Appendix F:
March 23, 2017 Board Hearing Testimonies

Comments received as testimony at the second Board Hearing,

March 23, 2017
much. It was a great conversation, and we've got some items to work on going forward. Thanks to the MPO directors for coming and staying with us, and for all the good analytical work you've been doing. And the next question is -- first of all, we obviously need to take a break. Everybody needs to stand up and stretch and move around a little bit.

Are we up for dealing with the final item on our agenda or will people just -- if you just can't take it any more, which I would understand, we could move it to tomorrow. Why don't you think about it while you're taking your stretch, and then we'll decide.

(Off record: 7:13 p.m.)
(The thereupon a recess was taken.)
(On record: 7:19 p.m.)
CHAIR NICHOLS: I'm on now.

Thank you. Thank you, sound engineer. We are dependent on you. We're going to take the last item, because the staff has told me that they have boiled their presentation down to the essentials, the absolute essentials. Thank you so much.

(Laughter.)

CHAIR NICHOLS: And we have a short list of witnesses, so -- and again, we'll be imposing the two-minute limit. This is actually the -- placement of
this item on the agenda does not reflect the importance. This is actually a very important item that we're dealing wit here, but everything has to have an order, and this -- this is where it fell today.

So with that, I am going to call Agenda Item 17-3-6. This is the --

BOARD MEMBER MITCHELL: Madam Chair?

CHAIR NICHOLS: Yes.

BOARD MEMBER MITCHELL: Madam Chair, I just need to announce that I'm going to recuse myself from this item and leave the dais, because a decision on this item may affect a financial interest that I hold, so...

CHAIR NICHOLS: Thank you very much, and thank you for letting us know that you weren't just leaving to go party while the rest of us were still working --

(Laughter.)

CHAIR NICHOLS: -- because there are others who would have, I'm sure, opted to join you.

We'll see you tomorrow.

BOARD MEMBER RIORDAN: 8:30.

CHAIR NICHOLS: 8:30 tomorrow morning.

(Laughter.)

CHAIR NICHOLS: 8:30, yes.

Okay. So last item on the agenda is a proposed regulation for greenhouse gas emissions standards, for
crude oil, and natural gas facilities. It's the second of two hearings on this item. The first hearing considered the proposed regulation along with the staff's 15-day change proposals. And this is now back before us for final approval.

And with that, I'm going to turn it over to the staff. It's about methane.

EXECUTIVE OFFICER COREY: Yes, go.

CHAIR NICHOLS: Okay. You got a nice picture.

(Thereupon an overhead presentation was presented as follows.)

CHAIR NICHOLS: That's a good start.

AIR RESOURCES ENGINEER FISCHER: Thank you.

Thank you, Mr. Corey. Good evening, Chair Nichols and members of the Board, right?

(Laughter.)

CHAIR NICHOLS: He was going to waive his presentation any way.

(Laughter.)

AIR RESOURCES ENGINEER FISCHER: Well, given the late hour, and that this is the second hearing, I will just be covering the highlights.

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AIR RESOURCES ENGINEER FISCHER: Here's an
overview of my presentation.

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AIR RESOURCES ENGINEER FISCHER: Now, I will go through a little background.

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AIR RESOURCES ENGINEER FISCHER: Both the original and 2013 update to the Climate Change Scoping Plan identified the oil and gas sector as a significant source of methane emissions. In addition, the Short-Lived Climate Pollutant Strategy includes a 40 to 45 percent reduction in methane from this sector by 2025. The proposed regulation also helps further the objectives of SB 4 and SB 887.

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AIR RESOURCES ENGINEER FISCHER: In 2013, methane emissions from this sector accounted for approximately four percent of the total statewide methane emissions in California. Other large sources of methane include agriculture, waste handling, and pipeline related activities.

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AIR RESOURCES ENGINEER FISCHER: We coordinated with our sister agencies at the Division of Oil and Gas and Geothermal Resources, or DOGGR, and the California Public Utilities Commission, or CPUC, to ensure consistency with the related rule-makings. Also, we have been working closely with the local air districts throughout the development of this regulation.

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AIR RESOURCES ENGINEER FISCHER: We've also been reviewing federal actions related to oil and gas facilities. Our proposal is for both new and existing sources, is broader in coverage, and is generally equivalent or more Stringent. We've been working to harmonize these requirements as much as possible in order to smooth implementation and to streamline the different testing and reporting requirements.

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AIR RESOURCES ENGINEER FISCHER: I will now briefly discuss the proposed regulation with changes incorporated since the last Board hearing.

