

VIDEOCONFERENCE WEBINAR  
STATE OF CALIFORNIA  
AIR RESOURCES BOARD  
PROPOSED AMENDMENTS TO THE HARBOR CRAFT REGULATION

ZOOM PLATFORM

WEDNESDAY, JANUARY 12, 2022

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PROCEEDINGS

TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

Good afternoon, everyone. It's just a minute past four o'clock and we're going to get started here in a second. We have a full agenda today and this meeting is scheduled out until seven o'clock PM Pacific time.

For those of you that don't know me, I'm David Quiros. I'm the manager of the section at CARB that oversees the Commercial Harbor Craft Regulation, both the current regulation as well as the proposed amendments effort that we're going to be discussing today. We have various members of the regulatory team here with us today. We also have several members from our air quality incentive programs here to communicate some information to you all.

Bonnie Soriano, the Chief of the Freight Activity Branch also joins us. And we are going to be getting started here in just a minute. So it looks like there are a pretty steady number of attendees, so to start us off today, I'm going to hand this meeting to Nicholas Taylor, who will introduce the meeting a little bit. And I first just wanted to say that this meeting is going to be recorded. You'll have a chance to ask questions a couple times during the webinar. And I will now turn it over to you Nick to get us started. Thank you, everyone.

1 (Thereupon a slide presentation.)

2 TTD AIR RESOURCES TECHNICIAN TAYLOR: Great.  
3 Okay. Yeah. Let's go to the next slide, please, David.

4 --o0o--

5 TTD AIR RESOURCES TECHNICIAN TAYLOR: So, yeah,  
6 first, I'm Nick Taylor. And we'll take a few moments to  
7 get organized here. So just please be aware that this  
8 meeting is being recorded and will be publicly posted  
9 within the next few days. If you are not all already  
10 muted, please mute yourself. If you are on the Zoom  
11 platform, you'll be using the mute/unmute button at the  
12 bottom left of the screen. And if you are on the phone,  
13 you'll dial star six to mute or unmute. We do ask all  
14 attendees to please remain muted during the presentation.

15 Once you are muted, please check that your screen  
16 name has been entered correctly. We ask that you write  
17 your first name and then last name, then your affiliation.  
18 You can rename yourself by clicking the option on the top  
19 right side of your picture or video. If you need help,  
20 please use the chat feature. That concludes our  
21 housekeeping.

22 Let's go to the next slide, please.

23 --o0o--

24 TTD AIR RESOURCES TECHNICIAN TAYLOR: So I'll be  
25 introducing things with some background on what's going on

1 today and why we're here.

2 So next slide.

3 --o0o--

4 TTD AIR RESOURCES TECHNICIAN TAYLOR: So this is  
5 slide 4. So to briefly share some background, CARB's  
6 commercial harbor craft, or CHC, regulation sets  
7 requirements for harbor craft in California. It includes  
8 requirements for reporting vessels to CARB using  
9 low-sulfur fuel and for some vessel categories meeting  
10 certain emission standards. The compliance dates in the  
11 current regulation run from 2009 to 2022. So at the end  
12 of this year, 2022, the current existing harbor craft  
13 regulation will be considered fully implemented.

14 At the same time, CARB's overall mobile source  
15 strategy and other planning documents continue to work  
16 towards a reduction in emissions from all sectors,  
17 including, but not limited to, marine vessels, on-road  
18 vehicles, locomotives refrigeration units, and others.

19 So at the request of our Board for the past  
20 several years, our staff has been developing a proposal to  
21 amend the harbor craft regulation. This process involved  
22 over 400 meetings, including four series of workshops  
23 before today and has resulted in the proposed amendments  
24 released this past September.

25 Many of you joining us here today are likely

1 already familiar with this proposal. However, for those  
2 of you who are not, the main element is to expand the  
3 emission requirements, so that they apply to all vessel  
4 categories. Staff are also proposing to tighten the  
5 standards themselves in a Transition to zero emission for  
6 some vessel categories and higher tier cleaner combustion  
7 standards for others.

8 Now, the proposed compliance dates to take effect  
9 would begin in 2023, run through 2031, and most compliance  
10 extensions would expire by 2035. Now, that's the main  
11 element. The proposal also includes other elements, such  
12 as new alternative options for compliance, requirements  
13 for harbor craft facility reporting and infrastructure,  
14 updates to the diesel fuel requirements, and a number of  
15 other changes that are intended to close the gaps and  
16 improve public health outcomes.

17 This summary, of course, leaves details out, so  
18 we still encourage everyone to review the proposal  
19 materials on our website. There is a link to our website  
20 included at the end of these slides.

21 Next slide, please.

22 --o0o--

23 TTD AIR RESOURCES TECHNICIAN TAYLOR: So this is  
24 slide 5, the purpose of our webinar today. After these  
25 amendments were proposed for public comment in September,

1 our Board considered the proposal during their November  
2 meeting. During this meeting, our Board directed CARB  
3 staff to continue to perform outreach before they next  
4 consider the proposal. A formal date for the Board to  
5 vote on the proposal has not been set yet, but we're  
6 expecting this to be scheduled to occur in the couple of  
7 months.

8 Today, in response to direction from the Board at  
9 our November Board meeting, we are seeking input from you  
10 on how to address the Board's direction, discussing  
11 questions and concerns, and providing additional  
12 information on incentive opportunities. This webinar will  
13 become a public record, and will be transcribed, and we  
14 will post the recording on the CHC website.

15 Next slide, please.

16 --o0o--

17 TTD AIR RESOURCES TECHNICIAN TAYLOR: This is  
18 slide 6. So our specific agenda today has a few parts.  
19 First, our staff that work on the Harbor Craft Regulation  
20 are being joined by several of our partners from some of  
21 our programs to share information about the funding  
22 opportunities that are out there for harbor craft. These  
23 folks will be presenting and talking about options that  
24 currently exist today, as well as options that might be  
25 made available in the future. Before we move on from that



1 topic, we'll have a good break for your questions about  
2 these funding options.

3           Second, staff will then share updates about  
4 what's been going on since the November Board meeting, how  
5 we've been responding to their directions, and what we  
6 expect to be doing before returning to the Board for final  
7 consideration. That includes ideas about the compliance  
8 extensions, a technology and implementation review,  
9 zero-emission measures, and our next steps.

10           And then lastly, we'd like to hear your thoughts,  
11 as vessel operators, on how the implementation of harbor  
12 craft requirements can improve. For example, what sorts  
13 of information could you use from us to communicate  
14 regulatory requirements or other information funding  
15 opportunities, and in what format would it be help for us  
16 to share things.

17           So next slide, please.

18                               --o0o--

19           TTD AIR RESOURCES TECHNICIAN TAYLOR: So I will  
20 shortly hand this off to our first presenter from one of  
21 our incentive groups, but first I want to mention an  
22 overview of the Board's direction on incentive  
23 opportunities. Our Board directed us to continue  
24 outreach, which we have done and are doing today by  
25 hosting this webinar on the funding opportunities

1 applicable to the harbor craft sector. We will continue  
2 to have expanded dialogue with our funding program  
3 partners to identify, communicate, and generally maximize  
4 the use of funding opportunities while complying with  
5 future proposed amendments. And lastly, we will be  
6 prioritizing communication with our external partners at  
7 local air districts regarding opportunities for them to  
8 use funding sources that they administer, such as for the  
9 Carl Moyer Program.

10 So with that, I'll hand this off to Earl who will  
11 start getting into some of the specific options that are  
12 out there.

13 MSCD STAFF AIR POLLUTION SPECIALIST LANDBERG:  
14 Thanks, Nick.

15 --o0o--

16 MSCD STAFF AIR POLLUTION SPECIALIST LANDBERG: I  
17 really appreciate that. Again, we're on slide number 8,  
18 the funding programs for harbor craft. Again, my name is  
19 Earl Landberg. I'm a Staff Air Pollution specialist with  
20 Mobile Source Control Division here within CARB. I'm the  
21 lead staff for CARB's Low Carbon Transportation Funded  
22 Advance Technology Demonstration and Pilot Projects  
23 Program.

24 Before I move on to that discussion, I wanted to  
25 acknowledge that the draft State budget for fiscal year to

1 2022 and 2023 was posted this last Monday. This is what  
2 we call the January budget proposal. This is the  
3 Governor's starting negotiating position for the State's  
4 budget. A lot of you have probably taken a look at it or  
5 heard about it in the media recently. We are not talking  
6 about the funding from this proposal today. We're only  
7 going to go into the detail of actual budget that was  
8 passed this last June. I will say that the budget  
9 proposal has a significant amount of funding to continue  
10 the progress we are making on cleaning the air and  
11 improving public health.

12           There are line items in the draft budget, such as  
13 over a billion dollars for port infrastructure and goods  
14 movement, over a billion dollars for clean trucks, buses,  
15 and off-road equipment, and \$200 million for emerging  
16 opportunities, also called demonstration and pilot  
17 projects, with a focus on marine and off-road.

18           One of the major takeaways that I had was there  
19 is a significant amount of funding being proposed for  
20 ports, marine, and goods movement. I want to reiterate  
21 that this is the first proposal for next year's budget,  
22 and changes to these numbers will happen. And there is no  
23 certainty that CARB will be the agency implementing any of  
24 these proposed funds.

25           But with that all said, if there is anyone that

1 is interested in being part of the public process to help  
2 determine where these funds will be allocated and for what  
3 purpose, I encourage you to sign up to the low carbon  
4 transportation listserv gov delivery system, so you can be  
5 updated on meetings and events that surround the public  
6 process in developing next year's funding plan. And I'll  
7 include, at the end of my presentation, my contact  
8 information if you're interested in participating in that  
9 process.

10 So turning back to funds that we have in hand and  
11 not the proposal for next year, I want to take this moment  
12 to briefly identify the roles of each of the next three  
13 funding programs that we're going to talk about and how  
14 they all work together.

15 First, the current LCT, or low carbon  
16 transportation, funding opportunity that I'm going to  
17 discuss is the Advanced Technology Demonstration and Pilot  
18 Project Program. The goal of this program is to help  
19 develop pre-commercial technology quicker than would  
20 organically happen and accelerate deployment of supporting  
21 pilot projects to analyze commercial available --  
22 commercially-available technologies in large-scale  
23 deployments. The goal of the pilot project is to collect  
24 data on operations, such as vehicle or vessel operations  
25 and how infrastructure functions under different

1 scenarios.

2 I'll talk about opportunities under this program  
3 in a few minutes. The next program listed on this slide  
4 is the CORE Program. And Todd will go into much more  
5 detail on this program in a few minutes, but for context,  
6 CORE is a State-run program focused on deployment of  
7 commercialized advanced clean technologies into the  
8 off-road space. This program does not have a scrap  
9 requirement, because technology is still new and in need  
10 of financial incentives to gain a foothold near the  
11 marketplace.

12 Typically, off-road projects funded in the  
13 Advanced Technology Demonstration and Pilot Projects  
14 Program would graduate into CORE, once they complete their  
15 demonstration and proven their technical ability. But  
16 these project -- these types of projects are still more  
17 expensive than conventional technologies.

18 The Carl Moyer Program is the next step in  
19 deployments of advanced technology. This is an air  
20 district run program. It is a replacement program, where  
21 older and dirtier vehicles and equipment are scrapped and  
22 replaced with newer, cleaner equipment than essentially  
23 does the same duty cycle as replaced equipment.

24 Moyer requires technologies to be commercialized,  
25 with most projects being performed by companies with

1 long-term support of manufacturers and established dealer  
2 networks.

3 Now, as I said, Todd and Anthony will discuss  
4 these opportune -- the opportunities under their programs  
5 in a few minutes, but now I want to turn my attention back  
6 to the Low Carbon Transportation Funded Advanced  
7 Technology Demonstration and Pilot Projects.

8 Can we go --

9 --o0o--

10 MSCD STAFF AIR POLLUTION SPECIALIST LANDBERG:

11 There we go. Thank you.

12 So we're on slide 9, Low Carbon Transportation.  
13 Low carbon transportation is funded by the GGRF, which is  
14 the Greenhouse Gas Reduction Fund and started in fiscal  
15 year 2013-2014 supporting CARB's first programs to  
16 incentivize the deployment of hybrid and zero-emission  
17 cars and trucks, the Clean Vehicle Rebate Project, or  
18 CVRP, and HVIP or the Hybrid and Zero-Emission Truck and  
19 Bus Voucher Program.

20 These two programs are devoted to on-road  
21 vehicles, but have developed an important economic method  
22 of reducing the cost of vehicles to end users. Starting  
23 in fiscal year 14-15, GGRF funds were brought to bear on  
24 advanced technology demonstration and pilot projects.  
25 Over the years, funding for low carbon transport --

1 funding for low carbon transportation has grown year to  
2 year. The first couple of years was about \$200 million  
3 per year, then ramping up to about 400 million, now  
4 pushing over a billion with the last funding plan approved  
5 by our Board, which nears an allocation of 1.5 billion.  
6 But I do have to point out that that number does include  
7 some general fund dollars and not all is GGRF, but it has  
8 been programmed under low carbon transportation.

9           Most of this funding is allocated to heavy- and  
10 light-duty vehicle voucher programs and equipment  
11 programs, equity programs, and demonstration and pilot  
12 projects. Over the last seven funding cycles, demo and  
13 pilot projects have supported around 35 separate projects  
14 representing about \$400 million in State investment, which  
15 translates into about three-quarters of a billion dollars  
16 in total State investment from all project partners.

17           Projects funded by this program span the wide  
18 range of technologies from zero-emission trucks, yard  
19 trucks, cargo handling equipment, locomotives, delivery  
20 vans, and many other vehicles, and off-road equipment  
21 types all benefiting disadvantaged communities.

22           Through the Advanced Technology Demonstration and  
23 Pilot Projects, CARB has funded about six projects with  
24 marine elements. We've funded two hybrid tugboats, a fuel  
25 cell ferry, the Sea Change, which is just starting its sea

1 trials right now, and two IMO Tier 3 compliant ocean-going  
2 vessels.

3 Next, I'm going to talk about the opportunities  
4 that we have for this year for commercial harbor craft  
5 demonstrations.

