNHA: Good morning. Manual Cunha with the  
11 Nisei Farmers League, also represent the California  
12 African-American Farmers, and the National Hmong Growers  
13 that are located in the five counties of the San Joaquin  
14 Valley. First, I want to thank the staff.

15           But, Madam Chair, I'd like to take a moment of  
16 silence, if we could, for a young lady who made all of  
17 this happen in meetings with the Governor by the name of  
18 Nancy McFadden who just passed away. And a wonderful  
19 lady, all the way till the very end. You couldn't have  
20 asked for a better person to bring ag and the Governor,  
21 Richard Corey, and others to that room that day to come up  
22 with this plan to get this thing through. So if we could  
23 take a moment of silence I'd appreciate that.

24           CHAIR NICHOLS: Mr. Cunha, I had planned to do it  
25 right after we finished this item, but we -- I'm happy to

1 do it now. Let's do it.

2 MR. CUNHA: Okay. And I'll make comments short  
3 after this. Okay. Thank you.

4 (Moment of silence for Nancy McFadden.)

5 MR. CUNHA: Thank you very much.

6 At this time, I want to thank Richard Corey and  
7 Kurt, especially Richard for all the time driving down in  
8 the rain and the hail and everything else that we've had  
9 in the valley. Thank, God, we're getting water. I use  
10 that carefully too.

11 Also, Lucina, Michelle, and Erin, you three  
12 ladies, are incredible. You have a great team. They've  
13 met with agriculture many times to come up with several  
14 big programs. The Tractor Replacement Program, Equipment  
15 Replacement Program. Agriculture puts in anywhere from 50  
16 to 60 percent of their own money. So this is not a free  
17 program.

18 The next program was the trade-up. The Tractor  
19 Trade-Up Program is the first one of its kind in the  
20 country, taking a tier 3 tractor, rather than cutting it  
21 up, giving it -- or not giving it, a farmer pays for it.  
22 We took that money that they got for that tractor to begin  
23 with and we move it to another farmer, who has a tier 0  
24 that would never be able to buy a new one. I don't care  
25 what anybody said. So that program is tremendous in the

1 Tractor Trade-Up Program.

2           The third is our partners. You as ARB, Carl  
3 Moyer, all the work that Richard and everybody else has  
4 done to bring revenues in.

5           NRCS, Natural Resources Conversation. In 2002,  
6 we started with five million for air with -- for the  
7 State. Today, we have an average of \$19 million comes to  
8 the San Joaquin Valley for equipment replacement through  
9 USDA as a partner with your funds.

10           So, at this time, I really support the effort,  
11 especially the staff's hard work. It's been a tremendous  
12 partnership. And if it isn't, then somebody's missed the  
13 boat, because it has been an honest partnership. No one  
14 is trying to get rid of the farmers. We feed the world,  
15 and we do a great job at that.

16           And my last thing on this is on this replacement  
17 program, it has to be voluntary. Farmers, we achieve the  
18 goal very well.

19           And my last comment is I want to make something.  
20 I just got back from New York. We have a welterweight  
21 title champion of the boxing world, 140-pound Jose Ramirez  
22 from Avenal won the world title at Madison Square Garden,  
23 who represented and fought for water, and fought for  
24 immigration, and is still fighting.

25           So, Madam Chair, sorry for the few minutes over.



1 Thank you.

2 CHAIR NICHOLS: Thank you. You're excused

3 (Laughter.)

4 CHAIR NICHOLS: Mr. Ayerza.

5 There's a special Manny Cunha exemption to the  
6 time limit.

7 (Laughter.)

8 MR. TODD AYERZA: Good morning. My name is Todd  
9 Ayerza. I'm with Campos Brothers. I help manage a  
10 mid-sized farm in the Central Valley, San Joaquin Valley.  
11 And I just want to first say how much we appreciate these  
12 programs that help us reduce emissions.

13 We started way back in '04, '05, I believe with  
14 the AG-ICE Program to help eliminate all of our diesel  
15 wells. More recently, the Tractor Replacement Programs to  
16 get rid of our tier 0, 1 tractors. And then just this  
17 past year, we got involved in the Tractor Replacement  
18 Program. We had tier 3 tractors that we would have never  
19 dreamed of getting rid of. We keep our tractors  
20 historically for 15, 20 years. But this -- we were able  
21 to do that and pass these on to the smaller farmers.  
22 Anyway, just that. And we appreciate it. Thank you.

23 CHAIR NICHOLS: Thank you.

24 MR. JOSEPH AYERZA: Good morning, staff. Thank  
25 you very much for all your partition in these programs.

1 My name is Joseph Ayerza. I'm with the John Deere  
2 dealership at Fresno Equipment in the Central Valley. We  
3 handle Madera and Fresno County.

4 And I just want to tell you how important these  
5 programs are for us, and for our customers, and, of  
6 course, yours customers.

7 These voluntary programs make a difference and an  
8 impact in getting rid of tier 0s and tier 1 tractors that  
9 are just gross pollutants out there and bringing in a  
10 emissionized equipment. It makes a difference in  
11 impacting the PMS and NOx in the Central Valley, and it's  
12 very important.

13 And I just want to thank the staff members and the  
14 San Joaquin Valley Air District. They are very great to  
15 work with, and just appreciate everything.

16 Thank you very much.

17 CHAIR NICHOLS: Thank you.

18 We have one more witness.

19 MS. APODACA: Good morning. My name is Lori  
20 Apodaca. I'm the director of regulatory affairs for  
21 California Citrus Mutual.

22 Our board and our members are very excited about  
23 this program. We represent over 2,500 growers in the  
24 State for Citrus. The majority, of course, are located in  
25 the Central Valley in Fresno, Tulare, and Kern County.

1           And a lot of our growers, there are small family  
2 growers. Some are just starting out, some have been in  
3 citrus for many years, but they face challenges. We have  
4 HLB, which is a fatal disease for citrus trees that we're  
5 currently combating, and then we also have a water  
6 shortage, of course.

7           And while some growers can weather that, we have  
8 a lot of the smaller growers who can't. And so they're  
9 not thinking about replacing equipment. They're thinking  
10 about maintaining that equipment so they can use their  
11 money to spend buying water.

12           And so this is -- this is I think going to be a  
13 really good program. I'm new to California Citrus Mutual,  
14 so I haven't met all of you, but I'm sure you all know  
15 Joel Nelsen.

16           So I look forward to working with you and sharing  
17 this great, great program with our growers.

18           Thank you.

19           CHAIR NICHOLS: Thank you.

20           So that concludes our list of witnesses. And  
21 we'll go next to Board Member Eisenhut.

22           BOARD MEMBER EISENHUT: Thank you, Chair Nichols.  
23 Well, this should be easy. We've heard the chairman's  
24 comments. We've heard from all of you. And I had hoped,  
25 as I looked at the sheet, that Kevin had checked the wrong

1 box, and it turned out that was the case, as we heard his  
2 defendant

3 MR. HAMILTON: I checked the box?

4 (Laughter.)