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AIR RESOURCES ENGINEER FISCHER: We have been developing the proposed regulation for over two years
through an extensive engagement process with air districts
and stakeholders.

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AIR RESOURCES ENGINEER FISCHER: The proposed
regulation overs intentional emissions, also known as
vented emissions, as well as unintentional emissions
called fugitive emissions or leaks.

Here's a list of the types of new and existing
oil and gas operations covered by this rule.

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AIR RESOURCES ENGINEER FISCHER: I will now
describe the main provisions of the proposed regulation.
Separator and tank systems are used for separating crude
oil from produced water or for separating produced water
from natural gas. As part of the 15-day changes, we
clarified the provisions to exempt very low throughput
systems, as well as small gauge tanks because these
systems or tanks would have negligible

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AIR RESOURCES ENGINEER FISCHER: Circulation
tanks are used in conjunction with well stimulation
treatments and used to remove excess sand from a well after hydraulic fracturing or fracking.

In addition to following a best practices management plan, as part of our 15-day changes, we clarified that the technology assessment specified in the proposed rule be made available in time for the ARB Executive Officer to make a determination on whether or not vapor controls will be required by January 1st, 2020.

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AIR RESOURCES ENGINEER FISCHER: Leak detection and repair or LDAR is a program designed for finding and repairing leaking components, such as valves, flanges, or pipe-fittings. Under this proposal, LDAR would be used to find and repair leaks of methane at all types of facilities, including natural gas facilities not covered by district rules.

The proposal requires quarterly instrument inspections to locate leaks. These requirements have been modeled directly after existing local district rules. In the July 2016 version of the proposed regulation, there was a provision that allowed facilities to step down from quarter to annual inspections.

Based on additional scientific information and per the Board's direction, we removed the annual step-down provision as part of our 15-day changes. During the
comment period, we received comments by some stakeholders that believed that leaks found in the 4th quarter will result in an automatic violation. We clarified that as stated in the context of the regulation, they will not receive a violation for repairing leaks within the specified time frames.

We also received comments expressing concern that a facility may need to vent or blow down large volumes of gas in order to make minor repairs, and that this could create more emissions. We believe that -- we believe that most leaks would not require such blow downs to repair. Nevertheless, this concern can be addressed for safety or natural gas system reliability reasons by way of the delay of repair or critical component provisions which allow for longer repair times.

We plan to include these clarifications as part of our Final Statement of Reasons that we submit to the Office of Administrative Law. And we may also find a need to issue additional guidance during implementation for this and other topics.

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AIR RESOURCES ENGINEER FISCHER: For underground natural gas storage facilities, the proposal includes a monitoring plan that covers both ambient air monitoring and wellhead monitoring designed for the early detection
of leaks. These requirements are in addition to LDAR and are based on lessons learned from Aliso Canyon, which highlighted the need for regular monitoring at these high pressure concentrated sites.

As part of the 15-day changes, we revised the ambient air monitoring provision to include upwind and downwind monitoring censors and revise the baseline monitoring criteria. We also incorporated new requirement -- a new requirement based on SB 887 requiring the use of optical gas imaging in the event of a well blowout.

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AIR RESOURCES ENGINEER FISCHER: We made no significant changes to the provision for -- on compressors, so in the interests of time, I'll skip this slide.

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AIR RESOURCES ENGINEER FISCHER: We also made no significant changes to pneumatics or measurement and reporting requirements, so I will skip this slide.

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AIR RESOURCES ENGINEER FISCHER: Beginning January 1st, 2018, the testing and reporting requirements take effect. Beginning January 1st, 2019, the equipment changes-outs go into effect. And finally, beginning
January 1st, 2020, circulation tank must be controlled with the use of a vapor collection system, unless the ARB Executive Officer determines otherwise, after reviewing the results of the technology assessment.

We have developed this phased-in approach to put the regulation in place as quickly as possible, while recognizing necessary lead time.

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AIR RESOURCES ENGINEER FISCHER: The overall estimated annualized cost of the proposed regulation is $27.3 million, and the regulation results in estimated annual methane reductions of more than 1.4 million metric tons of CO2 equivalent using a 20-year global warming potential. These estimates reflect 15-day changes.

The proposed regulation resulted in an overall cost effectiveness of about $19 per metric ton of CO2 equivalent reduced.

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AIR RESOURCES ENGINEER FISCHER: This proposal also results in statewide emission reduction co-benefits, and VOC -- of VOC and toxic air contaminant and results in a neutral statewide NOx impact.