6 --o0o--

7 MSCD STAFF AIR POLLUTION SPECIALIST LANDBERG:  
8 Okay. So we're on slide 10, current low carbon  
9 transportation funding opportunities.

10 CARB's Board approved the fiscal year 2021-2022  
11 low carbon transportation funding plan in November of last  
12 year. The plan has an allocation of \$40 million for  
13 advanced technology demonstration and pilot projects.  
14 There are five categories that were included in the plan,  
15 and all five will be funded by the available \$40 million.  
16 The plan includes a zero-emission commercial harbor craft  
17 resilient, renewable infrastructure project. This project  
18 is going to be focused on resilient on-site renewable  
19 power or fuel generation for vessel refueling and  
20 recharging. This project will be done in collaboration  
21 with the California Energy Commission.

22 We typically require a financial match to be  
23 eligible for funding. This project is focused on the  
24 infrastructure and not the vessel. However, the vessel  
25 can act as the required match for this project. The



1 project will also require data collection and analysis.

2 We expect to start the work group process  
3 starting soon, and we hope to have the solicitation out by  
4 mid-spring. Individuals cannot directly apply for funding  
5 under this program. Anybody who is interested in applying  
6 would need to team with an eligible applicant, which is  
7 either a public entity or an eligible California based  
8 nonprofit to act as an applicant. The whole project team  
9 must be assembled at the time of application submission  
10 with cost estimates and a reasonable timeline.

11 Other projects in the -- in the funding plan that  
12 was approved in November are focused on ocean-going  
13 vessels, cargo handling equipment, and zero-emission  
14 deployments for municipalities. If you want to be part of  
15 the development process for this solicitation that I  
16 mentioned, I would encourage you to participate in our  
17 future work group meetings. Sign on to our listserv for  
18 govern delivery notices. And if you have any questions on  
19 being part of the process or how to sign up for  
20 notifications, you can see my contact information at the  
21 end of my section

22 Next slide, please.

23 --o0o--

24 MSCD STAFF AIR POLLUTION SPECIALIST LANDBERG:

25 This is slide number 11, the compliance schedule

1 for zero-emission and advanced technologies. And this  
2 slide highlights the compliance schedule. The  
3 zero-emission commercial harbor craft resilient and  
4 renewable infrastructure project that we just talked about  
5 could be the infrastructure for vessels that would be  
6 compliant with this schedule.

7           So this really could be a good opportunity for  
8 one vessel operator that wants to get out in front of the  
9 rest of the pack and demonstrate the feasibility of  
10 this -- of this technology.

11           Next slide, please.

12                               --o0o--

13           MSCD STAFF AIR POLLUTION SPECIALIST LANDBERG:

14           This is slide 12 for more information on LCT.  
15 And this slide has my contact information and a link to  
16 the Low Carbon Transportation webpage. This is where  
17 information about demo and pilot solicitations are housed.  
18 I am available for one-on-one meetings with anybody that  
19 is interested in applying for funding under the Advanced  
20 Technology Demonstration and Pilot Project, and  
21 specifically the Resilient Zero-Emission Vessel Charging  
22 Project, as well as the other ones that I mentioned.

23           I would also suggest signing on to our listserv.  
24 I know I've hit that a couple times, but it's really  
25 important if you want to be part of the process. So

1 please you can send me an email. If you don't know how to  
2 sign up for the email listserv, I'll be happy to help you  
3 with that process.

4 And that's it for me. And at this point I would  
5 like to pass it off to Todd Sterling to talk about CORE.

6 Todd.

7 MSCD AIR POLLUTION SPECIALIST STERLING: Thank  
8 You, Early. My name is Todd Sterling. I'm an Air  
9 Pollution Specialist here at CARB. I'm the staff lead for  
10 the CORE incentive Program.

11 And -- if we could skip -- if you would turn to  
12 slide 13 --

13 --o0o--

14 MSCD AIR POLLUTION SPECIALIST STERLING: The  
15 Clean Off-Road Voucher Incentive Project, or CORE,  
16 targeted zero-emission, commercially available, off-road  
17 equipment that has yet to achieve a market foothold. CORE  
18 accelerates the deployment of cleaner technologies by  
19 providing a streamlined process for fleets ready to  
20 purchase specific zero-emission equipment to receive  
21 funding to offset the higher cost of such technologies.

22 This year CORE has 165 million to fund  
23 zero-emission equipment. In addition to freight movement  
24 equipment, the program will expand to heavy-duty off-road  
25 equipment, for example, construction, agricultural,

1 material handling, and even landscaping equipment.

2 Slide 14, please.

3 --o0o--

4 MSCD AIR POLLUTION SPECIALIST STERLING: Core is  
5 for commercially available off-road equipment. These are  
6 not demonstration projects like Earl was alluding to  
7 earlier, but projects that get zero-emission equipment  
8 into California. CORE is a first-come, first-served  
9 program. There's no scrappage required and stacking of  
10 funds is allowed. In addition, additional funds called  
11 plus ups can be added to the voucher amount, if the  
12 equipment operates in a disadvantaged community or if  
13 infrastructure is needed.

14 Equipment manufacturers apply to the Program with  
15 an equipment eligibility application to determine the  
16 voucher amount. Equipment manufacturers submit this  
17 equipment eligibility application where the voucher may be  
18 determined. The dealers -- the dealers play a big role in  
19 CORE voucher process, and the dealers even take a quiz to  
20 participate.

21 At this time, the Board has capped all CORE  
22 projects at \$500,000, and we plan to start receiving  
23 voucher requests in the summer of 2022 this year.

24 Slide 15, please.

25 --o0o--

1           MSCD AIR POLLUTION SPECIALIST STERLING: We'll be  
2 having our first work group meeting on January 18th. If  
3 you're interested sign in up on the low Carbon  
4 Transportation webpage Earl was talking about earlier.  
5 For additional information on overall CORE Program, you  
6 can reach out to me, Todd Sterling, and here's my email  
7 address. If you have specific questions on the CORE  
8 eligibility -- equipment eligibility application process,  
9 you can contact Matt Diener and his address is here.

10           We also have a CORE webpage. We partner with  
11 CALSTART. They're our grantee. This is their webpage to --  
12 there's tons of information to understand the program  
13 and -- so you can understand the program better. You can  
14 always reach out to me or Matt. We can help you out. I  
15 think it's a great program.

16           And with that, I'd like to pass it on to Anthony.

17                           --o0o--

18           MSCD AIR POLLUTION SPECIALIST POGGI: Thank you  
19 very much. My name is Anthony Poggi. I am staff -- or  
20 I'm the lead staff for the Carl Moyer marine chapter  
21 source category. I'm going to take you through some  
22 information about the Carl Moyer and the Community Air  
23 Protection programs.

24           So the Carl Moyer Program was established in 1998  
25 and was built from the ground up by the program's

1 namesake, Dr. Carl Moyer, whose picture is on this slide.  
2 Funding for this program has historically come from smog  
3 abatement and new tire fees. The key concept of the  
4 program was to buy cost-effective emission reductions that  
5 could be creditable to the State's Implementation Plan  
6 through the replacement of old, high-polluting engines for  
7 cleaner alternatives.

8 Emission reductions are required to be SIP  
9 creditable. And SIP credibility is made up of four  
10 central pillars, which are the keys to Moyer's success.  
11 They must be permanent, surplus, quantifiable, and  
12 enforceable emission reductions. In short, emission  
13 reductions must be earlier than required by any  
14 regulations or the regular -- the reductions must go  
15 beyond what is required by the regulation. We refer to  
16 these as surplus reductions.

17 The program was designed from the start as a  
18 partnership between CARB and local air districts. In  
19 short, we set the guidelines and provide oversight,  
20 whereas the air districts select and fund projects  
21 according to local needs. Moyer allocations to each  
22 district depend upon the community needs and the pools of  
23 applications that are received.

24 Slide 17, please.

25 --o0o--

1           MSCD AIR POLLUTION SPECIALIST POGGI: The  
2 Community Air Protection Program focuses on communities  
3 facing disproportionate air quality burdens, also known as  
4 AB 617 communities. Funding is determined on an annual  
5 basis by the Legislature. It is administered by air  
6 districts in conjunction with the Carl Moyer Program.  
7 Funds are allocated to air districts based on general  
8 principles in the community air protection guidelines.  
9 The primary focus is on zero-emission technologies and  
10 communities selected to participate in the program. There  
11 are four general principles that should be followed into  
12 the allo -- to be followed by the allocation.

13           Consider the original legislative mandated  
14 allocation in the first year of funds, which puts 95  
15 percent of the money in the three largest air districts.

16           The second principle is to consider the selected  
17 communities.

18           And the third principle is to consider  
19 communities that are under consideration for future  
20 selection, so that would be communities that are not  
21 currently designated as AB 617, but are under  
22 consideration for future selection as an AB 617 community.

23           And the last consideration is that they are rural  
24 air districts and community -- and communities must also  
25 be taken into account.

1           The Community Air Protection marine requirements  
2 are based on the Carl Moyer marine guidelines. However,  
3 Community Air Protection offers higher maximum funding  
4 percentages than Moyer. So for example, marine repower  
5 can be funded at 95 percent of the eligible project costs  
6 for Tier 4 versus 85 percent for an equivalent Moyer  
7 project.

8           Next slide, please, slide 7 -- slide 18.

9                           --o0o--

10           MSCD AIR POLLUTION SPECIALIST POGGI: So looking  
11 back at the last decade plus of the Carl Moyer funding, it  
12 has received between 70 and 94 million dollars annually  
13 from fiscal year 2011-2012 to fiscal year 2020 to 2021.  
14 The fiscal year 21-22 allocation was increased 247 million  
15 and subsequent allocations are 130 million per year.

16           The Community Air Protection Program received --  
17 has received 704 million since fiscal year 2017-2018 and  
18 received another 260 million in fiscal year 21-22.

19           Depending on community needs and the pool of  
20 applications received, the air districts decide which  
21 eligible source of categories to fund out of their total  
22 Moyer allocation. These funds are not earmarked for  
23 specific source categories.

24           Slide 19, please.

25                           --o0o--



1           MSCD AIR POLLUTION SPECIALIST POGGI: So this  
2 slide shows the annual Moyer and CAP funding by air  
3 district for marine projects since 2018. Since that time,  
4 districts have spent over \$40 million on marine projects.  
5 Funding is categorized by the calendar year of the  
6 inspection of the completed project.

7           As expected, the air districts with the highest  
8 number of commercial harbor craft, South Coast and Bay  
9 Area, make up the majority of the funds being spent.  
10 Commercial and charter fishing vessels make up about 80  
11 percent of the funding that you see here -- or, excuse me,  
12 80 percent of the total number of projects that you see on  
13 this table.

14           Slide 20, please.

15                           --o0o--

16           MSCD AIR POLLUTION SPECIALIST POGGI: Thank you.

17           Carl Moyer requires vessels to have at least  
18 three years of surplus reductions in order to be eligible  
19 for the program. Emission reductions that occur prior to  
20 or in the absence of regulatory requirements are  
21 considered surplus. Emission reductions that go beyond  
22 regulatory requirements may be considered surplus, even if  
23 the regulatory deadline has passed.

24           The examples shown here illustrates a vessel with  
25 the compliance date at the end of 2028 would have to be

1 repowered or replaced and operational with the new  
2 equipment by the end of 2025. If this vessel was required  
3 to go to Tier 4, but used Moyer funds to install zero or  
4 near-zero technology, the surplus reductions and the  
5 incentive contract could continue after 2028, which is the  
6 compliance date.

7           When evaluating marine projects, districts may  
8 use a vessel's extended compliance date, if that vessel  
9 received a compliance extension.

10           The second example shown on this slide is with a  
11 vessel -- is for a vessel with a compliance date of 2026,  
12 which applies -- the owner applies for Carl Moyer funding  
13 in early 2025 and notifies the District as part of their  
14 application process, that they will apply for a compliance  
15 extension at their earliest opportunity, which would be 18  
16 months before the compliance date July 2025.

17           The District may approve the project with the  
18 condition that the grant will not be paid unless the  
19 vessel and vessel owner receive a compliance extension to  
20 2028. If the extension is granted, the vessel would have  
21 to be repowered by the end of 2025 and would have three  
22 years of surplus before the 2028 compliance date.

23           Vessel owners who wish to apply for Moyer and  
24 compliance extensions must do so at the earliest possible  
25 opportunity in order to complete their project early

1 enough to achieve the required surplus period of three  
2 years.

3 Slide 21, please.

4 --o0o--

5 MSCD AIR POLLUTION SPECIALIST POGGI: Vessel  
6 replacement projects and zero-emission technologies are  
7 available through Carl Moyer on a case-by-case review and  
8 approval process. If a district chooses to submit such a  
9 project for CARB review, they will be evaluated by CARB  
10 staff to see whether or not that they can proceed.

11 For a replacement, staff will evaluate the  
12 necessity of a vessel replacement. Good candidates for  
13 replacement include vessels that are incompatible for the  
14 proposed new technology or when repower costs exceed the  
15 cost for vessel replacement. If a repower is feasible,  
16 but the owner -- the vessel owner still wishes to replace  
17 the vessel, the maximum funding amount will be based on  
18 the lower cost of the two options, whether that be the  
19 repower or the replacement.

20 Zero-emission projects are evaluated in part to  
21 determine if the replacement vessel will be able to fully  
22 replace the duty cycles of the existing vessel. The  
23 proposed vessel's battery capacity, horsepower, charging  
24 opportunities throughout the duty cycle, as well as the  
25 capabilities of the proposed charging infrastructure are

1 required -- they will be evaluated to see if they will  
2 allow the zero-emission vessel to perform the same duties  
3 as the existing vessel.

4 CARB staff will also request examples of the  
5 proposed technology's current use in the marine sector to  
6 determine the viability and commercial readiness of the  
7 technology. So as Earl was talking about earlier funding  
8 pilot projects, that's not what Moyer does. Moyer funds  
9 projects that -- in which the technology is already in use  
10 and has demonstrated commercial viability.