5 BOARD MEMBER EISENHUT: I just want to indicate  
6 my strong support for this program. I appreciate the way  
7 it's designed, the allocation -- the allocation is  
8 impactful where there is a need, and where there is a  
9 presence of equipment. And so I support that allocation.  
10 I particularly support the Trade-Up Program for the  
11 reasons that we've already discussed. I think there is  
12 a -- I sense, and I've heard, there is a significant  
13 population that intersects with the environmental justice  
14 population of small farmers who have that, yes, that tier  
15 0 jalopy tractor that --

16 (Laughter.)

17 BOARD MEMBER EISENHUT: -- and lack the resources  
18 jalopy to trade up. And so this program will allow that  
19 to happen.

20 I do have a question. The Executive Director has  
21 certain amount of authority. If that three million is  
22 oversubscribed, does his authority allow transferring  
23 additional funds to that program?

24 Thank you.

25 MSCD OFF-ROAD AGRICULTURAL STRATEGIES AND

1 INCENTIVES SECTION MANAGER BUFFINGTON: Good morning. Oh.

2 CHAIR NICHOLS: Sorry. Go ahead.

3 MSCD OFF-ROAD AGRICULTURAL STRATEGIES AND

4 INCENTIVES SECTION MANAGER BUFFINGTON: This is Michelle  
5 Buffington. To address your question about the \$3 million  
6 for the Ag Trade-Up Program, that money was programmed  
7 into the trade up in '16-'17. The new '17-'18 allocations  
8 we don't have specific bins for them to spend it on.

9 BOARD MEMBER EISENHUT: Okay.

10 MSCD OFF-ROAD AGRICULTURAL STRATEGIES AND

11 INCENTIVES SECTION MANAGER BUFFINGTON: So once they have  
12 expended the \$3 million from '16-'17, we anticipate that  
13 San Joaquin will continue to feed that program with some  
14 of their '17-'18 funds.

15 BOARD MEMBER EISENHUT: Okay. Thank you.

16 CHAIR NICHOLS: Okay. Well, this is one of those  
17 rare days. Yes. You didn't pop up on the screen.

18 Now you do. Okay.

19 (Laughter.)

20 CHAIR NICHOLS: Dr. Sherriffs.

21 BOARD MEMBER SHERRIFFS: I'm challenged when it  
22 comes to these electronic devices.

23 (Laughter.)

24 BOARD MEMBER BALMES: And he's even a farmer.

25 CHAIR NICHOLS: I know.

1 BOARD MEMBER SHERRIFFS: Yes.

2 CHAIR NICHOLS: You may have a conflict of  
3 interest.

4 (Laughter.)

5 BOARD MEMBER SHERRIFFS: Yes, I have a conflict  
6 of interest, but I'm not planning on applying for any of  
7 these funds.

8 You know, this is a great example of, you know,  
9 we think of farming as conservative. No, no, farming is  
10 innovative, farming is into investment, but people in  
11 farming have to be careful because there's so much that's  
12 not controlled. And weather and the global markets are  
13 just a couple of examples. But farmers are eager to find  
14 the next best thing, find a way to improve what's being  
15 done. And this clearly is an example of that on a  
16 statewide basis.

17 The co-benefits are obvious, in terms of air  
18 quality issues, greenhouse gases. And it's why the lion's  
19 share of this goes to the Central Valley because of the  
20 air quality issues.

21 But, yes, this needs to be distributed throughout  
22 the State and to engage farming operations throughout the  
23 State. And staff has done a good job of reallocating and  
24 wrestling with that issue.

25 You know, I know we're not supposed to compliment

1 staff, but --

2 CHAIR NICHOLS: Oh, it's okay. You can do it.

3 BOARD MEMBER SHERRIFFS: But -- well --

4 (Laughter.)

5 BOARD MEMBER SHERRIFFS: -- you know, yesterday  
6 one of our big themes was let's not delay. Why are we  
7 pushing things back? How can we move them forward? And  
8 this is an incredible example of moving things forward and  
9 getting money spent not next year or the year after, but  
10 this year. And that reflects on staff's hard work,  
11 staff's going out, and to the response the ag industry  
12 being able to be there and respond. So it's a great  
13 example. It's a great example.

14 And this is particularly important because this  
15 is not a one shot. There are -- we anticipate ongoing  
16 funding, and we're going to be coming back next year and  
17 looking at this. And so we need to build on these  
18 successes. So it's yet another reason why it's important  
19 to get that money out the door, see what's working, see  
20 what's getting us the most benefits. And it's a great  
21 compliment to a number of districts that have been able to  
22 organize and they're ready. They're not going to plan  
23 once we say, yes. No, no they're ready. If we say yes,  
24 it will happen this afternoon. So that's -- that's --  
25 that's wonderful.

1           Just thinking again this is ongoing, and I think  
2 there have been some great suggestions of things we need  
3 to think about. Yeah, the Trade-Up Program is likely to  
4 be very successful. Great bang for the buck. And so  
5 probably looking at how we're going to expand funding for  
6 that in the future. And some great suggestions about,  
7 yes, how do we integrate more in terms of electrification  
8 of solar, and is there a way that this is going to help us  
9 in terms of ag waste management? And so thinking  
10 creatively in terms of the future. So thanks to everyone  
11 for their participation.

12           I'm sorry, staff, that I complimented you and  
13 called you out.

14           (Laughter.)

15           CHAIR NICHOLS: Thank you.

16           Judy Mitchell.

17           BOARD MEMBER MITCHELL: Thank you.

18           A couple of comments were made that I think bears  
19 some merit. And I don't know whether we have ever done an  
20 ag equipment inventory. Staff, have we done that?

21           MR. HAMILTON: We asked for it.

22           (Laughter.)

23           MSCD OFF-ROAD AGRICULTURAL STRATEGIES AND

24 INCENTIVES SECTION MANAGER BUFFINGTON: Yes. Actually, in  
25 2008, staff conducted a statewide survey to build an



1 agricultural inventory. There is a high level version of  
2 that posted on-line. And that's what we actually used to  
3 do -- to build our distribution formula. But we have  
4 heard from the stakeholders and from the air districts  
5 that there is some -- they would like for us to update it.  
6 And so staff is working towards figuring out the best way  
7 to go about building up the next inventory.

8 BOARD MEMBER MITCHELL: Good. I think that that  
9 would be good program. And since we're looking at a  
10 Trade-Up Program, it would be sort of be the bedrock of a  
11 Trade-Up Program, you know, where equipment is, and you  
12 can get rid of 0 -- tier 0 jalopies, as we've been calling  
13 them, and move up to a higher grade. So I think that's a  
14 great idea.

15 Thank you, staff. I'll put that in there too.  
16 And I'm very supportive of this program. San Joaquin is a  
17 nonattainment area that shares that distinction with my  
18 district. And I think we really need to put money into  
19 San Joaquin to help them reach attainment. So I'm very  
20 supportive of this.

21 CHAIR NICHOLS: Okay. I do not see any other  
22 speaks in the queue. So I think we can proceed to a  
23 decision. I can't resist adding just one thing, which is  
24 that I think this will be -- were you ready to -- waving  
25 at me.