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AIR RESOURCES ENGINEER FISCHER: Next, I will briefly discuss the environmental analysis.
AIR RESOURCES ENGINEER FISCHER: Staff completed a draft environmental analysis, or EA, for the proposed regulation. Staff received two comment letters on the draft EA during the 45-day public comment period. Staff has also provided the final EA and written responses to comments on the draft EA to the Board for your consideration.

AIR RESOURCES ENGINEER FISCHER: I will now cover some of the aspects related to implementation.

AIR RESOURCES ENGINEER FISCHER: As I mentioned, the local air districts play a major role in reducing emissions from stationary sources. This proposal allows both ARB and the districts to implement the proposed regulation. However, district implementation is preferred. Districts are encouraged to charge fees to help cover the cost of implementation, and that can also keep enforcement penalties. ARB is also working with the air pollution control officers of affected districts in exploring additional resource options to aid with the cost for personnel and test equipment.

AIR RESOURCES ENGINEER FISCHER: ARB and the
districts have developed a Memorandum of Agreement that specifies each agency's roles and responsibilities, enforcement coordination, as well as a supporting -- as well as supporting information and data sharing. We expect the MOA to be completed this summer prior to implementation of the regulation.

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AIR RESOURCES ENGINEER FISCHER: As is typical of ARB programs, we will examine the data reported each year, along with any additional voluntary data provided. We also plan to work closely with CAPCOA and stakeholders to develop guidance, while we monitor implementation. This may include guidance on clarity issues related to LDAR concerns on the fourth quarter violations and blow downs. We plan to periodically update the Board and propose adjustments as necessary.

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AIR RESOURCES ENGINEER FISCHER: I will now present staff's recommendation.

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AIR RESOURCES ENGINEER FISCHER: Staff recommends that the Board adopt Resolution 17-10 to approve the written responses to the environmental analysis comments, certify the final environmental analysis, and make the required CEQA findings, to adopt the final regulation.
order, and direct staff to continue working with the districts to finalize the MOAs.

That concludes my presentation, I would now like to introduce Alan Abbs, the Executive Director of the California Air Pollution Control Officers Association to say a few words.

After Alan, you will also hear from Rob Habel of the Division of Oil, Gas and Geothermal Resources. In addition, CPUC has provided a letter of support.

CHAIR NICHOLS: Hello again.

CAPCOA EXECUTIVE DIRECTOR ABBS: Good evening. I didn't realize I had a position of honor tonight for this. (Laughter.)

CAPCOA EXECUTIVE DIRECTOR ABBS: I thought I was just going to be a commenter.

My name is Alan Abbs and I'm the Executive Director of the California Air Pollution Control Officers Association. Thank you for the opportunity to come up and support this regulation, that if approved and implemented would result in significant reductions in methane across the State, as well as toxic air contaminants. And I think that's one of the things that we're -- we strive to do in all these GHG regulations is not only get the reductions for GHGs, but also get the criteria pollutant reductions and the toxic air contaminant reductions. And so that's a
nice thing to see as part of this regulation.

This -- staff only had give minutes to do the presentation, but it belies that there's been a lot of work that's gone into making this regulation. And the air districts have been working with ARB staff for over two years in various work groups to look at the regulation and the implementation, and try to do refinements.

And this regulation is one of those unique ones that connects stationary sources with greenhouse gas regulations. And so it's a mash up of air district responsibilities, and ARB responsibilities. And these are particularly difficult regulations to get through and -- but we manage to do it.

And so we have haven't fully gotten the process down, but we got pretty close this time. And we're looking forward to finishing up the MOU process and the implementation phase to make this regulation a success.

The last thing I'll stay is that there -- we have two types of air districts that are going to be implementing this regulation. We have oil and gas districts, ones that have existing oil and gas operations and traditionally have -- have these facilities under permit. And then the non-associated gas districts, which traditionally have only permitted combustion devices that are at these non-associated gas facilities like
compressors and dehydrators.

The non-associated gas districts, as staff mentioned, are going to need some significant support going forward to make sure that they can implement this regulation, because they're going to be adding a lot of -- a lot of components as part of their -- as part of their permitting and enforcement that haven't been permitted and inspected before.

And so staff mentioned some help with staffing, with resources, with equipment, we'll all be -- we'll all be looking for support from ARB for that going forward.

So with that, thank you for the opportunity to comment. And as I said, we look forward to working with CARB during the implementation phase.