11 Slide 22, please.

12 --o0o--

13 MSCD AIR POLLUTION SPECIALIST POGGI: CARB staff  
14 is available to answer questions about the Carl Moyer  
15 project -- Carl Moyer marine project ability, policies,  
16 procedures, and other questions related to the guidelines  
17 and program administration. For specific questions about  
18 application processes and project selection, please  
19 contact your local air district.

20 Thank you very much. My contact information as  
21 well as my manager is on this slide. Please don't  
22 hesitate to reach out for any questions you may have. And  
23 I will now pass it on to Melissa Houchin to talk about  
24 additional funding opportunities and Board direction.

25 --o0o--

1 TTD AIR RESOURCES ENGINEER HOUCHIN: Thanks  
2 Anthony. And hi, everyone. My name is Melissa Houchin.  
3 I'm an Air Resources Engineer for the Freight Technology  
4 Section at CARB. I'll be starting on slide 23.

5 In addition to funding opportunities through the  
6 Carl Moyer Program, funding may be available through other  
7 programs. The Volkswagen mitigation trust funding for  
8 harbor craft is available for repowering Tier 2 and older  
9 ferry and tugboat or towboat engines. There are two  
10 categories of funding that apply and are open for  
11 solicitation. These funds are for repowers only and  
12 cannot pay for any portion of a new vessel.

13 For combustion freight and marine engines, there  
14 is a \$60 million in two -- sorry, excuse me -- there is  
15 \$60 million in two \$30 million installments administered  
16 by the South Coast Air Quality Management District for all  
17 projects across the state. This program awards up to \$1  
18 million per vessel with a 40 percent cap for  
19 non-government projects, and can be used to repower to  
20 Tier 4 or technology with equivalent or lower NOx  
21 emissions. Solicitation has been open since June 2021,  
22 remains first-come, first-served, and has approximately  
23 \$15 million remaining from the first installment.

24 For zero-emission freight and marine projects,  
25 there is \$70 million in two \$35 million installments

1 administered by the Bay Area Air Quality Management  
2 District for projects all across the state. This program  
3 awards up to \$2.5 million per vessel with a 75 percent cap  
4 for non-government projects and can be used for repowers  
5 to zero-emission. The first-come, first-served  
6 solicitation remains open until March 22nd, 2022 or when  
7 the first installment funds run out.

8           There is approximately \$20 million remaining in  
9 the first installment. The second installment of funds  
10 for both of these programs are anticipated to be released  
11 in late 2022 or early 2023. Other funding opportunities  
12 include the Diesel Emissions Reduction Act Program, the  
13 Low Carbon Transit Operations Program, the Transit and  
14 Intercity Rail Capital Program, and Prop 1B funds.

15           CARB staff will continue to monitor and develop  
16 funding programs and communicate opportunities to  
17 stakeholders on our website.

18           I'll now hand it over to Aaron Bali who will  
19 facilitate our first question and answer segment.

20                           --o0o--

21           TTD AIR RESOURCES ENGINEER BALI: Hi, everyone.  
22 Good evening. My name is Aaron Bali and I'm an engineer  
23 for the Freight Technology Section here at CARB and I'll  
24 be moderating the Q&A session.

25           Just as a reminder, if you wish to ask a

1 question, you raise your hand, and I'll call on you in the  
2 order of which you arrived. And if you can leave -- you  
3 can also leave a question in the comments section.

4 If dialed in through phone, Nick will be handling  
5 the call-ins. Nick, if you'd like, you can explain how  
6 you will be identifying callers.

7 TTD AIR RESOURCES TECHNICIAN TAYLOR: Sure. Yes.  
8 So I'll be calling on folks in groups of phone numbers by  
9 the first digit of your area code. So if multiple callers  
10 begin to speak at the same time, I'll ask one of you to go  
11 first, but I'll be activating microphones for folks on the  
12 phone in a minute.

13 TTD AIR RESOURCES ENGINEER BALI: Thank you,  
14 Nick. As a reminder, once you are unmuted, you may begin  
15 speaking. And I'll be calling people first based on the  
16 chat questions we have received. And our first comment  
17 was from Merlin Kolb of Reel Magic Sport Fishing and  
18 Charters. And his question says, "CARB's proposed  
19 regulation for commercial passenger sportfishing and whale  
20 watching boats has generated opposition from over 20,000  
21 Californians reflected in a petition and over 3,000  
22 written comments. And at the hearing, nearly a hundred  
23 Californians expressed concerns, almost all of which were  
24 opposition to the regulation as drafted. Did all the  
25 concerns expressed have any impact on modifying the

1 proposed Harbor Craft Regulations, and if so, how so"?

2           And I will be unmuting you Merlin, so you may  
3 begin speaking if you have any additional questions or  
4 comments.

5           MR. KOLB: Yeah. Thank you, Ali[SIC], this is  
6 Captain Merlin with Reel Magic Sport Fishing out of Bodega  
7 Bay.

8           TTD AIR RESOURCES ENGINEER BALI: Hi, Merlin.

9           MR. KOLB: Hi. Yeah, I mean that is my question  
10 the one that I wrote and submitted in. I do have some  
11 follow-ups, but I'd like to let you work on that one  
12 first.

13           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

14           Hi, Merlin. This is David Quiros. I'll take  
15 that question. We have a second portion of this webinar  
16 where we're going to talk about our response to the Board  
17 direction that was not related to funding. So we'll  
18 circle back to your question after we get through that  
19 content in the second Q&A session. So for the rest of the  
20 Q&As, we're going to focus on questions that are related  
21 to the funding programs, Carl Moyer, the Clean Off-Road  
22 Equipment Voucher Program, the Low Carbon Transportation  
23 Program, or any of the other programs that Melissa went  
24 over at the end there.

25           MR. KOLB: So all of the funding type questions?



1 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
2 Funding questions, now, yeah, and then we will  
3 pause again at the end and take questions related to the  
4 program response to Board direction.

5 MR. KOLB: Yeah. No problem. I just -- I just  
6 am trying to figure out what I'm going to do with my boat,  
7 because if I install the Tier 4 motors, it will burn.

8 That's all

9 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
10 Yeah. Thank you for the comment. We recognize  
11 your concern.

12 Yeah, so Aaron, can you go through and --

13 MR. KOLB: Yeah, thank you.

14 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
15 Yeah. So back to you, Aaron. Can you scan  
16 through and read just the questions that are related to  
17 incentive funding or we could switch to those that have  
18 raised hands.

19 TTD AIR RESOURCES ENGINEER BALI: Yes. Let's  
20 see.

21 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
22 And if you have your hand up now and it's not a  
23 funding question, perhaps it would be best if you just put  
24 your hand down for now and you can re-raise it at the time  
25 we're taking general questions.

1 TTD AIR RESOURCES ENGINEER BALI: So we have a  
2 question in the chat from Lauren Dunlap who said,  
3 "Regarding Moyer, awards for CHC before and after these  
4 new amendments will be very different. Is it possible to,  
5 at some point before the Board meeting, see a couple of  
6 before and after calculations showing the impact of the  
7 Moyer grant of the new reg"?

8 And, let's see, Lauren, I'm going to unmute you,  
9 so if you have any further questions or anything to add to  
10 that.

11 MSCD AIR POLLUTION SPECIALIST POGGI: Lauren,  
12 this is Anthony Poggi, the lead staff for the Carl Moyer  
13 Marine. If you don't have anything to add, I can address  
14 your question. I will talk to my management about putting  
15 out some different -- some example calculations. The  
16 before and after, it does depend on a lot. A vessel with  
17 a short lead time, let's say with a three-year surplus --  
18 three years of surplus may not be affected very much by  
19 the change in -- by the change in the guidelines, but  
20 vessels with longer lead time perhaps, you know, our new  
21 chapter would change the calculations a bit, but I will --  
22 I will address that with my management and we will try to  
23 get some information out to the public.

24 TTD AIR RESOURCES ENGINEER BALI: Next question  
25 comes from Jim Luttjohann. I apologize if I mispronounce

1 your name, but his question is, "Are privately owned or  
2 operated passenger vessels eligible for Moyer funds"?

3 MSCD AIR POLLUTION SPECIALIST POGGI: Is he on  
4 the -- is he available to speak?

5 TTD AIR RESOURCES ENGINEER BALI: Yes. I will  
6 unmute him.

7 MSCD AIR POLLUTION SPECIALIST POGGI: Yeah.  
8 Jim, can you hear me? This is Anthony.

9 JIM LUTTJOHANN: Hi. This is Jim.

10 MSCD AIR POLLUTION SPECIALIST POGGI: Hi, Jim.  
11 Can you tell me what you mean by privately owned and  
12 operated?

13 JIM LUTTJOHANN: I reside on Catalina Island,  
14 where our primary passenger service vessels are all  
15 privately owned. We have two different operators that  
16 connect us to the mainland. And it was my understanding  
17 in the previous meeting in November that -- and maybe I  
18 misunderstood, but that the funding that was available for  
19 the large passenger vessels were limited to like the  
20 Government-run ones up in Northern California.

21 MSCD AIR POLLUTION SPECIALIST POGGI: I'm not  
22 sure what exactly funding you're talking about, but if any  
23 vessel is performing in a business capacity and is not a  
24 pleasure craft or just used for leisure, it is -- should  
25 be eligible for the Carl Moyer Program.

1           Now, whether your air district decides to fund a  
2 certain type of vessel or another, I can't speak to that  
3 here. I don't want to speak for them. But a private  
4 business is -- that is -- private businesses and  
5 government vessels and other types of equipment are funded  
6 by Carl Moyer.

7           JIM LUTTJOHANN: Thank you.

8           MSCD AIR POLLUTION SPECIALIST POGGI: You're  
9 welcome.

10           TTD AIR RESOURCES ENGINEER BALI: Our next  
11 question is from an anonymous attendee who's asking "Are  
12 marine vessels currently eligible for CORE? If not, will  
13 they be included in the next iteration of the program"?

14           MSCD AIR POLLUTION SPECIALIST STERLING: Yeah.  
15 This is Todd Sterling. I talked about CORE earlier. Yes,  
16 we're planning on bringing commercial harbor craft into  
17 CORE this round. Like I said in my presentation, we're  
18 having our first work group meeting on the 18th. This is  
19 to kind of kick-off the process for this year. I'd love  
20 to hear from you ideas on -- and different technologies  
21 that could be included into CORE. So if you can attend  
22 that meeting, you know, reach out to me. My email address  
23 is on there earlier and we can talk about it on the side,  
24 but this is just the first meeting of several that we'll  
25 have to work out CORE and how we want to spend these

1 funds.

2 TTD AIR RESOURCES ENGINEER BALI: We have another  
3 anonymous attendee who asks, "Will there be incentive  
4 funding for public entities, such as local governments, to  
5 handle increased numbers of abandoned or surrendered  
6 vessels due to noncompliance"?

7 MSCD AIR POLLUTION SPECIALIST POGGI: Can you  
8 repeat that question one more time? I'm sorry, I  
9 trying --

10 TTD AIR RESOURCES ENGINEER BALI: Yes.

11 MSCD AIR POLLUTION SPECIALIST POGGI: -- I want  
12 to make sure I understand before I try to answer it.

13 TTD AIR RESOURCES ENGINEER BALI: Yeah. So the  
14 question was, "Will there be incentive funding for public  
15 entities, such as local governments, to handle increased  
16 numbers of abandoned or surrendered vessels due to  
17 noncompliance"?

18 MSCD AIR POLLUTION SPECIALIST POGGI: And from a  
19 Moyer perspective, I can't speak to that. That's not a  
20 type of project that we've done.

21 MSCD STAFF AIR POLLUTION SPECIALIST LANDBERG:

22 This is Earl Landberg from CARB. I'll just offer  
23 real quick, you know, there's concurrent programs like  
24 that in farmland for, you know, illegal disposal hazardous  
25 waste and such. And that's probably ran through the

1 county. So that would be something that is really outside  
2 of any of our sphere of influence here in CARB incentive  
3 team. So I would reach out to your country  
4 representative.

5 TTD AIR RESOURCES ENGINEER BALI: We'll be  
6 switching to raised hands. So Matt Holmes, I'm unmuting  
7 you, if you have any questions, please ask.

8 MATT HOLMES: Yeah. I kind of said in the chat  
9 too, but basically my questions was about Moyer and I was  
10 particularly interested in the commercial harbor craft  
11 vein and if there's any sort of targeting of incentives  
12 based on air pollution attribution or non-attainment with  
13 the Clean Air Act. I saw a table up there that didn't  
14 list the San Joaquin Valley Air Pollution Control Strict  
15 and we have the worst air in the entire country and we got  
16 it 10 years earlier than everyone. And so I see millions  
17 of dollars going to places like Monterey and Ventura. And  
18 so I'm curious if there's any sort of a depreciation for  
19 equity and environmental justice in the Moyer CHC funding  
20 formula.

21 MSCD AIR POLLUTION SPECIALIST POGGI: So as I  
22 said in the presentation, and thank you for your question,  
23 we do -- Moyer allocations are determined in part by  
24 community need, which includes air pollution as well as  
25 the CAP program as well, is targets areas with undue or

1 more pollution burdens. This table that you're looking at  
2 is not all Moyer spending. That's only marine. And as  
3 you might imagine, the San Joaquin Valley doesn't have a  
4 lot of harbor craft, so that's why that when you -- when  
5 you're looking here, you don't see them on there. So I  
6 hope that answers your question.

7           The pollution burden is taken into account. This  
8 table does not represent all source categories. San  
9 Joaquin Valley, for instance, would have a very high share  
10 of the ag. If I were to put up a table with ag equipment,  
11 you'd see them very significantly represented.

12           TTD AIR RESOURCES ENGINEER BALI: The next  
13 question is from Mark Roest, if you have a question about  
14 any of the incentive funding, I will unmute you and you  
15 can ask.