1 BOARD MEMBER BALMES: No, no. I was ready to  
2 make a motion.

3 CHAIR NICHOLS: Oh, okay. You could -- I just  
4 want to say one other thing, which is that the source of  
5 the funds -- the principal source of the funds is the  
6 Greenhouse Gas Reduction Fund, which is now ongoing thanks  
7 to legislation that was really shepherded through the  
8 legislature to the two-thirds vote that it needed by Nancy  
9 McFadden. So I wanted to close the loop on that -- on  
10 that. And it's going to come up time and time again as we  
11 go forward, I think, over the months ahead, that her  
12 finger prints are on so many of the good things that we  
13 get to do. So thank you for the -- for that.

14 And now, would you like to make a motion?

15 BOARD MEMBER BALMES: And before I make the  
16 motion, I would like to say this is well spent money from  
17 the Greenhouse Gas Reduction Fund.

18 So I would move that we accept the staff  
19 proposal.

20 BOARD MEMBER SHERRIFFS: Second.

21 CHAIR NICHOLS: And a second.

22 All in favor please say aye?

23 (Unanimous aye vote.)

24 CHAIR NICHOLS: Any opposed?

25 Any abstentions?

1           Seeing none, it is unanimously adopted. And  
2 thank you all, staff. Good job.

3           And I echo the praise in terms of your going out  
4 and consulting too. That was really -- it helped to get  
5 us to this point, so thank you.

6           I'm going to race along without a break here,  
7 because I know we're in danger of losing at least a couple  
8 of our members who have other obligations. So let me just  
9 start the -- start with the opening statement before the  
10 staff are fully in place.

11           The next item on the agenda is Item 18-2-9, a  
12 public hearing to consider the proposed regulation for  
13 prohibitions on use of certain hydrofluorocarbons in  
14 stationary refrigeration and foam end-uses.

15           The Board will consider a regulation to reduce  
16 emissions of hydrofluorocarbons, or HFCs, which are  
17 powerful short-lived climate pollutants. The proposed  
18 regulation is to adopt as California regulations something  
19 that had been a federal prohibition on the use of certain  
20 high global-warming potential HFCs in stationary  
21 refrigeration and foam end-uses.

22           This sounds very technical and difficult to  
23 pronounce, but it's very important stuff when it comes to  
24 the immediate threat to our climate.

25           The federal restrictions however were recently

1 vacated by a court, and the proposed regulation ensures  
2 that, at least in California, we will be able to maintain  
3 their emissions benefits.

4 Mr. Corey, would you please introduce the item?

5 (Thereupon an overhead presentation was  
6 presented as follows.)

7 EXECUTIVE OFFICER COREY: Yes. Thanks, Chair.

8 SB 1383 authored by Senator Ricardo Lara also  
9 required CARB to approve and implement a plan to reduce  
10 emissions of short-lived climate pollutants by 40 percent  
11 below 2013 levels by 2030. You approved that plan  
12 spelling out a strategy for reaching the HFC emission  
13 reductions targets previously.

14 The U.S. EPA's Significant New Alternative  
15 Policy, or SNAP, Program rules 20 and 21 were a critical  
16 part of this strategy accounting for approximately 20  
17 percent of the HFC emission reductions needed.

18 However, on August 8th, 2017, in Mexichem Fluor,  
19 Inc. versus EPA, the D.C. Circuit Court of Appeals ruled  
20 that U.S. EPA does not have authority to require companies  
21 to replace high global warming potential HFCs with lower  
22 global warming potential substitutes under rule 20.

23 In light of the court ruling, California can no  
24 longer rely on U.S. EPA's SNAP Program rules as a  
25 originally stated in the Short-Lived Climate Pollutant

1 Strategy. In order to preserve HFC emission reductions in  
2 California expected from the U.S. EPA's SNAP Program  
3 rules, CARB is proposing to adopt key prohibitions from  
4 U.S. EPA SNAP rules into State law.

5 I'll now ask Glenn Gallagher of the Research  
6 Division to begin the staff present.

7 Glenn.

8 STAFF AIR POLLUTION SPECIALIST GALLAGHER: Thank  
9 you, Mr. Corey. Good morning, Chair Nichols and members  
10 of the Board.

11 Today, we will present Board Item 18-2-9, a  
12 proposed regulation for prohibitions on use of certain  
13 hydrofluorocarbons in stationary refrigeration and foam  
14 end-uses. The intent of the regulation is to preserve and  
15 continue in California some of the U.S. EPA's prior  
16 prohibitions on high global warming hydrofluorocarbons.

17 Last year, a decision by the D.C. Circuit Court  
18 of Appeals limited U.S. EPA's authority in this area.

19 --o0o--

20 STAFF AIR POLLUTION SPECIALIST GALLAGHER: In  
21 today's presentation, we will provide background  
22 information on the need for regulatory action, describe  
23 the proposed regulation, and conclude with our  
24 recommendation for 15-day changes.

25 --o0o--

1           STAFF AIR POLLUTION SPECIALIST GALLAGHER: First,  
2 some background on hydrofluorocarbons and their emissions.

3                           --o0o--

4           STAFF AIR POLLUTION SPECIALIST GALLAGHER:

5           Hydrofluorocarbons, or HFCs, are potent  
6 short-lived climate pollutants with global warming  
7 potentials hundreds to thousands of times greater than  
8 carbon dioxide.

9           For example, just one pound of R-404A, an HFC  
10 refrigerant used in supermarkets, has the global warming  
11 potential of almost two tons of CO2, equivalent to driving  
12 a car more than 4,000 miles.

13           Fortunately, alternatives with lower global  
14 warming potentials are commercially available with some in  
15 very wide usage.

16                           --o0o--

17           STAFF AIR POLLUTION SPECIALIST GALLAGHER:

18           Currently, HFCs comprise four percent of all  
19 greenhouse gas emissions in California. However, they're  
20 the fastest growing source of greenhouse gases in our  
21 state and throughout the world. Without further controls,  
22 HFC emissions will double in 20 years.

23           In 2016, Senate Bill 1383, authored by Senator  
24 Lara, established a goal to reduce HFC emissions 40  
25 percent below 2013 levels by 2030.

1                               --o0o--

2                   STAFF AIR POLLUTION SPECIALIST GALLAGHER: In  
3 2030, under business-as-usual conditions without further  
4 regulations, we estimate that almost 80 percent of HFC  
5 emissions will be from stationary refrigeration, and  
6 stationary air conditioning.

7                   Including mobile AC and transport refrigeration,  
8 refrigerants make up more than 90 percent of HFC  
9 emissions. To a lesser extent, HFC emissions also come  
10 from aerosol propellants, foams, solvents and fire  
11 suppressants.

12                               --o0o--

13                   STAFF AIR POLLUTION SPECIALIST GALLAGHER: This  
14 chart summarizes the short-lived climate pollutant  
15 strategy for HFC reductions adopted by the Board last  
16 March. Business-as-usual emissions are about 27 million  
17 metric tons of CO2 equivalents in 2030.