Thanks.

BOARD MEMBER SHERRIFFS: Can I ask a question?

CHAIR NICHOLS: Yes.

BOARD MEMBER SHERRIFFS: I was wondering how many districts this will affect and what percent of them, in fact, are -- have expressed an interest in --

CAPCOA EXECUTIVE DIRECTOR ABBS: In implementing the --

BOARD MEMBER SHERRIFFS: In implementing it, yes.

CAPCOA EXECUTIVE DIRECTOR ABBS: So we have -- we have 15 air districts that look like they would be
affected or would have sources that they would regulate as part of this regulation, and about, roughly split, half are oil and gas districts and half are non-associated gas. And from what I've been able to figure out, the oil and gas districts are all going to be able to roll those regulations into their existing enforcement and implementation. We have the non-associated gas districts that are really looking at the regulation. And part of it's going to rely on the implementation and the Memorandum of Understanding with ARB.

But I believe that our goal should be to get all of the districts to do it. But it will be challenging, but we'll give it a shot. May not be successful, but we'll give it a shot.

Thanks.

CHAIR NICHOLS: Okay. We were going from our colleagues with Department -- Division of Oil and Gas.

DOGGR SPECIAL ASSISTANT HABEL: Good evening.

CHAIR NICHOLS: Hi.

DOGGR SPECIAL ASSISTANT HABEL: My name is Rob Habel with the Division of Oil and Gas and Geothermal Resources. As Joe mentioned, a sister agency to ARB. First of all, I'd like to mention that the Division of Oil and Gas is the major regulatory agency responsible for overseeing the development of oil and gas
resources in the State.

And although the majority of our work deals with the subsurface, the construction of the wells, the operating the wells, and a variety of other things, we also do have a component of the surface, such as tanks, pipelines, compressors and so on. Therefore, we have an overlapping role with a lot of the work that ARB does. And so we've been working very closely with ARB for several years, even before SB 4. You remember SB 4 dealing with well stimulation, hydraulic fracking.

And through that effort, we do have a memorandum of agreement to share information, and bring ARB into the permitting process, and take their comments. So they're very involved.

And more recently, we've had a lot of conversations with the staff ARB dealing with Aliso Canyon. So we've had meetings on a regular basis. We've conducted site visits looking at new technology. And because the Division has Emergency regulations in effect, as a result of Aliso Canyon, we had leak detection protocols associated with that.

And as a result of the emergency regulations, we're in the process of finalizing having permanent regulations, which should be coming out next several weeks. And in that component is with the leak detection
most of that really should fall onto ARB, but since we were already poised to do that, we have that responsibility, and we're working very, very closely with the ARB staff.

At the same time, with our rule-making that's coming out very soon in the next several weeks, we've also worked out a nice hand-off to ARB. So we've been informed that even though the regulations may be in effect January 1, 2018, they probably won't be fully implemented until September 2018. So the way we worked very closely with our legal team and ARB's legal team to draft our regulations to make a nice smooth hand-off that we will continue doing the monitoring until ARB's program is fully implemented.

And so we are here in support. We're working very closely with ARB, and we look forward to continually working closely with the staff to regulate the oil and gas industry and any emissions. And I'm here to answer any questions if you may have any.

CHAIR NICHOLS: Thank you. I appreciate very much your being here and spending the time with us, and always your collaboration on this. It is always a little bit tricky when you've got agencies with slightly different mandates, but overlapping areas of jurisdiction. And we certainly recognize that your Division has the lead
on this industry as far as California is concerned. But we get to -- we get to be responsible for everything that competes -- everything that contributes at least to greenhouse gas emissions. So it's -- I think it's worked well, and thank you for all your help.

Thank you.

DOGGR SPECIAL ASSISTANT HABEL: Thank you.

CHAIR NICHOLS: As you mentioned, we also have a letter from the Public Utilities Commission urging us to move forward at this point as well.

So I guess we should now turn to the witnesses. If you want to come forward, those of you who have made the long trek and are still with us starting with Bruce Baizel and on.

MR. BAIZEI: Good evening. Good evening, Chairman Nichols and Board. Thank you for persevering. I came from southwest Colorado. And it's a little different than the last time I came and submitted comments. I worked -- we have an -- I'm an NGO. We work with communities on the impacts from oil and gas and mining. And under my supervision, we have a couple of the OGI infrared cameras that we've been using in conjunction with communities, particularly down in Kern County, but also in L.A. basin to look at emissions. And we do some air testing and things like that. So I participated in the
Colorado rulemaking when we did our methane rule in 2014.