16           MARK ROEST: Great. Thank you. Yeah, it is  
17 about incentive funding. And there's a pro -- you know,  
18 it's in the context of both existing repower technology,  
19 which is unfunded and needs to be funded to get the  
20 prototypes commercial -- to get the prototypes certified,  
21 so that it can then provide thousands of conversions for  
22 the ports. So what we're looking for is money for --  
23 money for the conversions of the Class 8 trucks that have  
24 to be, unless something has been extended that I don't  
25 know about, that have to be the older ones, 2009 and

1 earlier engine model area, according to CARB must be  
2 updated to 2010 or later and/or electric conversion before  
3 the end of this year in order to keep -- for the people  
4 who operate them to maintain their livelihoods, because  
5 they're going to be barred from the ports and the  
6 multi-modal rail hubs after the end of this year.

7           So we're trying to jam together a -- the  
8 resources necessary to get these conversion kits into  
9 production. They're already designed and specked. They  
10 need to be brought into production and they can be brought  
11 into pretty high volume production if the funding is  
12 there. And that will cover the short haul -- you know,  
13 there's 230 to 300 kilowatt hour lithium battery packs  
14 that are already designed for those and we are working on  
15 two plus kilowatt hours per kilogram batteries and 48 --  
16 and we will be working on 48 percent efficiency solar  
17 thin-film, which means twice the amount of electricity  
18 generated in the same area over truck stop or a yard.

19           So we're looking for the money for that. We need  
20 to be able to say to our customers and we've got one  
21 customer who's a -- who is an opinion leader in one of the  
22 ports. So we need to be able to say to them you can get  
23 this money, but we're talking about for conversions not  
24 for replacement vehicles.

25           So our conversion -- so I understand the last



1 page, they said this is for -- you know, not for new  
2 vehicles, but for the previous three programs that were  
3 talked about, are those -- are conversions allowable for  
4 funding in those? And also is there anywhere you can find  
5 funding to -- for start-up funding for the companies that  
6 can provide them?

7 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

8 Well, thank you for the comment. It sounded like  
9 most of your question was pertaining to funding for  
10 sources that are not harbor craft, like trucks. So I  
11 don't know if any of our incentive funding groups have  
12 information for you. If not, we'll need to circle back  
13 with you to get you the right person to answer that  
14 question.

15 MARK ROEST: Yeah. Well, we can also do the same  
16 conversions for any diesel harbor craft that runs  
17 essentially the same size engines up to a Class 8. And we  
18 also have technology, not -- the conversion guy may --  
19 probably can do that. We, and the battery, and solar  
20 company also have large-scale gearless wind turbine  
21 generator design, which can be used as a wheel motor. So  
22 we can provide high -- or, you know, as a marine motor  
23 too. We can provide very high torque, higher powered  
24 gearless motors to go with our batteries and solar.

25 MSCD STAFF AIR POLLUTION SPECIALIST LANDBERG:

1 Mark. Mark, I don't want to interrupt you, but I  
2 think for the interests of time, it may be a good idea --

3 MARK ROEST: Yeah, and that was it.

4 MSCD STAFF AIR POLLUTION SPECIALIST LANDBERG:

5 -- to if you could communicate directly with me,  
6 since I'm lead staff --

7 MARK ROEST: Okay.

8 MSCD STAFF AIR POLLUTION SPECIALIST LANDBERG:

9 -- for CARB's Advanced Technology Demonstration  
10 and Pilot Projects, and we can talk about all the funding  
11 options for on-road vehicles and large-scale projects.

12 MARK ROEST: All right. Thank you. I took a  
13 picture of your contact info.

14 MSCD STAFF AIR POLLUTION SPECIALIST LANDBERG:

15 Great, Mark.

16 TTD AIR RESOURCES ENGINEER BALI: Okay. Our next  
17 call -- our next person with a raised hand is Jared Davis.  
18 Jared Davis I'm unmuting you. You may begin talking.

19 JARED DAVIS: Yeah. Okay. Hi. Can you hear me?

20 TTD AIR RESOURCES ENGINEER BALI: Yes, we can  
21 hear you.

22 JARED DAVIS: Okay. My name is Jared Davis. I  
23 am a board member of Golden Gate Fisherman's Association,  
24 as well as Golden State Salmon Association, and also the  
25 owner and operator of a 49-passenger charter boat based

1 out of Sausalito, California. I provide fishing and whale  
2 watching trips to the public.

3 I'd actually like to preface my question with  
4 kind of a statement. It's been shown that these Tier 4  
5 engines will not be able to be installed in vessels that  
6 are made of fiberglass, wood, and possibly even aluminum.  
7 So that represents, you know, a vast majority of the  
8 charter boats in the State. So my question would be this  
9 is CARB has, in leading up to the November meeting,  
10 concluded that vessel replacement would be possible to be  
11 funded by the individual boat owners, if those boat owners  
12 would simply raise their prices by no more than \$40 per  
13 passenger.

14 However, contacting actual ship builders and an  
15 analysis by a CPA show that prices would have to increase  
16 by hundreds of dollars, you know, tripling the price of a  
17 one-day fishing or whale watching trip. Given that CARB  
18 did not contact these actual ship builders and basically  
19 just used values from current vessels, that can't comply  
20 with the equipment mandates by the way, will CARB be  
21 updating the economic impact to these boat owners and will  
22 CARB reflect the loss of revenue to these boat owners from  
23 individuals and families that will no longer be able to  
24 afford to access these trips due to the price?

25 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

1           Thank you, Jared, for the question. I think the  
2 short answer is no, we're not going to be updating the  
3 economic analysis, because that's not what the Board  
4 directed us to do. We are going to cover what the Board  
5 did direct us to do shortly. So if you have your hand  
6 raised, please lower your hand if you do not have a  
7 question related to the funding programs we just  
8 discussed.

9           We'll come back to questions that are related to  
10 Board direction and updates to the economic cost, the  
11 economic impacts of the proposed regulation.

12           Thank you.

13           TTD AIR RESOURCES ENGINEER BALI: Okay. Go back  
14 to the -- go back to the chat real quick, we have a  
15 question from Christian Stark, who asks, "How does Carl  
16 Moyer handle the calculation of surplus years in the gray  
17 area before the pending regulations are approved by the  
18 Board?"

19           MSCD AIR POLLUTION SPECIALIST POGGI: So the Carl  
20 Moyer -- Carl Moyer staff have -- direct the districts to  
21 run their programs according to the current guidelines  
22 until the new regulation is passed by the Board. So I  
23 have been advising the air districts who administer marine  
24 projects that they are obligated to the current  
25 guidelines, however that they should take in any potential

1 compliance dates in the new -- in the new regulation into  
2 account, so we don't have -- they don't have a project  
3 that's slated to go past a future compliance date,  
4 whatever that would be for the new technology.

5 Now, if they are working on a project now in the  
6 recent -- say in the last year, that 2020, 2021 engine  
7 isn't -- will likely not have a compliance date in the  
8 immediate future. So there should be some project life  
9 there before there's any compliance dates that comes into  
10 effect.

11 But there is -- so I've been advising the  
12 districts to take the new regulation into account, as far  
13 as project life, but that they are only obligated to go  
14 buy what's currently the existing Commercial Harbor Craft  
15 Regulation, and thereby the guidelines -- the current  
16 Moyer guidelines as well.

17 JARED DAVIS: Thank you very much. I think that  
18 answers my question.

19 MSCD AIR POLLUTION SPECIALIST POGGI: You're  
20 welcome. Thank you.

21 TTD AIR RESOURCES ENGINEER BALI: Yeah. Our next  
22 question is from Greg Bombard. In the chat he asks, "Can  
23 you provide us with a guarantee that if we build new  
24 vessels to Tier 4 standards that we will be permitted to  
25 operate them for their full 20- to 25-year useful life?"

1 And after reviewing the Governor's new budget, I didn't  
2 find anything that provides funding for those of us who  
3 are affected by your proposed regulations. We have spoken  
4 with CORE representatives and funding isn't available  
5 there either. Please tell us where we are going to find  
6 funding for such a costly and potentially business-killing  
7 regulation"? And Greg Bombard I'm going to unmute so you  
8 may speak if you have anything else to add.

9 GREG BOMBARD: Yes. Good afternoon. That's our  
10 question. I mean, basically we understand that CARB  
11 funding is for repowers. And unfortunately, that's not a  
12 feasible move for us, meaning in Catalina Express. We  
13 would lose over 56 percent of our passenger complement,  
14 which therefore makes it an unfeasible project. And  
15 again, we need to try to find some funding that's going to  
16 help us get to the fact that the new vessel is going to  
17 range around \$20 million. And we would have to build six  
18 to seven of those vessels to replace the fleet over this  
19 run with CARB.

20 So we're looking to try to help support whatever  
21 means we have to to get the government to understand that  
22 we need some funding for this new regulation. That's our  
23 point. And that if we do build a Tier 4, that we will get  
24 some guarantee that as new technology comes along, meaning  
25 electric or hydrogen electric or whatever, that this --

1 the new CARB 4 -- or the Tier 4 vessel would then not be  
2 told that it needs to go away and we need to move to the  
3 newer technology before we've even got any chance to get  
4 the lifecycle out of that. Those are my two questions.

5 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

6 Well, thank you, Greg, for the comment. We  
7 recognize the challenge that the proposed amendments  
8 present, especially as it relates to compliance costs. As  
9 you're aware and as we discussed today, there's some  
10 incentive funding opportunities that are for repower, some  
11 are just for zero-emission, some include vessel  
12 replacement options. So to the extent that those could be  
13 maximized for your fleet, we're here to make sure you have  
14 all the information you can, so that you can take  
15 advantage of those opportunities and anything else that  
16 comes to be available in the future.

17 On the regulation side, we're going to discuss  
18 shortly that there's going to be a potential technology  
19 and implementation review that's going to look at how the  
20 implementation of Tier 4 requirements goes, and also the  
21 status of zero-emission technology. And I'm going to save  
22 the rest of that for later, but I will just point out that  
23 the proposed amendments have dates running out through  
24 2031 and compliance extensions would run through 2035. So  
25 as proposed under this rulemaking, the requirements would

1 be as proposed, which would be for ferries in your  
2 application going from the mainland California to Catalina  
3 Island to meet a Tier 4 plus DPF performance standard.

4 GREG BOMBARD: And then would you also be working  
5 with the Governor or whoever to try to have him understand  
6 the cost effectiveness of this and how we might find  
7 funding or how he may put together some funding for this?  
8 If it's as good as we all think and will be for the  
9 emissions here in the local basin, then hope hopefully  
10 he'll see the benefit to putting dollars towards it.

11 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

12 That's a good question. I think that Bonnie  
13 Soriano, the Chief of our Branch, might have something to  
14 say to that. But I did want to turn over to Anthony Poggi  
15 to add a little bit more detail on the Moyer Program, at  
16 least on the funding that we have available now. So over  
17 to you, Anthony.

18 MSCD AIR POLLUTION SPECIALIST POGGI: Thanks  
19 David. So I just wanted to clarify that Moyer can pay for  
20 a Tier 4 vessel replacement. We do these projects on a  
21 case-by-case basis. We will try to streamline that  
22 process a little bit in the revised guidelines. However,  
23 like I said, it is something where we ask the -- just for  
24 the integrity of the program, we ask that the District  
25 provide us with information to show why a replacement is



1 necessary. And if it's not necessary, then -- and the  
2 repower would be a cheaper option, then we would pay based  
3 on the repower. But if a replacement is necessary, then  
4 it's -- then you would be paid based on the cost of the  
5 replacement cost. So I just want to make that clear, that  
6 vessel replacements are possible through Carl Moyer.

7 GREG BOMBARD: Anthony, thank you for that. I  
8 was always understood that we would not be eligible for a  
9 full replacement. But are you going to take into  
10 consideration then the feasibility of a repower versus  
11 having to build new?

12 MSCD AIR POLLUTION SPECIALIST POGGI: Repeat that  
13 last part for me, please, take into account --

14 GREG BOMBARD: Sure.

15 MSCD AIR POLLUTION SPECIALIST POGGI: -- the  
16 feasibility of a repower versus building new?

17 GREG BOMBARD: Right. If the vessel is not  
18 feasible to upgrade to Tier 4, is that going to be a  
19 consideration toward funding a new vessel?

20 MSCD AIR POLLUTION SPECIALIST POGGI: Absolutely.  
21 So that's what we -- that's -- if a district brings me a  
22 case-by-case for a vessel replacement, that's one of the  
23 first questions I ask them is why -- not out of -- not out  
24 of any kind of skepticism, just so I have -- I have it in  
25 my -- to present to my management why is the repower

1 necessary. Okay. The new technology is not feasible.  
2 Okay. Show me why and then that will be part of our  
3 case-by-case determination.

4 GREG BOMBARD: Thank you for that.

5 MSCD AIR POLLUTION SPECIALIST POGGI: That is a  
6 major factor. Yeah.

7 GREG BOMBARD: Thank you very much for that.

8 MSCD AIR POLLUTION SPECIALIST POGGI: You're  
9 welcome.

10 TTD AIR RESOURCES ENGINEER BALI: So our next --  
11 going back to the raised hands, our next person with a  
12 raised hand Frank Rescino. Frank, I'm going to unmute  
13 you, you may ask your question.

14 FRANK RESCINO: Can you -- okay. Can you hear me  
15 okay?

16 TTD AIR RESOURCES ENGINEER BALI: Yes, we can  
17 hear you.

18 FRANK RESCINO: Okay. My name is Frank Rescino.  
19 I have the vessel Lovely Martha. My family has been in  
20 business since 1908. That's 113 -- 114 years now.

21 What I want to ask, I was looking at the charts  
22 and stuff and the money there. And I want to -- it's my  
23 legacy to hand down my vessel or my business to my son,  
24 who's a fourth generation fisherman. And this is very  
25 important to me. I've been researching alternate, you

1 know, hybrid systems, and what else. But the -- what I  
2 see, I see like a few million dollars there. I mean, just  
3 for one boat, you're talking a few million dollars.  
4 There's going to be enough money to replace 200 boats? I  
5 mean, the State I here has \$20 billion. I mean, I'm just  
6 worried about the money. I'm worried about if I approach  
7 a hybrid system, is that Carl -- in the Carl Moyer thing,  
8 like an electric engine, diesel-powered electric, or  
9 diesel hybrid or -- is the -- the funding is there for  
10 that right now?