18                   The SB 1383 goal shown in green means that  
19 California must emit no more than 10 million metric tons  
20 of CO2 equivalents by 2030. Attaining this goal is 10  
21 percent of the entire greenhouse gas reduction strategy  
22 described in the scoping plan adopted by the Board last  
23 year.

24                   The top of the bar chart shaded in light blue  
25 shows potential reductions of 26 percent that can achieve

1 by the international Kigali amendment or HFC phase-down,  
2 if ratified by the United States. An additional 24  
3 percent reduction was expected from the U.S. EPA's SNAP  
4 rules shown in orange.

5 The remaining emission reductions shaded in pink  
6 must be achieved by additional CARB regulations.

7 Now, we'll update you on these three different  
8 strategies.

9 --o0o--

10 STAFF AIR POLLUTION SPECIALIST GALLAGHER:

11 International efforts to reduce HFCs will be  
12 achieved by the Kigali amendment to the Montreal Protocol  
13 to phase down the production of HFCs, eventually applying  
14 to all countries.

15 The first step of the phase-down applies to  
16 developed countries and begins next January. The United  
17 States signed the Kigali amendment in November 2016, but  
18 has not yet taken action to ratify it through the U.S.  
19 Senate. And if ratified, it would still need to be  
20 implemented by the U.S. EPA.

21 Although the Kigali amendment should  
22 significantly reduce HFC emissions by 2050, it will not be  
23 sufficient by itself to help California achieve its SB  
24 1383 reduction goal by 2030.

25 --o0o--



1           STAFF AIR POLLUTION SPECIALIST GALLAGHER:   EPA's  
2 Significant New Alternatives Policy, known as SNAP,  
3 implements section 612 of the amended Clean Air Act of  
4 1990, which requires EPA to evaluate replacements for  
5 ozone-depleting substances to reduce overall risk to human  
6 health and the environment.  These replacements include  
7 HFCs.

8           EPA applied this authority to prohibit high  
9 global warming potential HFCs in new equipment and  
10 materials as viable lower GWP alternatives became  
11 available.  However, last year, the federal D.C. Circuit  
12 Court of Appeals decided that EPA cannot require  
13 replacement of HFCs in many circumstances.

14           CARB staff would support EPA reading the decision  
15 narrowly and adopting national HFC rules under their other  
16 existing authorities.

17                           --o0o--

18           STAFF AIR POLLUTION SPECIALIST GALLAGHER:

19           California was relying on the SNAP rules to meet  
20 24 percent of our HFC reduction goal, leaving us with an  
21 emission reduction gap of more than four million metrix  
22 tons of CO2 equivalents.

23                           --o0o--

24           STAFF AIR POLLUTION SPECIALIST GALLAGHER:   SB  
25 1013, the California Cooling Act, authored by Senator Lara

1 is currently awaiting hearing in the Senate Environmental  
2 Quality Committee, and would place all of the SNAP HFC  
3 prohibitions into State law.

4 In contrast, the proposed regulation under  
5 consideration today would preserve emission reductions  
6 from select sectors with past or shortly upcoming  
7 effective dates, but does not backstop all of the  
8 potential losses due to the court ruling. A future HFC  
9 rulemaking will cover additional measures identified in  
10 the SB 1383 short-lived climate pollutant strategy.

11 --o0o--

12 STAFF AIR POLLUTION SPECIALIST GALLAGHER:

13 Fortunately, the HFC reductions needed are  
14 achievable because refrigeration technology has become  
15 increasingly green. Refrigerants have transitioned from  
16 ozone depleting and high global warming to non-ozone  
17 depleting and low global warming. These low GWP  
18 refrigerants include hydrofluoroolefins, or HFOs, and  
19 natural refrigerants, such as carbon dioxide, ammonia, and  
20 hydrocarbons.

21 Natural refrigerants have been used in -- have  
22 been in use today since the 1800s and are used in  
23 thousands of retail food stores today.

24 --o0o--

25 STAFF AIR POLLUTION SPECIALIST GALLAGHER: The

1 global transition to low global warming potential  
2 refrigerants is well underway. The European Union is  
3 currently implementing more ambitious HFC reduction  
4 measures than those proposed here.

5 Canada recently adopted measures similar to the  
6 aforementioned bill, SB 1013. Australia and Japan also  
7 have HFC reduction programs. Most of the affected  
8 industry serve a global market and are preparing for one  
9 low GWP solution, and many manufactures and users in the  
10 U.S. have all already adopted lower GWP technologies.

11 --o0o--

12 STAFF AIR POLLUTION SPECIALIST GALLAGHER: Now,  
13 I'll describe the proposed regulation

14 --o0o--

15 STAFF AIR POLLUTION SPECIALIST GALLAGHER: The  
16 proposed regulation focuses on commercial refrigeration  
17 equipment and foam types with past and shortly upcoming  
18 compliance dates under the partially vacated SNAP rules,  
19 and will prevent backsliding of manufacturers from using  
20 high global warming HFCs again. Most manufacturers have  
21 already transitioned or begun the transition to lower  
22 global warming alternatives.

23 The regulation would make the SNAP prohibitions  
24 enforceable in California with an estimated 3.4 million  
25 metric tons of CO2 equivalent reductions annually by the

1 year 2030.

2 --o0o--

3 STAFF AIR POLLUTION SPECIALIST GALLAGHER: The  
4 proposed regulation applies mainly to equipment  
5 manufacturers. Prohibited HFCs may not be placed into new  
6 equipment and materials that are sold, used, or entered  
7 into commerce in California for the following end-uses:

8 Supermarkets and remote condensing units, which  
9 are small refrigeration systems used by convenience  
10 stores; refrigerated food processing and dispensing  
11 equipment, for example, slurpee machines and frozen yogurt  
12 dispensers; stand-alone or small self-contained  
13 refrigeration units, also known as plug-ins; refrigerated  
14 vending machines; and foams used in buildings and other  
15 uses.

16 --o0o--

17 STAFF AIR POLLUTION SPECIALIST GALLAGHER: This  
18 chart shows the end-uses from the previous slide, and  
19 lists the HFC prohibition date, along with the current  
20 industry status for HFC replacements. All of the end-uses  
21 have available alternatives today.

22 The preferred alternative for vending machines is  
23 propane refrigerant, which is not allowed in some  
24 locations.

25 --o0o--

1           STAFF AIR POLLUTION SPECIALIST GALLAGHER: The  
2 requirements of the regulation are largely the  
3 responsibility of the manufacturers who cannot use  
4 prohibited HFCs in new refrigeration equipment or foams.  
5 Record keeping of the types and numbers of equipment  
6 entering California are required of all manufacturers.

7           A disclosure statement must certify that the  
8 product uses only compliant refrigerants or foam expansion  
9 agents.

10                           --o0o--

11           STAFF AIR POLLUTION SPECIALIST GALLAGHER: The  
12 total cost of this regulation statewide is estimated at  
13 \$4.25 million over 20 years, or about \$210,000 per year  
14 across all manufacturers to comply with the HFC  
15 prohibitions, as well as the record keeping and disclosure  
16 statement requirements.