So part of the reason I felt it was important to be here today was because this is a very significant rule, and we are extremely pleased that this has come to fruition. This rule -- this rule nationally will raise the standards for what's done in terms of leak detection, and control of methane emissions in the oil and gas exploration and production and storage areas.

So for us as an NGO trying to reduce impacts we're extremely pleased. And I think for that reason alone, it was worth the price of the plain ticket to come out. And hopefully, you will be passing that -- passing this.

But the second reason is that we -- because we do work with communities, and part of what we do is try to help increase enforcement, and we -- so we read the rule very carefully. And we're very comfortable with the provisions that are in there that will allow us to continue to use the infrared technology to say, yes, what you're smelling is also -- have some methane components to it. And therefore, you can go to the air district. And we've done that successfully this past fall. For example, some tanks down in Kern County, where they submitted the videos and the complaint was filed, and a violation of -- notice of violation was issued.
So I'm really pleased that you're doing this, and glad to be here.

CHAIR NICHOLS: Thank you. Thanks for joining.

MR. EDER: Is there a timing thing?

CHAIR NICHOLS: Yes.

MR. EDER: Where is it?

CHAIR NICHOLS: You can see it off to your left, I believe. The number should pop up as soon you start. Well, it's not popping up at the moment. Where is the timer.

MR. EDER: Is this it here?

CHAIR NICHOLS: It's that yeah, but it hasn't started yet.

MR. EDER: One that doesn't move. Anyway.

CHAIR NICHOLS: It won't start until you start speaking.

VICE CHAIR BERG: And the lights in front of you --

CHAIR NICHOLS: And there's a light in front of you also. That green light that -- so --

MR. EDER: Okay. Well, knowing how much time you have is valuable. Anyway. I support this. I did some work with going to DOGGR meetings about solar for storage, which was ignored. They're using these -- the same facilities could be used for solar storage as used for
natural, gas and oil.

Worked with a group on fracking. You folks said 8, 10 years ago there was no fracking in the State. Well, there is. And that happens on the 90 percent of the natural gas that comes into the State.

This brings the greenhouse gas numbers way up, even on 100-year basis over 100. Work done out of Cornell Howarth et al. incorporated into the record by reference. They're -- this -- we have -- we've got oil and gas around, and we've got to use them for the transition. Also, there's the possibility of the State litigating against ExxonMobil. They knew about this since '76 -- I see a green light -- this is a minute that I'm limited to?

Okay. All right. Well, they've got to be phased out, and solar has to be phased in.

Oh, okay. Anyway. There's no two ways about it. The sooner we do it, the better, and there is, you know, the laws on the books about non-renewable fossil fuels. And anyway, we need to work on solar conversion as soon as possible.

It says in the law that is expediently as practical, which means at least five years ago, when we had the '12 plan and stuff was cost effective then.

MS. THOMAS: Good evening. I'm Taylor Thomas with --
(Timer went off.)

MS. THOMAS: Woop. I didn't even start yet.

I will be very brief. I'm Taylor Thomas with East Yard Communities for Environmental Justice. I'll just get right to the point. I'm here with four specific asks, maintain the leak threshold at 1,000 parts per million, maintain the quarterly leak repair timelines, prioritize the top 25 percent of disadvantaged communities, as identified by CalEnviroScreen, and move forward with the adoption of this rule today.

Thank you.

MS. ALI: Good evening, Chair Nichols and members of the Board. Fariya Ali on behalf of PG&E. I'd like to start off by really thanking staff for all of their hard work on the oil and gas regulation. In particular, staff's efforts to try and address some of our operational concerns.

For example, as Mr. Fischer mentioned, the clarification by ARB that it is not their intent for leaks above the thresholds that are found by operators in the fourth quarter of every year to automatically be considered violations, as long as they're repaired on time is really important and we look forward to seeing this explanation in the Final Statement of Reasons, and recommend that it be included in guidance to the local air
districts as appropriate as well.

However, the use of EPA Method 21 as the basis in this rule for characterizing the severity of leaks is still a major concern, as it can lead to a considerable -- as it could lead to a considerable amount of time and resources being spent to repair leaks of negligible size. Method 21 is not a good predictor of actual methane emissions. A leak that has a high concentration measurement does not necessarily indicate a high emission leak. And this has been demonstrated in the Stage Research Report recently released by ARB as well as our survey results as well.