11 A replacement of one vessel is going to cost you  
12 over a million bucks, two million maybe, three. I was  
13 just wondering will there be more money?

14 MSCD AIR POLLUTION SPECIALIST POGGI: So I can  
15 speak on the Moyer side of things. And if any other  
16 incentive staff here want to chime in after me, please do.  
17 I did present on the funding slide that there is a very  
18 large allocation compared to the historical allocations  
19 that we received this year. So instead of the 70 to 94,  
20 we have a -- you know, a three and a half -- around  
21 threefold increase in that funding just for this year and  
22 \$130 million for Moyer in subsequent years.

23 Community Air Protection good 260 million in this  
24 current fiscal year. So while I can't guarantee, like I  
25 said in my presentation, what the districts will spend the

1 money on, because they select the projects, there is more  
2 money than there has ever been. And so that's all I can  
3 speak to as far as the amount of money available in the  
4 Carl Moyer and CAP programs.

5 FRANK RESCINO: And is a hybrid system eligible  
6 for that too?

7 MSCD AIR POLLUTION SPECIALIST POGGI: A hybrid  
8 system is eligible on a case-by-case basis. Now, I will  
9 say that a hybrid system, if it's not verified, then it's  
10 a little bit harder to -- like to do the calculations on,  
11 but it is an eligible project type on a case-by-basis,  
12 since it's explicit in the Carl Moyer guidelines that we  
13 have that as an eligible project type.

14 FRANK RESCINO: It's A lot safer and it's a lot  
15 cheaper than putting a Tier 4 in there, but it's a lot  
16 cheaper than replacing a vessel too. I want to appreciate  
17 everything Carl Moyer has done. I've used the program  
18 several times and I'm looking for that to be our salvation  
19 in the future.

20 And that's pretty much it. I want to thank you  
21 and keep the money coming, please, because we have no  
22 intention of being put out of business by this.

23 MSCD AIR POLLUTION SPECIALIST POGGI: Thank you  
24 for your feedback. I'm glad you've had a positive  
25 experience with the program.

1 TTD AIR RESOURCES ENGINEER BALI: Our next  
2 individual with a raised hand Jerry Allen. Jerry, I'm  
3 going to unmute you and you may ask your question.

4 JERRY ALLEN: Hi. Can you hear me okay?

5 TTD AIR RESOURCES ENGINEER BALI: Yes, we can  
6 hear you.

7 JERRY ALLEN: All right. Mostly -- this is  
8 mostly towards Anthony. On the Carl Moyer Program, last  
9 year we attended a grant funding workshop where we were  
10 told that the Moyer Program was going to be reduced to a  
11 40 percent funding per project and a million dollar cap  
12 per project. I also heard Melissa mention something on  
13 one of the other programs that was a 40 percent funding  
14 program. Can you elaborate on that, because it really  
15 changes the dynamics of trying to get funding, and to make  
16 it a viable business decision to keep the boats in  
17 California basically.

18 MSCD AIR POLLUTION SPECIALIST POGGI: So when you  
19 say 40 percent -- thank you for your question. When you  
20 say 40 percent, are you saying 40 percent of the project  
21 costs.

22 JERRY ALLEN: Yes, sir. Yes, sir.

23 MSCD AIR POLLUTION SPECIALIST POGGI: Okay. I am  
24 in charge of writing the marine chapter. I have written  
25 no such draft that includes a cap of 40 percent. The

1 workshop you went to, I don't know if that was a district  
2 workshop or if that was a CARB workshop.

3 JERRY ALLEN: Okay.

4 MSCD AIR POLLUTION SPECIALIST POGGI: If it was a  
5 district workshop, the district may have decided that they  
6 will be reducing marine projects to 40 percent.

7 JERRY ALLEN: It was a Port -- POLA, Long Beach  
8 and LA grants workshop presentation and they covered, you  
9 know, multiple, including Carl Moyer. South Coast was  
10 there, you know. And so continue on what about a -- do  
11 you see any caps or is it still by -- you know, a million  
12 dollar cap or anything or is it case by case?

13 MSCD AIR POLLUTION SPECIALIST POGGI: We don't  
14 have a price cap on Moyer. There are three factors that  
15 would dictate your grant, one would be cost effectiveness.  
16 And I'll also add for zero-emission and hybrid  
17 technologies, the cost effectiveness goes from 30,000 a  
18 ton up to a hundred thousand a ton. So it's a three times  
19 higher cost effectiveness. So the cost effectiveness of  
20 the project, the cost of your Moyer -- or the amount of  
21 Moyer funding cannot exceed your project amount. And then  
22 there's also a -- the chapter itself will set a maximum  
23 funding percentage.

24 So there's three factors at work there, but I  
25 have not -- I have not released anything privately or

1 publicly saying a program-wide million dollar cap. We've  
2 had plenty of marine projects that were over a million  
3 dollars, as they so often are, and -- nor have I, you  
4 know, put out any public -- anything publicly that says  
5 that we will be introducing a statewide 40 percent funding  
6 project cost cap on Moyer projects. If Long Beach and  
7 other districts decide to do that, that's something that,  
8 you know, we could talk to them about as far trying to  
9 figure out their strategy and how to strategize going  
10 forward. They do have the ability to run their programs  
11 at the funding amounts they see fit, depending on their  
12 communities needs and where they want to focus their  
13 money.

14 JERRY ALLEN: Okay. Thank you. That answers my  
15 questions.

16 MSCD AIR POLLUTION SPECIALIST POGGI: You're  
17 welcome.

18 TTD AIR RESOURCES ENGINEER BALI: Our next person  
19 with a raised hand is Jaime Diamond. Jaime, I'm going to  
20 unmute, so you may ask your question.

21 JAIME DIAMOND: Good evening, everybody. My name  
22 is Jaime Diamond. I own Stardust Sportfishing out of  
23 Santa Barbara. I also own Santa Barbara Landing.

24 Funding is incredibly skewed an inequitable along  
25 the California coast. You've repeatedly said there's more

1 money now than ever, yet my area in Santa Barbara on slide  
2 I believe it was 19 received none, despite they told --  
3 they were told there was so much coming they increased  
4 their maximums from this last cycle, only to then half to  
5 reduce it by almost half.

6 I'm now out of pocket over a hundred thousand  
7 dollars in my project that I'm doing right now. For one  
8 engine, the max is \$150,000 that we get. For one -- and I  
9 only can do one engine on that.

10 I have another vessel that, I mean, other  
11 people -- most vessels have two engines. There are areas  
12 just south of us in Ventura where they get up \$500,000 and  
13 there's areas that get zero dollars, because they aren't  
14 next to a disadvantaged community, so somehow that means  
15 their boat is magically able to afford all of this.

16 So I'm very concerned in how funding is going to  
17 get to those that need it, because it's never gotten there  
18 properly, especially right now. Like, look, you can see,  
19 zero dollars in 2021, Santa Barbara County. That's nuts.

20 So are you guaranteeing -- and seeing as you have  
21 acknowledged that most of the vessels in my fleet have to  
22 be replaced, are you guaranteeing funding for all vessels  
23 that need to be replaced to comply, because as of now,  
24 there are lots of vessels in areas that get no funding as  
25 it is, no grant money. So through slide -- let's see



1 here, which was that? That was -- I don't have the slide  
2 number, the funding vessel replacement and zero-emission.  
3 And you've talked about it now, you -- your funding  
4 replacement. Is there a cap on replacement, because it's  
5 a guarantee that my vessels are going to have to be  
6 replaced. They're wood and fiberglass.

7           So is -- I mean, do I just go and call a shipyard  
8 right now and say, hey, I need to order a boat and throw  
9 it on the Moyer tab? I mean, because that's pretty much  
10 what we're looking at and you're going to have a log jam  
11 of people that have to do that.

12           I'd be lucky if -- we'd be -- I doubt that in our  
13 lifetime, you'd be able to build all the vessels that need  
14 to be replaced, so -- and that's assuming that everybody  
15 got money for it. So I just want to know how you're going  
16 to magically have all this money to build all these new  
17 vessels? Yeah. Where -- how are you going to do this?

18           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

19           Hi, Jaime. Thank you for your comment. And I --  
20 I'm sorry to hear that the Moyer project that you were  
21 pursuing didn't end up working out. The Carl Moyer  
22 Program is available for -- in some cases, to pay for  
23 surplus emissions reductions. It's not a guarantee that  
24 that funding would be available for a particular operator  
25 or for a particular region. I don't know if Anthony Poggi

1 wants to talk at all about how the Legislature has  
2 directed how the funding is apportioned between air  
3 districts, but we do recognize and our cost analyses have  
4 assumed the full cost of compliance on the operators and  
5 that there would be no incentive funding.

6 We did assume near vessel replacement in our cost  
7 analysis for the sportfishing sector. We do recognize  
8 those engines become more available and in more compact  
9 footprints. There's an opportunity that perhaps a repower  
10 could be possible by the time your compliance date comes.

11 MSCD AIR POLLUTION SPECIALIST POGGI: Thanks,  
12 David. And I'll just add. Like I said, the Moyer  
13 allocations are dictated by statute by State law. We  
14 don't have -- you know, we are -- there's a prescription  
15 for how we determine the allocations. As far as how your  
16 district treats marine projects, again the districts have  
17 that ability to fund marine projects with a cap. I've  
18 heard of the cap in Santa Barbara before. Their board, I  
19 would assume, or the District has decided to strategically  
20 limit price caps or put a price cap in for marine  
21 projects. So I never want to speak on the district's  
22 behalf, because that's their jurisdiction.

23 I suggest that, you know, everybody, and  
24 including you're all here participating in this public  
25 process, make sure to participate locally with your

1 districts as well and make them aware of the need of these  
2 source categories, especially because districts do like  
3 big projects typically. It gets a large chunk of money  
4 out the door very quickly. That's typically a positive  
5 for them. So I would encourage you to be active locally  
6 as well.

7           JAIME DIAMOND: So I actually am. I'm incredibly  
8 active locally. The problem is they were told they were  
9 going to be getting quite a bit more money for this last  
10 cycle and then wound up getting less than half of what  
11 they were told overall from whatever the funding sources  
12 were, which is crazy, because all I've been hearing in  
13 these presentations is how much money you guys are  
14 swimming -- like they're swimming in this money to be able  
15 to do these things and it didn't happen.

16           So my issues is that you're trying to manage  
17 something on a State level, but we have to deal -- we, the  
18 people that actually have to do it, have to deal at a  
19 county level. And so for there to be equity and to  
20 actually help us help you, kind of situation, this really  
21 should -- you need to change how the funds are allocated,  
22 and either take it out of the county's hands or give it  
23 completely to -- or give all the counties enough to do  
24 what they need to do, because it doesn't work right now.  
25 Even as is, even without everything else going on, there

1 are boats that can't get newer engines, because they can't  
2 afford it, because their areas don't get the funding.

3           So it's -- you know, even if they -- you know,  
4 the people that want to that are trying, and I'm one of  
5 those people, trying to -- we're at Tier 3, but I mean,  
6 it's like trying to make it harder for people to do the  
7 right thing. If you want someone to do this, then it --  
8 reason would be and logic would be that you give them all  
9 the tools to be able to do it, set them up for success,  
10 and that's not what's happening.

11           So you need to take a good look on the funding  
12 side to set people up for success. I mean, are you able  
13 to give \$5 million for each of these small passenger  
14 fishing vessels, because that's what the average cost is  
15 going to be. So -- for replacement. I mean, I'm just  
16 saying it doesn't -- it doesn't pan out as it is.

17           And in talking to my county, I can do that all I  
18 want, but ultimately it's at the State level, because they  
19 can only do what -- allocate what they're given.

20           MSCD AIR POLLUTION SPECIALIST POGGI: Well, I  
21 appreciate your feedback and if you want to follow up with  
22 me offline about some allocations and I can answer all the  
23 questions you might have and maybe direct you to some  
24 other funding opportunities for you, that maybe go or more  
25 directed towards the State instead of to the county, I'd

1 be happy to help you and give you as much information as I  
2 can.

3           JAIME DIAMOND: And the other thing is we're not  
4 allowed to stack Moyer fund. So it's like if we got -- I  
5 mean, we get Moyer Funding, but then we can't get any  
6 other source of funding unless we take out like a loan or  
7 something. So there's just -- there's a lot of ways in  
8 which it's -- and the fact that in order to do the Moyer  
9 funding, you have -- as a person have to pay everything a  
10 hundred percent up front and then you get reimbursed,  
11 which makes it even more of a burden on the small business  
12 owner.

13           I mean, there's so much different things, instead  
14 of just making this a streamlined process. Help us, help  
15 you. I keep saying that, but like really, like it just  
16 feels like every time we try and take two steps forward,  
17 we're shoved five back. You know, we're set up for  
18 failure here.

19           MSCD AIR POLLUTION SPECIALIST POGGI: Like I  
20 said, I -- you know, I'm happy to -- I'm happy to follow  
21 up with you offline and make sure that you have all the --  
22 you know, all the information you need as far as other  
23 opportunities, if Moyer is not working for you. And I'll  
24 also, when I do talk to the districts about marine  
25 funding, you know, I'll try to gauge their -- try to

1 understand their strategy better, because like you said,  
2 there's plenty -- there's more demand than there are funds  
3 in some places, and -- yeah, so I'm happy to follow up  
4 with you offline about this.

5           JAIME DIAMOND: And I totally appreciate that and  
6 will take you up on it, but honestly at least I get  
7 funding. There are so many others that I hope are  
8 listening that will take you up on that offer to talk  
9 offline, the problem is offline doesn't work for a lot of  
10 people, but it's just there are so many people -- this  
11 whole process has been so inequitable and the process  
12 before has been inequitable. So I think there needs to be  
13 more transparency in funding across the state for this  
14 program. Thank you.

15           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
16 Thanks, Jamie. Over to you Aaron.

17           TTD AIR RESOURCES ENGINEER BALI: We will --  
18 next, we'll be moving to phone callers. So, Nick, if  
19 you'd like to call out the phone callers.