17           The Greenhouse gas reduction cost is less than \$1  
18 per metric ton of CO2 equivalent reduction.

19                           --o0o--

20           STAFF AIR POLLUTION SPECIALIST GALLAGHER:

21           Stakeholders generally support CARB's efforts to  
22 preserve the SNAP prohibitions because it provides more  
23 certainty to industry. Many manufacturers have already  
24 made significant investments in using alternatives to high  
25 global warming HFCs. Some stakeholders would like CARB to

1 adopt all of the SNAP prohibitions. We focused on the  
2 past and shortly upcoming prohibitions. Senate Bill 1013  
3 would cover the entire program.

4 Other stakeholders express concerns. Several  
5 requested clarification that record-keeping requirements  
6 only apply to the original equipment manufacturer, and  
7 that the effective date of the HFC prohibitions applies to  
8 the date of manufacture and not installation.

9 These were always our intent, and these and other  
10 clarifying edits will be added through 15-day changes.

11 Also, some manufacturers wanted additional time  
12 to comply. However, approved refrigerants are available  
13 today.

14 --o0o--

15 STAFF AIR POLLUTION SPECIALIST GALLAGHER: Staff  
16 recommends approval of this proposal with 15-day changes.

17 This concludes the staff presentation. We will  
18 be happy to answer any questions from the Board.

19 Thank you.

20 CHAIR NICHOLS: Are there any questions -- are there  
21 any questions before we go to the public?

22 Seeing none.

23 Let's go ahead with our witnesses then beginning  
24 with Mr. Messner.

25 MR. MESSNER: Good morning. So I'm with the

1 Association of Home Appliance Manufacturers. We  
2 represent, in this case, refrigerators that are in  
3 everybody's homes, so they're not actually impacted by  
4 today's, but I wanted to -- so that's why I was neutral,  
5 but I wanted to speak because of the HFC interests that we  
6 have going forward.

7           So refrigerators -- a reminder refrigerators in  
8 every home. They're the centerpiece of everybody's home.  
9 They're actually -- Royal Society said they're the best  
10 invention in history. They preserve food, vaccines, and  
11 they're also the most honored place for artwork, if you  
12 have a magnet to put artwork up.

13           (Laughter.)

14           MR. MESSNER: So we, as an industry, we actually  
15 want -- are willing and want to go to isobutane, and have  
16 been for many years. There are things that have stopped  
17 us from getting there along the way.

18           And so we're in a position of we have said yes,  
19 yes, yes. And we keep getting things thrown in front of  
20 us that prevent industry from doing that. EPA allowed  
21 isobutane to be used. And then there are now charge size  
22 issues. Europe, you can use 150 grams of refrigerant in  
23 refrigerator. In the U.S., EPA restricts it to only 50  
24 grams.

25           And so this is -- we need that increased in order

1 to move forward before we can set a date, because we need  
2 time to redesign, train -- train people, because these are  
3 flammable refrigerants and we don't them in the home,  
4 children and everything, and there's repair -- it needs to  
5 get repaired in the home.

6 We want to do it. We petitioned EPA for this  
7 substituted. We worked with UL.

8 So my ask here is to please, as you go forward in  
9 phase 2, please be focused on the data, the science, which  
10 I think you're -- we're having good conversations with  
11 your program people. But I am -- the reason -- I wasn't  
12 even going to come today, but I'm nervous on the political  
13 side. There's no -- we don't want a political battle. We  
14 don't need a political pounding of the chest. We just  
15 want to roll up our sleeves and get it don't.

16 And there are legi -- there's legi -- when it's  
17 in the legislature, there's political dates. Like,  
18 it's -- everything that's done in SNAP on January 19th,  
19 which is the day before Trump Administration. We need to  
20 be flexible so we can have a U.S./Canadian solution that's  
21 good for us. We want a U.S./Canadian market, and it's  
22 good for the climate.

23 And we're working with Canada. We're working  
24 with EPA. They actually did a rule to increase the charge  
25 size for us. So it's all working together. It



1 unfortunately got stopped by an adverse comment by a  
2 couple individuals in New York. So we have to go through  
3 now another rulemaking. It's an unfortunate -- it was a  
4 un -- it was a noncontroversial way to do the rule -- a  
5 direct final rule through -- so Administrator Pruitt was  
6 able to do that for us, but then that means that if  
7 there's any adverse comments over the matter, it cancels  
8 it.

9           So I just encourage you to please stick to the  
10 data and please let's all work together. We are a willing  
11 partner, but we can't just leap onto dates before we get  
12 other barriers resolved. And we want to get there. So  
13 please just continue to work. Keep the legislative shop a  
14 little more reined in.

15           (Laughter.)

16           MR. MESSNER: Okay. Thank you.

17           CHAIR NICHOLS: Thank you. Yes, Hector.

18           BOARD MEMBER DE LA TORRE: Excuse me.

19           Excuse me. Did you say it was flammable?

20           MR. MESSNER: Yes.

21           BOARD MEMBER BALMES: Isobutane big time. Big  
22 time.

23           MR. MESSNER: Yeah, it's -- isobutane is like  
24 propane. These are flammable refrigerants. They're used  
25 everywhere in the rest of the world, but that's -- so in

1 order -- the flammability they're A3 flammable  
2 refrigerants. And so they're used in refrigerators  
3 throughout the world. They weren't allowed in the U.S.,  
4 but they're allowed in Canada.

5 But, yes, there's only about three cigarette  
6 lighters worth of refrigerant in a refrigerator.

7 But -- so, yes, but they are flammable.

8 BOARD MEMBER BALMES: Just to remind you,  
9 hydrogen is flammable too.

10 (Laughter.)

11 BOARD MEMBER DE LA TORRE: Yes.

12 CHAIR NICHOLS: Okay. Thank you.

13 MR. MESSNER: Any other questions?

14 (Laughter.)

15 CHAIR NICHOLS: Always a good reminder.

16 Mr. Eder.

17 MR. EDER: Hello there again. Harvey Eder for  
18 myself and for the Public Solar Power Coalition. Solar  
19 cooling and refrigeration, is the lifecycle cost  
20 effective? It should be implemented. And supporting SNAP  
21 and that portion of the proposal -- and in reference to  
22 Senate Bill 1383, besides HFCs, they're dealing with  
23 methane, which yesterday I brought to you current  
24 information.

25 And in the Low Carbon Fuel Standards, there's a

1 big push for renewable natural gas. There's drug  
2 resistant antibiotics that are put from the landfill, the  
3 sewer, and animal feed systems waste that's put into the  
4 natural gas distribution system.

5 Methane should be buried preferably, put in the  
6 ground, kept in the ground, burned secondary, but never do  
7 you use -- just emitting it into the air as the Low Carbon  
8 Fuel Standard does to subsidize renewable natural gas.  
9 And it's imported. And 90 percent comes from fracking.  
10 I've been dealing with this for over 10 years with the  
11 staff, and I was told that there was no fracking in the  
12 state and this kind of thing. Anyway, it has to be  
13 revisited, the issues of natural gas and 1383.