So as we move forward into implementation, we really hope that ARB will continue to work with operators to identify better tools and methodologies to characterize leaks in Method 21 alone, and that we can incorporate these into the regulation as soon as its feasible to make amendments. I'd just like to thank staff again, and look forward to continuing to work on this to achieve our common goal for cost effective methane emission reductions to the natural gas system.

Thank you.

MS. PHILLIPS: Kathryn Phillips with Sierra Club California. This was a rule that one of our national attorneys, Elly Benson has been following carefully. The
fact that national got involved should suggest to you how important this is for the Sierra Club, but also for everybody around the country who's been watching this rule.

I just want to urge CARB to continue the work that it's going to be doing on the MOA to make sure that there's a very careful plan to make sure this is actually implemented at the local level, and there's probably going to require some monitoring and some close coordination.

Also urge ARB to prioritize enforcement at facilities near environmental justice communities. And then finally, I just want to thank you for requiring the quarterly inspections and for rejecting a stepdown provision. That's a very important one for all of us.

Thank you.

MR. BARRETT: Good evening. I'm Will Barrett with the American Lung Association in California. The American Lung Association supports the reduction of methane and other toxic emissions from the whole lifecycle of the oil and gas sector.

In contrast to the federal dialogue right now on methane, we view this proposal before you as an important signal that will continue to protect our people and our climate against the unnecessary waste and leakage in the oil and gas sector. We view the quarterly -- ongoing
quarterly monitoring and correction of leaks as key, and
applaud that the Board is moving forward with that
provision without a stepdown going forward.

We encourage you to adopt the plan today and move
forward with implementation in coordination with the air
districts and in coordination with ensuring that the
environmental justice community is most affected by
this -- the leaks are treated well in this implementation.

With that, thank you very much for your
leadership and your patience throughout the day.

Thank you.

MR. MARQUEZ: Thank you for this opportunity to
speak. My name is Jesse Marquez, executive director of
the Coalition for a Safe Environment, and also speaking on
behalf of Los Angeles Environmental Justice Network and
the California Communities Against Toxics.

And I'm here to say congratulations for doing a
great job. Staff who worked on it, a special kudo to you,
especially for doing the interfacing with other agencies,
because I always have to deal with all those little
problems.

What we do like about this regulation are several
things. We do support the natural gas underground storage
facility's air monitoring, but we also want to make sure
it's for all categories of chemicals.
We do support the daily and continuous leak screening at each injection with withdrawal wellhead and pipelines. I live on top of the Wilmington oil field all my life. There are over three, four hundred operating oil wells right now, and about 100 more still in the planning to be done, so this is a major concern.

We do congratulate you for using and acknowledging the best available control technology, which is a vapor collection system and vapor control devices. The ironic thing I have to ask is why is it mandatory here, when I brought it up during the SIP and AQMD that oil refineries do not have to use this best available control technology on their storage tanks. That needs to be corrected.

We also want to make sure that this reg is not a permit that allows the oil well drilling industry to continue fracking or expanding their fracking. I do not want this to be a reference that is a permit for them to do that. So please clarify that.

I did look at your regulations for -- that identifies your enforcement. And I do applaud you for the categories of clearly defining what they must comply with. However, I discovered a big problem here.

Nowhere is there an acknowledgement or section for the penalties and sanctions for violating any of these
MR. PITCHER: Good evening Chair Nichols, members of the Board. My name is Jenifer Pitcher, and I'm here on behalf of the Western States Petroleum Association.

I would first like to start off by expressing our appreciation to your staff for working with WSPA and our members over the last three years in the development of this methane relation.

From the beginning of the rule development process, we've emphasized the importance of ensuring that methane regulation recognizes existing control requirements and does not unnecessarily impose duplicative requirements on operators.

In general, WSPA supports many of the staff's revisions. However, we would like to again, for the record, point out some of the following issues and recommendations for your consideration.

For circulation tanks, ARB is proposing control measures for circulation tanks beginning in 2020. As noted in our comments, we remain concerned that there are no feasible control technologies currently available that can achieve the requirement to be able to meet the 95 percent control efficiency, including the disposal without the use of supplemental fuel, or that can be disposed of...
without raising potential safety risks with the control
measures proposed.

We believe staff's revisions provide
clarification to allow for operators to continue with BNPs
if no such technology is available by the 2020 deadline.
We want to emphasize the importance for ARB to revisit the
regulation and make necessary revisions in the event that
no technology is available.

We also provided a safety analysis on the
circulation tanks, and we have that safety expert here to
answer any questions that you have.