20           TTD AIR RESOURCES TECHNICIAN TAYLOR: Sure. And  
21 I've been tracking the number of people coming in and out  
22 on phone. Right now, I'll call on folks in groups of  
23 phone numbers by the first digit of your area code. So if  
24 your phone number begins with a 1, 2, 3, 4, or 5, I have  
25 allowed you to speak. So please speak up, unmute yourself

1 by dialing star six, and state your name and your  
2 affiliation before you begin.

3           Okay. I'm not hearing anything. All right.  
4 Moving on, if your phone number area code begins with 6,  
5 7, 8, 9, or 0, I have unmuted you. Please again press  
6 star six as well to unmute on your end and share if you  
7 have any comments or questions.

8           Okay. I'm not hearing anything. We'll circle  
9 back around one more time, but otherwise, back to you,  
10 Aaron.

11           TTD AIR RESOURCES ENGINEER BALI: Thanks, Nick.  
12 So our next -- going back to the chat, our next caller is  
13 Markus Medak. And he asks, "Are there any mechanisms in  
14 place for allowing Carl Moyer funding when a compliance  
15 deadline is changed by amended regulations"?

16           MSCD AIR POLLUTION SPECIALIST POGGI: So Mark, I  
17 don't know if you're still on the phone here, but -- or if  
18 you're muted, but when you say amended regulations, once a  
19 regulation would be -- if it was amended, like I -- like I  
20 mentioned earlier, the guidelines and the districts are  
21 instructed to follow the current guidelines until the  
22 Commercial Harbor Craft amendments are finalized and --  
23 which is scheduled for March, I believe. So until that  
24 date where they pass, the districts are operating under  
25 the current guidelines.

1           Now, I, like I said, have advised them to take  
2 into account proposed compliance dates in the current  
3 draft of the regulation and keep an eye on those when they  
4 are -- when they are processing applications and deciding  
5 to write incentive contracts, so that we can avoid a  
6 situation where someone who is eligible for Moyer, and  
7 they say, okay, well, let's fund them A, let's extend  
8 their -- or excuse me, let's make their contract with  
9 Moyer end in 2027, and it turns out that the new  
10 regulation has a compliance date in 2025. That's a  
11 situation where no one would have done anything wrong  
12 under the current guidelines, but you'd end up with a  
13 active Moyer contract which -- in which the funded  
14 equipment would have to be retrofitted or replaced.

15           So I have been advising the districts to keep an  
16 eye on the new regulation when they're determining how  
17 long they're issuing incentive contracts. But until the  
18 regulation is finalized, the districts are operating under  
19 current guidelines.

20           MARKUS MEDAK: Can you hear me? I'm here.

21           MSCD AIR POLLUTION SPECIALIST POGGI: Yep.

22           MARKUS MEDAK: So no, my question was more like  
23 to comply with the surplus time. So if somebody, for  
24 example, now had an applications in, but they had Tier 0  
25 equipment, if they put it in and then this proposed Harbor



1 Craft Rule goes through, they're not going to be able to  
2 get the three years of surplus, because then the  
3 compliance date would be, I think, what 2023, I think?

4           So I guess my question is when you put this in,  
5 you're going to knock -- you know, there's going to be a  
6 lot of parts -- you know, there will be a lot of  
7 operations that would no longer be eligible for funding  
8 that would have been otherwise. Is there any way that --  
9 you know, are there any mechanisms available at all or are  
10 you just out of luck, if you hadn't gotten your  
11 application in before that compliance date was changed?

12           MSCD AIR POLLUTION SPECIALIST POGGI: So the  
13 three-year -- the three-year surplus requirement has been  
14 something that's been in the marine chapter for as long as  
15 I've been aware. The pool of -- the pool of vessels that  
16 will have those short compliance deadlines is something we  
17 could consider when we're rewriting the guidelines. I,  
18 again because of the surplus requirements, it's -- I  
19 understand -- I understand what you're saying is that if  
20 your -- if your compliance date is now -- if you suddenly  
21 have two years of surplus, are you eligible? The answer  
22 under the current guidelines would be no.

23           If you were -- if you proposed a project where  
24 you were going beyond what was required by the regulation,  
25 then you would be eligible for Carl Moyer. We could fund

1 you past your compliance date, because you would be  
2 going -- you would be getting the extra part of earlier  
3 and extra when it comes -- when it comes to surplus.

4 MARKUS MEDAK: Yeah, but as you heard before, it  
5 seems like it's going to be pretty darn difficult for us  
6 to be able to put in a Tier 4 with DPF, for example. And  
7 so pretty much if you didn't apply before this year, if  
8 this goes through, we're pretty much out of luck in the  
9 sportfishing sector from what I can tell. Correct me if  
10 I'm wrong, but that -- from my reading, that's what it  
11 appears to be.

12 MSCD AIR POLLUTION SPECIALIST POGGI: In the  
13 current guidelines, if you have less than three years of  
14 surplus, you are correct, that you -- you are not eligible  
15 for Moyer funding.

16 MARKUS MEDAK: Got it. Thank you.

17 MSCD AIR POLLUTION SPECIALIST POGGI: You're  
18 welcome.

19 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

20 And, Markus, I'd just like to add before we go on  
21 to the next question, that under the regulation, if you  
22 get to Tier 3 on your sportfishing vessel by the end of  
23 this year, December 31st, 2022, your compliance deadline  
24 would be pushed out to December 31st, 2030 before any  
25 extensions are considered. So I'm not speaking about

1 Moyer funding availability, but if somehow you're able to  
2 get Tier 3 in your vessel, that could be a way to get some  
3 extra time to figure out your business plan to get to that  
4 Tier 4 plus DPF standard.

5 MARKUS MEDAK: Right.

6 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
7 Just wanted to highlight that for you.

8 MSCD AIR POLLUTION SPECIALIST POGGI: Yeah,  
9 David. Thanks for bringing that up. If you were to, you  
10 know -- if you were to have a Carl Moyer vessel project  
11 completed by the end of this year, like David said, you  
12 would be -- according to the regulation, if you have a  
13 Tier 3, that does change -- that changes the compliance  
14 date. So that's another important thing to wherever  
15 possible act as early as possible, whether that's on your  
16 own or with an incentive program like Moyer.

17 MARKUS MEDAK: All right. Okay.

18 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
19 Back to you, Aaron. And just so everyone knows,  
20 we're going to run until 5:45 on the funding questions and  
21 then get to the next part of the presentation. We will  
22 take a five-minute break at 5:45. So we'll have a chance  
23 to take a break and then get back to the presentation. So  
24 Aaron, please proceed.

25 TTD AIR RESOURCES ENGINEER BALI: Okay. Our

1 next -- in the comments, our next caller is from Graham  
2 Balch from -- at Green Yachts. His question is, "How to  
3 vessel operators who are located in an area of California  
4 in which the AQMD does not administer marine funds apply  
5 to Moyer funds, and how would they apply for CORE  
6 funding"?

7 MSCD AIR POLLUTION SPECIALIST POGGI: So you're  
8 in an area of California -- I don't know if you're still  
9 on the phone. I apologize for the background noise at my  
10 home. You're in an area of California where there's no  
11 air district that operates -- that operates the Carl Moyer  
12 Program? I can't speak to CORE. I'll let the CORE  
13 individual -- I'll let the CORE staff reply to that. But  
14 I would think that if you're operating in California, you  
15 do have an air district -- you're in a jurisdiction of at  
16 least -- of one air district or another. It would just be  
17 determining which one.

18 You say AQMD. I don't know if you're referring  
19 to South Coast. If you're outside South Coast, perhaps  
20 you're in Ventura or a different air district that would  
21 be the one who would be perhaps able to take your Carl  
22 Moyer application.

23 TTD AIR RESOURCES ENGINEER BALI: Graham, I did  
24 unmute you, so if you have any follow-up, you may ask.

25 MSCD AIR POLLUTION SPECIALIST STERLING: Yeah.

1 And this is Todd with CORE. CORE works a lot differently  
2 than Carl Moyer, whereas in the CORE Program we have  
3 equipment and the powertrain companies apply for approval  
4 and a voucher amount. And you'd work through a dealer to  
5 purchase the powertrain.

6 GRAHAM BALCH: Sorry about that.

7 TTD AIR RESOURCES ENGINEER BALI: Hi, Graham, we  
8 can hear you.

9 GRAHAM BALCH: So just simply, as stated in the  
10 chat, there are a number of vessel operators around the  
11 State of California that exist in an AQMD that does not  
12 administer marine Moyer funds. How does a vessel operator  
13 in an AQMD that does not apply -- offer marine Moyer funds  
14 access the Moyer fund? And also will the CORE funding  
15 program be administered and applied to through the AQMDs  
16 or will there be another process?

17 MSCD AIR POLLUTION SPECIALIST STERLING: So the  
18 CORE funding is not through the districts. The CORE  
19 funding is through the State. I'll just kind of repeat  
20 myself again that the CORE funds work through a equipment  
21 manufacturer. They get a voucher amount, work through a  
22 dealer. So you as the vessel owner would go through a  
23 dealer type network and decide which powertrain would work  
24 for your vessel.

25 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

1           And, Graham, we hope that answers your question.  
2   And when we brought the CORE team on, I'll just say that I  
3   had you in mind and I'm hoping that you can participate in  
4   their process, so that some of the marine zero-emission  
5   power systems can be considered for CORE vouchers. It  
6   seems that that could be a viable opportunity to get more  
7   zero-emission vessels out on the water before compliance  
8   deadlines, and then for the other vessels that don't have  
9   compliance deadlines to push towards zero where feasible.  
10   So thank you for your comment. I don't know if you have  
11   any more.

12           GRAHAM BALCH: Absolutely. I was planning on  
13   follow up with Matt and Todd. Specifically, what does a  
14   vessel operator who is an AQ -- is in an AQMD without  
15   marine Moyer funds, how do they access Moyer funding, so  
16   like a vessel in Bodega Bay, for example, or Fort Bragg?

17           MSCD AIR POLLUTION SPECIALIST POGGI: So if  
18   your -- if your air district has decided that they do not  
19   want to or did not -- they choose that marine funds, they  
20   don't want to spend money on marine projects, that is  
21   their decision. Like I said, we allocate the money based  
22   on a -- based on various factors, but the air districts  
23   choose which source categories they want to fund. And  
24   Moyer funding has to go through the air district.

25           GRAHAM BALCH: Thank you.

1           TTD AIR RESOURCES ENGINEER BALI: Okay. Our next  
2 person in the chat is Jason Covell. He asks,  
3 "Stakeholders are finding that proposed CARB regulations  
4 show little compatibility with State grant and other  
5 funding programs, particularly when existing vessels must  
6 be replaced due to design and age constraints. How will  
7 CARB ensure that support funding is available? This is of  
8 particular concern, given the aggressive implementation  
9 schedule".

10           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

11           This is David. I'll take that question. Thank  
12 you, Jason, for the comment. I think that goes back to  
13 the statement that incentive funding is available in some  
14 cases, but it's not a guarantee. And the cost and  
15 economic analyses that we performed assumed no incentive  
16 funding. I don't know if you have a follow-up, but I  
17 think that's the only answer we have for you.

18           JASON COVELL: Yeah. Evening. This is Jason. I  
19 do have follow-up regarding Moyer funding. We were given  
20 some insufficient information from our -- the Bay Area Air  
21 Quality Management District, about vessel replacement. So  
22 we chose not to apply for CORE -- Carl Moyer funds. Since  
23 we've started the project, we found out that there is  
24 money available on a case-by-case basis for vessel  
25 replacement. But then we were told last week by the Bay

1 Area Quality Management -- Air Management District that  
2 since we started the project, we're not available -- or  
3 we're unable to apply for funding.

4 And, you know, we just -- we find that -- you  
5 know, it's pretty odd that we were given bad information  
6 and then we find out we have the information -- the  
7 correct information that we could have applied, that we  
8 can't apply now. Is there a way to revisit the  
9 case-by-case, Anthony?

10 MSCD AIR POLLUTION SPECIALIST POGGI: That would  
11 be -- the District would have to present me with the --  
12 you know, the scenario, and we'd have to look at it again  
13 with all the information. I don't want to speculate right  
14 here.

15 JASON COVELL: Okay.

16 MSCD AIR POLLUTION SPECIALIST POGGI: But I'm  
17 sorry that there was -- there was confusion on your end.

18 JASON COVELL: Okay. Well, we may reach out  
19 directly to you then just to give you our case. Thank  
20 you.

21 MSCD AIR POLLUTION SPECIALIST POGGI: Um-hmm.

22 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

23 Back over to you Aaron, if you could read the  
24 next question in the chat or next person that has their  
25 hand raised?



1 TTD AIR RESOURCES ENGINEER BALI: Yes. I'm back  
2 to the raised hands. We have David McCloy. David McCloy,  
3 I'm unmuting you, so you may ask your question.

4 DAVID MCCLOY: Thank you. I have one question  
5 with regards to vessel replacements. You discussed the  
6 viability of whether a replacement or a repower is  
7 considered for funding. Do you look at the vessel's age  
8 as a factor in that decision or is it just based on cost,  
9 whether it's, you know, \$3 million for a repower or \$14  
10 million for a new vessel. Do you also look into the  
11 service life of the vessel in a pretty rigorous  
12 environment?

13 MSCD AIR POLLUTION SPECIALIST POGGI: You know,  
14 I've had a few of these case-by-cases in which I haven't  
15 had to look at the life of the vessel, because it wasn't  
16 really a factor, because it was obvious where the  
17 replacement was a better option for both the program and  
18 for the vessel owner. It's something I could consider,  
19 but it's -- like the process suggests, it is a  
20 case-by-case. So if it is -- if it is a very old vessel,  
21 and that's part of the reason that a replacement is being  
22 suggested or proposed, that is something I would -- I  
23 would look at. Whether or not that's the deciding factor,  
24 like I said, I can't promise until I would have all the  
25 information in front of me. But if a vessel has been in

1 the water and is nearing the end of its useful life, that  
2 would -- that would be a factor.

3           Okay. Understood. So we'd just have to be  
4 prepared to -- with surveys and all the right information  
5 to talk more about that.