14 And solar refrigeration cooling, air conditioning  
15 whenever possible. I know that they mentioned things like  
16 using carbon dioxide. You've got to be like 6, 8, 10  
17 times the equipment. So, anyway.

18 That's all I have to say about this for now.  
19 Thank you. Bye.

20 CHAIR NICHOLS: Thank you. Okay.

21 MR. HAMILTON: Good morning again. Kevin  
22 Hamilton, Central California Asthma Collaborative. I do  
23 want to put on the public record that I made a mistake and  
24 filled out the oppose cards on two things.

25 (Laughter.)

1 MR. HAMILTON: I've asked staff to correct that.  
2 I support both of these things.

3 CHAIR NICHOLS: Thank you.

4 MR. HAMILTON: That's terrible, isn't it?

5 CHAIR NICHOLS: They may have just done it  
6 without even consulting you.

7 MR. HAMILTON: Yes, don't be running my time on  
8 that. He's making me laugh.

9 (Laughter.)

10 MR. HAMILTON: So with regard to HFAs. In  
11 another life, interestingly enough, as Machinist's Mate, I  
12 came out of the service knowing how to do refrigeration.  
13 When I came to California, it's what I did for the first  
14 six years I was here. I actually started and ran a  
15 company in Newhall of my own doing refrigeration.

16 So I'm very familiar with the industry, the  
17 challenges it faces. These systems tend to be very  
18 vulnerable to leaks over time. As we move from our R22,  
19 R14, and some of the other refrigerants into C -- into  
20 HFCs, the industry screamed loud and long that this was  
21 never going to -- it was going to drive us under. It's  
22 this and that, and now we have HFCs everywhere.

23 This is another one of those transitions that we  
24 have to make. In fact, these gases are significant  
25 short-lived climate pollutants. Their power is

1 incredible, and they're ubiquitous throughout our society,  
2 especially in California, and in the San Joaquin Valley,  
3 where we rely on refrigeration for our crop storage,  
4 right? And everybody has a grocery store or somewhere  
5 near their neighborhood. I won't say in their  
6 neighborhood, because we have a lot of neighborhoods  
7 unfortunately that do not, but again, a ubiquitous  
8 refrigerator.

9           It is interesting that there are other ways to  
10 refrigerate things. You mentioned the isobutane. When I  
11 grew up, a lot of the old farms had old refrigerators that  
12 ran on natural gas, interestingly enough, with ammonia.  
13 So that's old school. That's the way it was. An air  
14 conditioning company in Sunland actually created an  
15 air-conditioner called -- a company called Arctic Level AC  
16 that would air condition your house much more efficiently  
17 for a third of the price you paid for a regular HFA based  
18 refrigerator, and ran on 110 volts, which is fascinating  
19 to me.

20           Also, they -- you can use electricity through a  
21 process to create refrigeration. So we really need to be  
22 going deeper down that pathway. I only know this, because  
23 my brother smoked. He smoked Marlboros, and you can could  
24 get all these little credit things. And it turned out you  
25 could get a cooler that you could plug into your cigarette

1 lighter in your car that was an electric refrigerated  
2 cooler, and it actually cooled. I still have no idea how  
3 it worked. I didn't want to cut it up and take it apart.

4 Well, I actually did want to do it, but I didn't,  
5 so...

6 (Laughter.)

7 MR. HAMILTON: But the point is that this  
8 technology is there. We need to continue exploring this  
9 new technology. Refrigeration is key to our survival as a  
10 society. I agree that it's probably the greatest  
11 invention we ever had to both prevent disease and ensure  
12 that our population could spread be healthy. So we need  
13 to make sure we don't kill that industry. Yet, we need to  
14 move forward into this new area. So I support this. CCAC  
15 supports this resolution.

16 CHAIR NICHOLS: Thank you.

17 BOARD MEMBER BALMES: Kevin, I thought I knew a  
18 lot about you, but I didn't know about your previous life  
19 as a refrigeration guy.

20 (Laughter.)

21 MR. HAMILTON: I didn't go to college till I was  
22 almost 30 years old, so...

23 (Laughter.)

24 CHAIR NICHOLS: This is -- it's an extremely  
25 interesting topic though in terms of the global problems

1 of trying to keep things cold and what people are trying.  
2 So go ahead.

3 MR. MORRIS: Good morning. My name is Tom  
4 Morris. I'm with Honeywell. First, I want to thank CARB  
5 staff for their thoughtful and diligent efforts on this  
6 issue. I'm here today to say that Honeywell strongly  
7 supports the proposed regulation, but urges CARB to take  
8 further action to include other phase-out dates set in the  
9 SNAP rule 20 and 21 for all applications addressed by  
10 those rules.

11 Doing so would provide certainty for California  
12 businesses and continue the transition to low global  
13 warming refrigerants. We applaud CARB's leadership in  
14 taking steps to reduce HFC emissions, but we believe CARB  
15 should take the following additional actions that will  
16 have an immediate environmental impact, and send a clear  
17 signal that California will continue to support and lead  
18 the transition out of high global warming potential HFCs.

19 Firstly, with regard to aerosol propellants, CARB  
20 should adopt the phase-out dates for HFCs in all aerosol  
21 propellant end-uses covered by the SNAP rule. As far as  
22 we know, all users of 134A have already transitioned out  
23 of 134A to low-climate solutions in the regulated sectors.

24 But this is an -- on the other hand, it is easy  
25 for them to revert back to using the products that they

1 were previously using, and we think this could have an  
2 impact of one to two million additional tons of CO2  
3 equivalent, if they go back to the old product. We  
4 believe this is an easy low-cost action to implement,  
5 since the transition has already occurred.

6           Secondly, with regard to mobile air conditioning,  
7 we believe CARB should plan to phase-out 134A for mobile  
8 air conditioning as soon as possible. The SNAP rule  
9 called for a 2021 date, and we think it should be as close  
10 to that as possible.

11           Thirdly, with regard to foam-blowing agents, we  
12 believe CARB should expand the list of proposed  
13 applications to all of the ones covered by the SNAP 20 and  
14 21 rules. While CARB has indicated that they intend to  
15 address those at a later date, we think it would be better  
16 to do it now. The industry needs certainty in planning  
17 for future phase-outs.

18           And finally, with regard to stationary  
19 refrigeration, again, we support the proposals, but  
20 suggest they add the additional applications that were  
21 outlined in the short-lived climate pollutant workshops.

22           Adoption of all of the dates would continue  
23 long -- California's long history of demonstrated  
24 leadership on environmental policy. We expect other  
25 states would view these as simple straightforward



1 approaches and would follow California's lead.

2 And based on that, we want to fully support this  
3 legislation and thank you for your time.

4 CHAIR NICHOLS: Thank you.

5 MS. WALTER-TERRINONI: Good morning. Helen  
6 Walter-Terrinoni from the Chemours Company.

7 And I greatly appreciate the opportunity to speak  
8 with you this morning. We are part of the regulated  
9 industry, and appreciate the efforts of the program staff  
10 for their tremendous analysis and willingness to engage  
11 stakeholders in this process.