For leak detection and repair, we've stated
previously in our comments that oil and gas operators have
been subject to LDAR programs for over 30 years in the San
Joaquin Valley and in other air pollution control
districts. We understand the concerns raised in regards
to natural gas storage projects. And we again want to
point out there is immense differences between oil
production and storage.

Given that WSPA members Have implemented LDAR
inspec -- LDAR programs and equipment for the past several
decades, we would urge the Board to reinstate the
step-down provision. And if the Board does not agree to
reinstate it, we would encourage you to direct staff to
evaluate the data that's generated from the LDAR program,
and reconsider adjusting the frequency of inspections at a later date.

    And with that, I also provided some letters of support for you. And I thank you for your time.


    I've been waiting in that audience for 11 hours to be in front of you. So I am glad to have finally made it here.

    The beauty of 11 hours is I had a whole lot of time to condense my comments into four points. And they are Joe, Jim, Elizabeth, and Craig. Your staff to my right did a great job on this over the last few years. This has been long, enduring, and arduous. And while we made a great degree of progress and I can't tell you that we believe there's a perfect regulation before you here this evening, we're excited to continue working with you and your staff on the implementation of this particular regulation at the local districts.

    I think as the MOA process continues and memorandums begin to take shape, as key stakeholders, we should be involved in that process to the greatest extent possible. And we ask that that be incorporated into your actions moving forward.
We did submit a letter with several items for consideration in February. I don't need to go through those now. But if those items can be recognized in a Final Statement of Reasons, or in the adoption of the resolution, or in somehow, or in some fashion be addressed, we would appreciate that.

We would also stand in strong support of WSPA's suggestion just now related to LDAR inspections and revisiting data in a few years. We believe that's critical as well.

Otherwise, thank you for your time. Have a good evening.

MS. MORRIS: Jennifer Morris representing SoCalGas. First, we'd also like to thank the staff for working with stakeholders during the rulemaking process. Particularly during the past year, staff have put a lot of effort into addressing our concerns and we do appreciate that.

We especially appreciate Mr. Fischer addressing our concern about the issue of leaks reported by operators in the fourth quarter. And we look forward to this clarification in the upcoming FSOR and guidance to the air districts.

We share ARB's methane reduction goals, and support State efforts to mitigate methane in a technically
feasible and cost effective manner. We do still have a few remaining operational and feasibility concern with this rule, and we have raised these issues with both staff and the Board. These concerns are automatic violations for leaks measured above allowable thresholds as Method 21 concentration measurements that have been shown to be a poor predictor of actual methane volume.

Safety risks and feasibility issues with vapor recovery requirements for compressors and limited viable technology options in the storage monitoring provision of the rule.

We do appreciate staff's commitment to work with us on remaining concerns during implementation of the rule, and to modify the rule, if needed.

We look forward to working with ARB to ensure a successful rule implementation. And again, we thank staff for their efforts in working with stakeholders.

CHAIR NICHOLS: Thank you.
Laura Yao, or Willie Rivera -- no. Jennifer Morris, Laura Yao. Not here.
Irene Burga?
And then Bill Magavern.
MS. BURGA: Hello. Good afternoon -- evening.
My name is Irene Burga and I'm with the Environmental Defense Fund. Thank you for the opportunity
to comment in support of this landmark rule, which we urge the Board to adopt today. This rule is the product of many years of effort by the Board, careful consideration by staff, thoughtful listening of stakeholders, and tracking important developments and impacts of methane on climate and the effects of oil and gas pollution on public health.

EDF has been an active participant on this issue in California for much of the last seven years. We can say with confidence that finalizing the rule today will bring climate benefits, produce jobs, reduce waste and inefficiencies in oil and gas operations and benefit communities in California.

The rule will also support efforts of like-minded jurisdictions across the country, which is especially important, given federal efforts to repeal similar regulations. These requirements are critical to ensuring that ARB meets objectives aimed at reducing statewide methane emissions, all while delivering significant public health benefits. Oil and gas emissions include cancer causing compounds like benzene, as well as volatile organic compounds that form smog and cause respiratory problems. Impacted communities near oil and gas have reported experiencing severe headaches, nausea, nosebleeds, and respiratory problems just to name a few.
These and other related impacts often correlate with a higher number of days missed from school and work, lower educational attainment and income potential, and weakened health, and overall impacts, which are felt most in low income communities and communities of color.

Given the equity concerns, we recommend the rule implementation prioritize facilities in close proximity to disadvantaged communities identified in the top 25 percent of the CalEnviroScreen.