6           MSCD AIR POLLUTION SPECIALIST POGGI: Yeah. And  
7 I would encourage everybody listening, if you know that  
8 your project type is a case-by-case basis, make sure the  
9 district -- when you present it to the district, make sure  
10 that -- the more information you come with the better,  
11 because then there's less back and forth and it speeds up  
12 the process between myself, you, the installer, or the  
13 manufacturer, or the district. The more information and  
14 data I have to look at right off the bat or the district  
15 has to look at, it really does streamline the process.

16           And coming into the district saying, hey, I know  
17 this is eligible. Is it something you'd like to propose?  
18 It's something that I saw CARB made clear in the  
19 workshop -- the January workshop that this is eligible, if  
20 I present X, Y, and Z. While I can't promise that the  
21 district is going to take your project, I do know that  
22 that makes it easier on them, if they know that you've  
23 already done some of the legwork and have some of the  
24 information.

25           So that's just a little bit of advice.

1           DAVID MCCLOY: Okay. Great. Thank you. We're  
2 working on that. Appreciate it.

3           MSCD AIR POLLUTION SPECIALIST POGGI: Um-hmm.  
4 Yep.

5           TTD AIR RESOURCES ENGINEER BALI: Okay. Our next  
6 person with raised hands is Amber Coluso. I apologize if  
7 I mispronounced your last name. I'm unmuting you, so you  
8 may speak.

9           We can't hear you, Amber, if you have a question  
10 or not.

11          AMBER COLUSO: Hi. Can you hear me now?

12          TTD AIR RESOURCES ENGINEER BALI: Yeah, we can  
13 hear you.

14          AMBER COLUSO: Okay. Sorry. So the main issue  
15 is that for Carl Moyer, since the districts have the  
16 ability to choose what they want the funding to do, what  
17 we really want is that if you're going to use Carl Moyer  
18 as the funding source for all these repowers and  
19 replacements, you should require a certain percentage has  
20 to go to marine projects, because otherwise, it will just  
21 go to whatever the districts are concerned about, like,  
22 for instance, South Coast right now, they're more  
23 concerned about that truck earlier. They're going to be  
24 using most of their Carl Moyer for probably truck  
25 replacements or whatever, so it's not going to really go

1 to marine.

2           And another concern about replacements is that  
3 it's not -- a lot of the replacements, the cost  
4 effectiveness doesn't work out. It's going to be --  
5 the -- a lot of these vessels are already Tier 2 or Tier  
6 3. And if they're going to be trying to -- if they have  
7 to replace the vessel to Tier 4, the amount of emissions  
8 reductions isn't enough to meet the amount of cost of  
9 the -- of like a two or three million dollar boat, so it's  
10 not worth it. So it ends up losing in the  
11 competitiveness. So that's why there's all this concern,  
12 because that's what's happened in the past.

13           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

14           Amber, thank you for the comment. I don't know  
15 if any of the funding teams have a specific response. We  
16 recognize that some districts don't choose to spend money  
17 on marine projects and it's within their purview to decide  
18 how that money is allocated.

19           AMBER COLUSO: But, well, if -- can't you in the  
20 next funding, when you issue the funding, can't you like  
21 have certain designation, like because you're the main  
22 source of the funding, so you should be able to at least  
23 have a percentage like set aside for like -- like this  
24 percentage needs to be used for harbor craft or -- at  
25 least or something, like, you know, at least 10 percent,

1 so at least there's something that will guarantee that  
2 there's project.

3 And like if at some point like by X amount of  
4 time, if there's not enough -- like there's no takers,  
5 that it can be rolled over to some other project.

6 MSCD AIR POLLUTION SPECIALIST POGGI: Amber, so  
7 funding is never earmarked. And I'm not sure if that's  
8 something that -- that's a road we would -- I can't commit  
9 to changing that at this current time. Sometimes State  
10 reserve funding will be -- Moyer State reserve funding  
11 will be focused in one area or another, but as of right  
12 now, you know, funding -- we don't earmark funds for the  
13 districts.

14 AMBER COLUSO: Okay.

15 MSCD AIR POLLUTION SPECIALIST POGGI: But I  
16 appreciate your comment on that. Thank you.

17 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

18 Okay. Back to you, Aaron. We probably have time  
19 for one more question and then for all the funding  
20 questions we didn't get to, we can revisit when we finish  
21 the presentation, after the next part of the evening here.

22 TTD AIR RESOURCES ENGINEER BALI: Okay. Our next  
23 person with a raised hand is Lisa Lavelle. Lisa, I'm  
24 unmuting, so please ask your question.

25 LISA LAVELLE: Thank you. And I actually put it

1 into the chat as well, just in case. But are there any  
2 funds that government entities, (inaudible) with the City  
3 of Avalon, such as cities or nonprofits can apply for to  
4 create public-private partnerships to assist commercial  
5 watercraft like the Catalina Express or the Catalina  
6 Flier, which would serve both visitors and also are the  
7 primary means of public transportation for residents  
8 living in underserved or rural communities? And do any of  
9 these apply to retrofits or are they only for new vessels?  
10 I know, Anthony, you had mentioned that the Carl Moyer  
11 funds would be actually available on case-by-case basis  
12 potentially for new vessels and/or replacements. So  
13 the -- those -- that was encouraging to hear that. We  
14 thought we were going to be excluded from that funding.  
15 But I know -- I think Melissa had mentioned there was a  
16 couple of other opportunities for funding sources and just  
17 wanted to confirm what those were.

18 MSCD AIR POLLUTION SPECIALIST POGGI: So, Lisa,  
19 thank you for your comment. I can speak for Moyer. If  
20 there was a -- funding is available. And, I'm sorry, your  
21 connection was really bad. You were -- you were wondering  
22 if a public entity or public-private partnerships are  
23 eligible for Moyer funding? I apologize, your microphone  
24 was buzzing pretty bad.

25 LISA LAVELLE: Yeah, sorry about that. Yes, I

1 was wondering if those options are available. I did put  
2 the question in the Q&A if you want to read the question  
3 there.

4 MSCD AIR POLLUTION SPECIALIST POGGI: Okay.

5 LISA LAVELLE: But just trying to see if  
6 that's -- if there are additional opportunities for  
7 funding going through the either government funding route  
8 to reach out for funds for anything that you're doing or  
9 any nonprofits that could apply for funds as well?

10 MSCD AIR POLLUTION SPECIALIST POGGI: Well, for  
11 the Moyer part of that question, I will follow up with you  
12 in the chat. I don't know if any of the other incentive  
13 program contacts wanted to chime in at this time.

14 TTD AIR RESOURCES ENGINEER HOUCHIN: I can --  
15 this is Melissa Houchin again. I can just kind of  
16 reiterate about for the additional funding programs I  
17 mentioned, the Volkswagen Mitigation Trust funds are  
18 available for repowering Tier 2 and older ferries and  
19 tugboats. And I believe that should be available for  
20 government projects as well.

21 Do you have any follow-up questions on that  
22 specifically?

23 LISA LAVELLE: Would you be able to just put that  
24 slide back up for a moment with that information. I  
25 remember that it had some contact information.

1           TTD AIR RESOURCES ENGINEER HOUCHIN: Yes. Slide  
2 23 is that slide. And there -- we do have a fact sheet on  
3 our website which is linked down there with all this same  
4 information, I believe.

5           LISA LAVELLE: Yeah. And the only other question  
6 I had regarding the topics this evening, there are a  
7 number of both privately owned golf carts and also golf  
8 cart fleets, we were just wondering if golf carts were  
9 classified as off-road vehicles as well? It seems that we  
10 often run into issues regarding -- pardon me for going off  
11 topic slightly, but regarding golf courts and being able  
12 to have them receive funding for Cash for Clunkers or any  
13 other things like that. I wondered if anybody would be  
14 able to speak to some of the funds available for that  
15 level of information.

16           MSCD AIR POLLUTION SPECIALIST STERLING: Yeah,  
17 this is Todd with CORE. We could talk about off-road  
18 equipment offline, not during this Commercial Harbor Craft  
19 meeting. Why don't you give me -- send me an email or  
20 give me a call, we can talk about golf carts.

21           LISA LAVELLE: Will do. Thank you, folks. All  
22 of you, thank you.

23           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
24 Okay. This is David. I see there's a ton of  
25 questions, but we're going to go on a quick break, five



1 minutes. So it's 5:48 p.m. here in California, so we'll  
2 wait until a 5:53 and resume with the presentation, then  
3 pick up with questions. We'll be here at least till 7:00  
4 to finish out. So thank you, everyone. And we'll be back  
5 at 5:53 p.m.

6 (Off record: 5:48 p.m.)

7 (Thereupon a recess was taken.)

8 (On record: 5:53 p.m.)

9 TTD AIR RESOURCES ENGINEER HOUCIN: Okay. Hi,  
10 everyone. It's now 5:53, so I'm going to continue on with  
11 the rest of the presentation here on slide 25 --

12 --o0o--

13 TTD AIR RESOURCES ENGINEER HOUCIN: -- which is  
14 the agenda. We're going to be moving on to the next  
15 agenda item, which is discussing Board direction from the  
16 November hearing starting with streamlining compliance  
17 extensions on slide 26.

18 --o0o--

19 TTD AIR RESOURCES ENGINEER HOUCIN: The proposed  
20 amendments currently include five compliance extensions to  
21 provide flexibility for circumstances outside of an  
22 operator's control, such as delays in manufacturing or  
23 infrastructure and feasibility concerns.

24 Extension E3 is a feasibility extension that can  
25 provide an additional six to eight years for compliance

1 when retrofits are not technologically feasible and a  
2 vessel replacement is not financial feasible. This  
3 extension is intended to provide flexibility for operators  
4 that have unique operations that present feasibility and  
5 financial concerns.

6 At the November hearing, the Board directed staff  
7 to streamline the extension application process and  
8 facilitate the combined use of extensions and funding  
9 opportunities for small businesses.

10 Slide 27.

11 --o0o--

12 TTD AIR RESOURCES ENGINEER HOUCHIN: To  
13 streamline the application process, staff is proposing to  
14 allow the use of the 2019 California Maritime Academy  
15 Study to demonstration lack of technical feasibility of  
16 retrofits, eliminating the need for operators to fund  
17 their own feasibility study for the initial extension  
18 application.

19 Owners would still need to submit  
20 company-specific financial records demonstrating a lack of  
21 financial feasibility for purchasing vessel replacements,  
22 but the use of the CMA Study would decrease the overall  
23 cost and time necessary to submit an extension  
24 application.

25 Slide 28, please.

1                   --o0o--

2           TTD AIR RESOURCES ENGINEER HOUCHIN: I will now  
3 be moving to the next agenda item from the Board hearing,  
4 which is technology and implementation review on slide 29.

5                   --o0o--

6           TTD AIR RESOURCES ENGINEER HOUCHIN: Staff  
7 received public comments and Board direction to transition  
8 to zero-emission technology where feasible and to  
9 reevaluate zero-emission feasibility in the future to  
10 avoid missing opportunities to advance technology in the  
11 marine sector. Staff is proposing an implementation and  
12 technology review beginning every two years in 2023, which  
13 would track the advancement of zero-emission technology,  
14 as well as report on implementation progress of Tier 4 and  
15 DPF technology in the marine sector.

16           This will allow staff to reevaluate all  
17 technologies and reconsider requirements, if technology  
18 advancements facilitates more emission reductions.

19           Slide 30.

20                   --o0o--

21           TTD AIR RESOURCES ENGINEER HOUCHIN: We'll now  
22 move to the next agenda item, zero-emission contingency  
23 measure on slide 31.

24                   --o0o--

25           TTD AIR RESOURCES ENGINEER HOUCHIN: Board

1 discussion highlighted the importance of attaining air  
2 quality standards and including possible contingency  
3 measures requiring more zero-emission vessels in the  
4 future. The current proposal already maximizes the use of  
5 zero-emission technology that is available and feasible in  
6 the marine sector today. And the findings of the proposed  
7 technology and implementation review would inform future  
8 regulatory action, including this contingency measure for  
9 a more broad zero-emission adoption.

10 Slide 32.

11 --o0o--

12 TTD AIR RESOURCES ENGINEER HOUCIN: We'll now  
13 move to next steps for the proposed amendments on slide  
14 33.

15 --o0o--

16 TTD AIR RESOURCES ENGINEER HOUCIN: Staff will  
17 continue outreach with operators, the review of public  
18 comments submitted, and consider feedback received today,  
19 and return to the Board for a final vote and consideration  
20 in spring 2022.

21 The anticipated effective date of the proposal is  
22 January 1st, 2023.

23 Next slide, please.

24 --o0o--

25 TTD AIR RESOURCES ENGINEER HOUCIN: Contact

1 information for program staff is listed on slide 34, as  
2 well as our website where you can find more information,  
3 fact sheets, and other resources.

4 I'll now hand it over to Aaron to facilitate more  
5 questions.

6 TTD AIR RESOURCES ENGINEER BALI: Thank you,  
7 Melissa. Everyone, I'm Aaron Bali and I'll be moderating  
8 this Q&A session. As before, we will rotate between the  
9 chat, the raised hands, and the phone callers who Nick  
10 will handle.

11 And we'll start with the raised hands first.  
12 We'll start with Rick Powers. Rick, I'm unmuting you and  
13 you may ask your question.

14 RICK POWERS: Okay. I'm here. My name is Rick  
15 Powers. And I am President of Golden Gate Fishermen's  
16 Association. I also own and operate a couple of charter  
17 boats out of Bodega Bay, California.

18 You know, after listening to everybody, you know,  
19 speak regarding the issues at hand, the Moyer Program has  
20 been a path which many of our vessels have been able to  
21 take over the years leading us to low emissions. And most  
22 of the boats have been able to use it, but it is not a  
23 one-fits-all process.

24 Listening to Jamie speak about her situation down  
25 in Santa Barbara and others, the Moyer Program really

1 isn't the answer for everyone. My question is, you know,  
2 as mentioned earlier in your -- earlier at the very  
3 beginning of this -- of this meeting, you know, newspapers  
4 report that the State is flush with money and that the  
5 Governor -- that Governor Newsom wants to spend 2 -- 22.5  
6 billion over the next five years to fight climate change.  
7 Given that CARB's Harbor Craft Regulations will remove  
8 some sportfishing and whale watching boats from service  
9 and destroy our livelihoods, how come the Governor's  
10 budget didn't provide us any economic relief?