12 As has been discussed already this morning, I  
13 wanted to kind of talk a little bit about the nature of  
14 the approach that the program staff has taken. I think  
15 it's a very strong approach. We considered the following  
16 as we thought through this. The State needs to be meet  
17 its statutory guideline, the 60 percent of the 2013  
18 emissions. In order to do that, they have to take -- they  
19 have to use a bunch of different measures. The SNAP  
20 Program, if they didn't adopt these SNAP rules, they must  
21 shift the burden to other parts of the industry, other  
22 parts of the industry that may be less prepared than the  
23 sectors that have been chosen in this case.

24 So, for example, we've talked about flammable  
25 refrigerants this morning, right? There are some mildly

1 refrigerants that are in consideration for use in air  
2 conditioning. However, safety standards and codes need to  
3 be upgraded in order for them to be used safely. This is  
4 a lengthy process. There are a number of studies that  
5 have to be completed, and it may take some time for that  
6 to be done.

7           If CARB were to choose not to adopt the SNAP  
8 rules, then they would have to shift the burden perhaps in  
9 a more -- a more stringent way to these sectors that are  
10 not yet prepared for those transitions. So we think that  
11 this is a very reasonable approach that the Board is  
12 considering.

13           In addition to that -- in addition to that, there  
14 are a number of fluoro chemical users who have invested  
15 very heavily in preparation for compliance with the SNAP  
16 rules. And they are at risk of a stranded investment,  
17 because of the kind of pendulum swinging back and forth  
18 around these rules around the country. And so I think  
19 that there is significant frustration around that.

20           I did want to recommend that any new measures and  
21 appropriate -- that consideration be made for appropriate  
22 modifications to the SNAP rules. So, for example, the  
23 example that Kevin Messner made around the Association of  
24 Home Appliance Manufacturers. In that case, they're  
25 waiting for approvals to -- for the replacement product to

1 be allowed. They can't make the transition until then.

2 They're asking for very narrow consideration.  
3 They're not asking for the entire product line to be  
4 reconsidered, just the larger units that would require the  
5 larger charge size that has not yet been approved at the  
6 federal level.

7 So they've been very narrow in their request for  
8 leniency. And I think that that is a reasonable precedent  
9 to set, rather than maybe considering large swaths of  
10 industry to have differences in the SNAP rules.

11 CHAIR NICHOLS: Thank you.

12 MS. WALTER-TERRINONI: Thank you very much for  
13 your time.

14 CHAIR NICHOLS: Any questions?

15 Okay. Thank you.

16 MR. SKVARLA: Good morning Chair and members.  
17 Mikhael Skvarla with the Gualco Group here on behalf of  
18 the Carrier Corp the parent company to United  
19 Technologies.

20 Kind of Kevin and Helen both kind of made the  
21 point. As we go further down the path into the next phase  
22 of rules, we do have to remember that the fire standards  
23 and the Building Codes need to be considered in this  
24 process, which may delay kind of a more aggressive  
25 timeline.

1           In doing so, Carrier has spent hours with staff,  
2 and we really appreciate that time, and think that we  
3 should probably consider some additional stuff around R3,  
4 reuse, recovery, recycle. We have really low rates and we  
5 could get a lot of benefit from doing that, and that would  
6 help extend the development timeline of the kind of home  
7 air-conditioner, and things like that, that may have  
8 explosive charges, highly flammable propane. You know,  
9 it's fairly charged, or even the CO2 stuff which has much  
10 higher pressures than existing systems. We're talking,  
11 you know, thousands of PSI, which would require us to  
12 train the industry installers and others to these new  
13 safety standards.

14           We need the time. We're working very diligently  
15 on moving forward. We've provided staff information or  
16 hopefully our lawyers will allow us to provide more over  
17 time. We support you guys moving forward and hope we can  
18 be a part of this process into the next few years.

19           Thanks.

20           CHAIR NICHOLS: Thank you.

21           Mr. Skvarla was our last witness on this item.

22           It's a very interesting topic and one that leads  
23 to a lot of other interesting questions. But at the  
24 moment, we've got a pretty narrow proposal in front of us,  
25 which is just designed to keep some existing protections

1 from going away. It's a foot in the door in a sense for  
2 ARB to be entering into this area, but I think it's one  
3 that, given our interest in the short-lived climate  
4 pollutants is something we're going to have to be becoming  
5 much more interested and expert in.

6 So I would ask for a -- oh, Dr. Balmes.

7 BOARD MEMBER BALMES: I don't need to make this  
8 any longer than it needs to be, but I just want to know,  
9 was there anything staff wanted to respond to in terms of  
10 the testimony?

11 DEPUTY EXECUTIVE OFFICER KARPEROS: Thank you,  
12 Dr. Balmes. As Chair Nichols said, this -- the proposal  
13 in front of you is relatively narrowly tailored to  
14 backstop the hole that's been created in the SNAP Program.  
15 What we really want to do is turn our attention to the  
16 sorts of items that you heard in the testimony. There are  
17 lots.

18 If you recall in our presentation, there was, I  
19 think, 45 percent of the reductions from other measures,  
20 and we need to turn our attention to those. The sorts of  
21 things that the gentleman from Honeywell spoke to are  
22 where we want to be looking.

23 CHAIR NICHOLS: And it is an area where  
24 technology is also needed -- advances in technology  
25 clearly.

1 Ms. Berg.

2 VICE CHAIR BERG: And just following up on that,  
3 does staff feel that they do have the flexibility that a  
4 couple of our speakers spoke about both in the ability  
5 to -- with the enforcement dates, and the home appliances,  
6 the refrigerators, for example, in looking at being able  
7 to coordinate on the various levels internationally and so  
8 forth?

9 RESEARCH DIVISION CHIEF CROES: This is Bart  
10 Croes. So the -- some of the flexibility was regards to  
11 sectors we don't yet regulate. So we will certainly  
12 factor those issues about codes and standards into our  
13 future rulemakings.

14 In other cases, some of the stakeholders have  
15 asked for flexibility in record keeping. So we'll  
16 consider that as part of the 15-day changes.

17 VICE CHAIR BERG: Thank you very much.

18 CHAIR NICHOLS: Okay. Do we have a motion?

19 BOARD MEMBER GIOIA: I'll move the item.

20 VICE CHAIR BERG: And I'll second.

21 CHAIR NICHOLS: Okay. Thank you.

22 Any further discussion?

23 If not, all in favor, please say aye?

24 (Unanimous aye vote.)

25 CHAIR NICHOLS: Any opposed?

1 Abstentions?

2 Great. Yes.

3 ATTORNEY DILLEY: Sorry. This is Shannon Dilley.  
4 I'd just like to make sure the record gets closed.

5 CHAIR NICHOLS: Ah. I did not formally close the  
6 record. You're right. Getting sloppy here.

7 (Laughter.)