We applaud CARB for remaining committed to requiring quarterly inspections.

And I just wanted to say we urge you guys to adopt this and appreciate all the hard work done by staff and the Board. Thank you.

MR. MAGAVERN: Good evening, Bill Magavern with the Coalition for Clean Air. And as Irene said, this rule has been in the making for a long time. We're very eager for it to be implemented. I'm also very eager to get something to eat.

(Laughter.)

MR. MAGAVERN: So I will just say speaking also on behalf of John Shears from CEERT who's sitting behind me, we particularly appreciate the removal of the step-down provision for inspections. And this rule we think is going to be the best in the country and becomes
especially significant, given the federal government's
retreat from methane regulation.

Thank you.

CHAIR NICHOLS: And you are the last speaker, and
so I am going to close the record.

(Applause.)

CHAIR NICHOLS: And I'm going to omit my closing
remarks, because actually Mr. Magavern pretty much said
what I would have said. The only thing I would add to
that is that I really appreciate the fact that the oil and
gas industry worked with us on this regulation, and played
a positive and constructive role in bringing us to this
point. Not to say that that isn't always the case, but,
you know, sometimes our disagreements, especially on
technical matters, can really be profound and difficult to
overcome.

And I think this is one where respect on both
sides prevailed. And so as a result of that, we have a
much stronger rule, but it's also one that can be adapted
as we move along, if we gain new information if there's
reasonable to do so.

So with that, I want to thank the staff as well,
especially for being so flexible and for making your
presentation so brisk.

And now, unless anybody has any further
discussion on this item, I think I can just ask that we bring it forward.

VICE CHAIR BERG: Yes, I would move that we move Resolution 17-10.

BOARD MEMBER DE LA TORRE: Second.

CHAIR NICHOLS: We have a second.

All those in favor please say aye?

(Unanimous aye vote.)

(Senator Lara, Assembly Member Garcia and Supervisor Roberts not present.)

CHAIR NICHOLS: Opposed?

Or abstentions?

We have no abstentions.

All right. Thank you all very much.

It has been a long day, but we really got a lot done. So thank you very much.

BOARD CLERK McREYNOLDS: Madam Chair, we have a public comment.

CHAIR NICHOLS: Is there is someone who's asked to comment from the general public on a general comment not before the Board?

Oh, that's the card I have right here. I apologize. I didn't know that that was what it was for. It's yellow. I should have recognized it.

All right. Mr. Harvey Eder.
I'm not -- oh, it's -- he's back. Your handwriting changed.

MR. EDER: Hello. I'm Harvey Eder talking for myself and for the Public Solar Power Coalition. I've come before you in the past. That was when Dr. -- at least when Dr. Lloyd was here for electric vehicles, 12, 15 years ago.

Now, we're cutting back our numbers on electric again, only one and a half million by '25. This is pathetic. Back then, the -- Paul Scott and Plug In American were there. They're the ones that did who sold the electric car, where -- your predecessors were involved.

This history is important, because there's been so -- this shows the decades and whatnot of dragging feet. And I first saw solar in Israel nearly fifty years ago on the relative -- my relative's roofs who survived Hitler. I said, What's that? Oh, that's our solar hot water system". We had in the eighties, a third of the size of a giant nuke, 354 megawatts built in the desert out here within 100 miles of here in Daggett and Victorville. And back then, it only cost $3,500 a kilowatt hour. That's not much.

Got a lot of lip from the environmental community. They were out there, after the tax credit,
getting their billion dollars, going each year to get them extended and whatnot. It was Luz, an Israeli company. And they've been operating using solid storage. Now, there's a -- concentrating solar has been ignored. When combined with district heating and cooling, you get 70, 80 percent of your energy in -- it's in the record for South Coast about the sun shot, the last eight papers in March of last year.

Anyway, I'll -- the stuff is way proven out there. There's two gigawatts going in in Chile with 24-hour storage at $0.10 a kilowatt hour by Solar Reserve.

CHAIR NICHOLS: All right.

MR. SHEARS: I just want to quickly give my -- give kudos to the court reporter, who's had to be the -- (Applause.)

MR. SHEARS: -- the most focused person in the room all day today -- (Applause.)

MR. SHEARS: -- and deserves a bonus. (Laughter.)

CHAIR NICHOLS: That was a good comment. All right. We are adjourned. (Thereupon the Air Resources Board adjourned at 8:06 p.m.)
CE 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 10th day of April, 2017.

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