8 CHAIR NICHOLS: Thank you very much.

9 We should indicate that we did close the record  
10 actually before we took the vote. And so it will stay  
11 closed. Thank you.

12 Thanks for the reminder.

13 We have two people who have signed up for public  
14 comment. We have Harvey Eder and we have Mary Humboldt.  
15 So let's hear from Mr. Eder first so he can complete his  
16 unbroken record of having spoken on every item and in both  
17 public comment periods in over two days.

18 MR. EDER: Correction. It's one and a half day,  
19 and I was cut for the 2 -- second and third items  
20 yesterday.

21 It's -- I'm Harvey Eder. I'm speaking for myself  
22 and for the Public Solar Power Coalition.

23 It's -- I want to tell you a little bit more  
24 about my history like with solar. I first saw solar in  
25 '68 in Israel on the roofs of the apartment house where my

1 survivor relatives lived -- live. And I was the first  
2 registered environmental study student in the UC system in  
3 the fall of 1970, and worked on getting a living Christmas  
4 Tree in the White House to give to Nixon. And met the  
5 first administrator of the Environmental Protection Agency  
6 who accepted the tree on behalf of Nixon, William  
7 Ruckelshaus. And he asked me if I was with Environmental  
8 -- with the Environmental Action Foundation. I told him  
9 no. In '74, I worked with him with their utility project  
10 with a Rick Morgan, who was head of the Solar Renewable  
11 Committee with the regulatory associations around the  
12 opportunity.

13           Anyway, took -- in '74 installed what I think is  
14 the first solar system in UC on campus at Santa Cruz at  
15 the organic farm, 40 acres, and plumbed that system in  
16 March. And in '76 taught the solar section of -- at UC,  
17 and was the solar education specialist '77 and '78 for  
18 Santa Cruz county. And I met Sylvia Segal that wanted to  
19 take PG&E's energy conservation programs and move it into  
20 our county, which like started public solar power.

21           We started the Santa Cruz Alternate Energy Co-op  
22 in '74, which is spoof on the AEC. And it was basically  
23 educational. Did teach at the community college there.

24           And anyway, worked with a TURN and out of their  
25 offices, and was their expert witness on solar. And also



1 worked at the PUC, especially on low-income solar  
2 financing models, and litigated, STURN did. They were --  
3 had the investor-owned utilities finance, which was  
4 getting into extending what they did to -- and getting  
5 into financial institutions areas.

6 And there's antitrust inequity issues, and went  
7 to the Supreme Court, and had some success with -- as I  
8 mentioned yesterday.

9 Anyway, I have worked since '11 like in L.A.  
10 county to try to get a CCA. And a couple days ago was at  
11 their board meeting, and they not only have a CCA in L.A.  
12 County, but they have Ventura County is part of it, and  
13 there's like 40 entities now. A month go there was 30, a  
14 month before that there was 24. And I know -- I guess I'm  
15 out of time, but -- all right.

16 CHAIR NICHOLS: Thank you.

17 MR. EDER: You folks ought to be involved in that  
18 as well as the districts and try to get the Governor to  
19 come around what he's doing with the PUC and trying to  
20 harm CCAs is not good, and that's going on right now.

21 CHAIR NICHOLS: Okay. Mary Humboldt.

22 MS. HUMBOLDT: Good morning. I'd like to thank  
23 that gentleman for all of his wonderful work.

24 I'm here. I'm a resident -- a 40 year resident  
25 of the Inland Empire. I came to California in 1962 from

1 Minnesota to go to Pomona college. And one of the first  
2 things I did was get on my bike and ride down to the City  
3 of Pomona. I'd never heard the word "smog" before. Going  
4 downhill was okay. Coming back, it was just miserable,  
5 because it was 4:00 o'clock in the afternoon. And I don't  
6 think most of you are old enough to know what smog was  
7 like in the sixties, but it was just awful out here.

8 Over the last 50 years, smog has greatly  
9 improved. But here in the Inland Empire, we are still  
10 besieged by particulate matter. We have a higher heart  
11 attack rate, higher asthma, and higher cancer. This is a  
12 great tragedy. Over the last five years, there is a  
13 notable increase in the smog in the chemical taste you get  
14 in your mouths. This had all but disappeared over the  
15 last 10, 20 years. It had gotten better every year. And  
16 some must be because of the car improvements and also your  
17 good works.

18 But nevertheless, it's back. I lived in London  
19 in the early seventies when smog was becoming a horrific  
20 problem over there. I had a member of parliament in my  
21 neighborhood say, "Poor people do not deserve clean air".  
22 That has stuck with me all these years. "Poor people do  
23 not deserve clean air".

24 The City of Riverside has 330,000 people. The  
25 average wage of a family of four of non-public employees

1 is \$40,000 a year. I believe that less fortunate people  
2 deserve cleaner air and cleaner water than the well-to-do.  
3 They can -- the wealthy can afford good medical care, the  
4 poor cannot. When you vote on issues that affect the  
5 Inland Empire, remember the mantra, "Poor people deserve  
6 clean air".

7           Please, our beautiful farmland is being converted  
8 into jungles of warehouses with polluting trucks  
9 everywhere. It's an atrocity. And I don't know how  
10 anyone in good conscience, but our public officials seem  
11 to be able to vote again and again for these warehouses.

12           Please do not write us off, and thank you very  
13 much for your good work.

14           CHAIR NICHOLS: Thank you for coming.

15           This Board does have a long history with  
16 Riverside. And it's good to be back here again, and to  
17 know that we're going to be spending more time as a result  
18 of our laboratory that we're building adjacent to the UC  
19 campus here in the Inland Empire.

20           But you're right, that there's a history of  
21 Riverside having been impacted by smog that was blown in  
22 from other places, and a strong effort to fight back on  
23 behalf of the people who lived out here. It's a --  
24 there's a lot of interesting history there. And some of  
25 it is being published, in fact, right now, because it is

1 the 50th anniversary for the California Air Resources  
2 Board. So I think you'll find some of that reminds you of  
3 some things in your own history and you may learn some as  
4 well.

5 If there's no other business to come before the  
6 Board, I think we could be adjourned. So let's do that.

7 We will -- let's just before we -- before we  
8 break up, let's just take another moment to reflect on the  
9 important work and life of a woman who passed away. This  
10 was the Chief of Staff for Governor Brown, even though  
11 that wasn't her title. Executive Secretary was what she  
12 was called, but she functioned in all respects as the  
13 person who made things work in California State  
14 government, and who just dedicated her whole life to  
15 trying to work in the political sphere in a way that would  
16 be impactful for people's lives, and a great human being  
17 as well.

18 So we'll say just a moment -- take a moment and  
19 then adjourn in memory of Nancy McFadden.

20 (Moment of silence for Nancy McFadden.)

21 CHAIR NICHOLS: Thank you.

22 (Thereupon the Air Resources Board meeting  
23 adjourned at 10:29 a.m.)

24

25

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

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

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

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

IN WITNESS WHEREOF, I have hereunto set my hand this 7th day of April, 2018.

JAMES F. PETERS, CSR  
Certified Shorthand Reporter  
License No. 10063