11 My main questions is, is CARB willing to ask the  
12 Governor to buy our soon-to-be non-compliant boats and  
13 perhaps provide us grants to buy new ones - you know, such  
14 a move would save jobs and save communities that depend on  
15 commercial passenger boats to support local tourism - and  
16 if not why not?

17 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

18 Hi, Rick. Thank you for the comment. We  
19 recognize that the proposed amendments do have an  
20 associated regulatory cost. As CARB staff, we're not able  
21 to directly advocate to the Governor's office and request  
22 funding to help support regulated entities under our  
23 regulatory efforts. However, we do undergo significant  
24 cost and economic analyses through the regulatory process.  
25 So the Standardized Regulatory Impact Assessment went to

1 the Department of Finance. They do work with the  
2 Governor's office on our budget -- on the State of  
3 California budget.

4 I also want to draw your attention to the Board  
5 member discussion on November 19th, where one of our Board  
6 members, Hector De La Torre, did talk about talking with  
7 some members of the Legislature about appropriating  
8 funding that would be targeted or directed to harbor  
9 craft.

10 Outside of those efforts, we are not able to  
11 really advocate for more funding, but we do recognize  
12 there is a cost and it's been disclosed through our  
13 regulatory process. So thank you for your comment and  
14 we'll take it into consideration.

15 RICK POWERS: Thank you.

16 TTD AIR RESOURCES ENGINEER BALI: Our next caller  
17 is Kathleen Keehan. Kathleen, I'm unmuting you, so you  
18 may ask your question.

19 KATHLEEN KEEHAN: Hello. Can you hear me?

20 TTD AIR RESOURCES ENGINEER BALI: Yes, we can  
21 hear you.

22 KATHLEEN KEEHAN: Excellent. Okay. Hi. I had  
23 some questions about Moyer funding, and eligibility, and  
24 the interaction between that and the extension options  
25 that are available. I work in San Diego and we do a lot

1 of repower projects for these charter fishing vessels.  
2 Most of them are going up to -- moving up to Tier 3  
3 engines. And I understand that there would be -- are  
4 there Tier 4 engines available for these or would those be  
5 part of an extension process?

6 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

7 So thank you for the question. What I heard you  
8 ask was whether Tier 4 engines are available for  
9 sportfishing vessels in particular. There are a number of  
10 Tier 4 engines that have been certified. The standards  
11 have been in effect by U.S. EPA since as early as 2014. I  
12 believe there's 22 models that are certified or were  
13 certified before we took the presentation to the Board.

14 We recognize that not all those are the exact  
15 power rating for a sportfishing vessel. Also, the other  
16 part of the question is will it fit in the existing  
17 vessel? And our feasibility study with the California  
18 Maritime Academy that we posted in 2019 did show that the  
19 wood and fiberglass constructed vessels do have some  
20 challenges to be reconfigured. So there are engines  
21 available for sportfishing vessels, but vessel replacement  
22 may need to be a compliance outcome until more than 22  
23 engines become certified and they're of the smaller  
24 footprint that can fit into the existing hulls.

25 So let us know if that answers your question.



1           KATHLEEN KEEHAN: It does mostly, but I think my  
2 concern is we have applicants who are right now applying  
3 for Tier 3 equipment. Let's say that they would qualify  
4 for extensions, but we need -- I'm uncertain how the  
5 timeline works with us getting folks under contract to  
6 repower their boats, then applying for extensions to be  
7 able to access enough time to get at least three years of  
8 surplus under the -- under the Moyer Program. And at the  
9 end of that, let's say they do get through all of those  
10 hoops, would they then be required -- it sounds to me like  
11 they'd be required to go to a Tier 4 plus a DPF by  
12 probably around 2030. Am I understanding that correctly?

13           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

14           So for the newest Tier 3 engines, the compliance  
15 date on sportfishing vessels would be December 31st, 2030.

16           KATHLEEN KEEHAN: Okay.

17           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

18           The slide that's up on the screen now shows a  
19 couple of examples on how extensions can be used to  
20 generate extra surplus. Anthony Poggi might have a little  
21 bit to add here, but I'll just start by saying that one of  
22 the key considerations is that you can only get this  
23 extension if it's not feasible to repower. And we're only  
24 certain that you can get the extension for two years at a  
25 time.

1           So if there's a compliance date, for example, in  
2 2028, or let's go down to the bottom of this screen.  
3 There's a compliance deadline at the end of 2026, so it's  
4 the earliest Tier 2 vessel that's in the sportfishing  
5 category, the compliance date can be extended to 2028 with  
6 that extension, but the submission of the application has  
7 to be sent to our regulatory team and it has to be  
8 approved. And then the additional processes through the  
9 Moyer group have to be satisfied in order to count that as  
10 a surplus period starting in 2025. So it will get you an  
11 extra two years to count surplus years from your  
12 compliance date.

13           KATHLEEN KEEHAN: And would you be able to get  
14 that extension that early? Would you have to wait until  
15 2024 for a 2026 compliance date before you could apply for  
16 that extension?

17           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
18           Excellent question. It has to be at least 18  
19 months before the compliance date for the feasibility  
20 extension, E3, in our amendment. So everyone has  
21 different criteria, but you don't have to wait at least 18  
22 months prior to the compliance date.

23           KATHLEEN KEEHAN: Great. Thank you very much. I  
24 appreciate you answering my questions.

25           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

1           No problem. Back to you, Aaron?

2           TTD AIR RESOURCES ENGINEER BALI: Okay. Our next  
3 call in is Merlin Kolb. Merlin, I'm unmuting you and you  
4 can ask your question.

5           MR. KOLB: Hi. This Captain Merlin with Reel  
6 Magic Sport Fishing. The last time I was on you guys just  
7 bounced my question in less than 10 seconds, so can we  
8 talk about it now?

9           TTD AIR RESOURCES ENGINEER BALI: Yeah, go ahead.

10          MR. KOLB: Did you hear me?

11          TTD AIR RESOURCES ENGINEER BALI: Yeah, we can  
12 hear you.

13          MR. KOLB: Yeah, it was the one that I had  
14 submitted under questions. Do you still have that or  
15 should I read it for you?

16          TTD AIR RESOURCES ENGINEER BALI: Go ahead and  
17 repeat your question.

18          MR. KOLB: Okay. My submission is below, CARB's  
19 proposed regulations for commercial passenger sportfishing  
20 vessels and whale watching boats have gathered opposition  
21 from over 20,000 Californians reflected in a petition, and  
22 over 3,000 written comments. And at the last hearing,  
23 nearly a hundred Californians expressed concerns, all of  
24 which were opposed to the regulations as drafted. Did  
25 those concerns expressed have any impact on modifying the

1 proposed Harbor Craft Regulations or are you guys going to  
2 steamroll us, and if so, how did they modify your  
3 recommendations?

4 I'm a business owner. This is Merlin Kolb with  
5 Reel Magic Sport Fishing. I've worked my whole life to  
6 provide this service to the -- to the residents of  
7 California. And these regulations as written will  
8 literally put me out of business. The boat will be  
9 removed from service, because it will burn with a motor  
10 that hasn't even been invented yet.

11 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

12 Well, thank you, Merlin for patience and waiting  
13 to the second part of the presentation. In November, the  
14 Board directed us to cover four items, and one was to  
15 touch back -- touch base back with the regulated community  
16 on incentive opportunities. The other one was to  
17 streamline, the compliance extension process. The other  
18 one was to consider a technology and implementation  
19 review, and the fourth one was to look at a zero-emission  
20 requirement potentially as part of a contingency measure  
21 through the State Implementation Plan process.

22 The changes that we're proposing are going to be  
23 addressed through Board resolution and they would be to  
24 direct us to look at how technology is evolving over time,  
25 both on the Tier 4 engine side as well as the

1 zero-emission technology side, and also to make the  
2 compliance extensions more simple, especially for the  
3 small businesses. And that's what we're providing  
4 information on today and taking your comments for  
5 consideration.

6 MR. KOLB: Well, thank you very much for taking  
7 the comment. The engines that I have now are Tier 2. And  
8 I'm in the process of applying for CARB -- or for Carl  
9 Moyer assistance and hopefully I can get it done with  
10 enough time, so that I can keep operating. I plan to  
11 apply as soon as possible. But there is no way that a  
12 particulate burning filter will work in my fiberglass  
13 vessel. Aluminum is not an option. It degrades the  
14 strength of the aluminum. So if I buy a new vessel, as  
15 CARB suggests -- they say I'm supposed to sunset my  
16 vessel. If I buy a new one and quadruple or quintuple my  
17 costs to my customer, you're basically going to be --  
18 going to be blocking Californians access to the sea,  
19 because only -- you know, we're -- I don't operate in  
20 Beverly Hills. I operate in Bodega Bay and people can't  
21 pay \$700 to go fishing for the day, so they won't go, so  
22 access will be blocked. And my boat will be sunsetted per  
23 your regulations.

24 And if I bought a new steel boat, if I bought a  
25 new steel boat and I put a giant Tier 4 engine in it, the

1 carbon footprint of building the new steel boat, and  
2 disposing of my current excellent fiberglass boat, and  
3 then any hours of service additional, the delta between my  
4 current motors, the tons of emission, the dirty motors  
5 that I have that run very clean by the way, the delta  
6 between the Tier 4 the steel, the carbon footprint of  
7 building the, boat we'd be carbon deficit. Does  
8 anybody -- did anybody ever do the math? There would be a  
9 carbon deficit, if I followed CARB's recommendation to  
10 subset my vessel, but a new one, raise my prices to five,  
11 six hundred dollars a seat. You guys are going backwards  
12 on this.

13 Thank you for taking my call. Do the math.

14 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

15 Thank you for the comment.

16 TTD AIR RESOURCES ENGINEER BALI: Our next caller  
17 is Will Barrett. Will, I'm unmuting you, so you can ask  
18 your question.

19 WILL BARRETT: Hi. Thank you. I'm Will Barrett  
20 with the American Lung Association and very much  
21 appreciate the opportunity to ask a question here.  
22 Certainly, we view the program as an important public  
23 health measure and appreciate, you know, the discussion  
24 tonight, the robust conversation about the funding  
25 opportunities, and other elements that, you know, the

1 Board is reacting -- or the staff is reacting to the  
2 Board's direction.

3           On the slides that were just presented, you  
4 certainly we see the technology assessment as an important  
5 component of the implementation phase. We believe really  
6 it's important to get as many vessels as possible, as  
7 quickly as possible to zero emission. I think that tech  
8 assessment can help identify those pathways as quickly as  
9 possible. So appreciate that discussion.

10           And then the question I have is really on the  
11 issue of compliance extension and the streamlining  
12 proposal. You know, certainly this area of the rule has  
13 been a significant concern of ours, and really wanted to  
14 confirm that the extension process described, you know, as  
15 far as relying on the California maritime study. That  
16 would apply only to the initial application for extension,  
17 rather than kind of an ongoing substitute for a vessel  
18 analysis. Is that accurate or could you clarify that?

19           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

20           Thanks will for the comment and good question.  
21 So our suggestion that we're presenting today is it would  
22 be the initial extension, which would be two years. The  
23 results of the CMA feasibility study did show that there  
24 was no fitment identified to upgrade to Tier 4 and put  
25 DPFs on for the commercial passenger fishing and the

1 commercial fishing fleet.

2           So the one of those that's required to go to a  
3 Tier 4 plus DPF performance standard would be the  
4 commercial passenger fishing fleet. What we're thinking  
5 is even though in that study it was just the sportfishing  
6 or the commercial passenger fishing fleet that had the  
7 feasibility challenges, the reason was because of the  
8 difficulty of reconfiguring the wood and/or fiberglass  
9 hulls. So what we want input on is should we extend that  
10 to any vessel that's wood or fiberglass and should it just  
11 be the initial two years, should it be longer, should  
12 it -- is two years too much and do we really need to have  
13 vessel-specific analyses done to make sure that we're not  
14 granting extensions where they're not actually needed.

15           WILL BARRETT: Okay. I appreciate that. And  
16 I'll just end with saying that I really do feel like it's  
17 necessary and urgent that we move forward with this rule  
18 to establish those public health benefits and get them  
19 rolling as quickly as possible. We encourage the staff  
20 and Board to take action on this really no later than  
21 March to make sure that we're moving the process forward.  
22 So thank you again, really appreciate this.

23           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
24           Yeah, thank you for your comment.

25           TTD AIR RESOURCES ENGINEER BALI: Next caller is



1 David McCloy. David, I'm unmuting you, so you can ask  
2 your question.

3 DAVID MCCLOY: Yes. Thank you again for taking  
4 my question. Back to slide 26 and extension E3. I wasn't  
5 aware that I was trying to find the latest proposal on the  
6 amendments. So that shows six to eight years. Would  
7 that -- if a vessel replacement is happening, let's say  
8 with my group, do we need to show any other -- it would be  
9 mainly for the ability to have the shipyards complete the  
10 projects, and all the design, and all the engineering, and  
11 completing the projects, that six to eight years would be  
12 quite helpful with my group here at San Francisco Pilots.  
13 Would we be able to take advantage of that extension? I  
14 wasn't aware of that one. I was looking more at the  
15 one-year extensions you were talking before.

16 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
17 Yeah. Great question. So can the feasibility  
18 and compliance extension, E3, be applied to your company,  
19 which I believe is the San Francisco Bar Pilots.

20 DAVID MCCLOY: That's correct.

21 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
22 Melissa Houchin, I wanted to direct that question  
23 to you to see if you're able to respond about the  
24 applicability and then also the two requirements that have  
25 to be met.

1           TTD AIR RESOURCES ENGINEER HOUCHIN: Yeah. So  
2 this extension -- in order to get this extension, you  
3 would need to prove -- or demonstrate lack of  
4 technological -- or technical feasibility for the retrofit  
5 and financial feasibility -- lack of financial feasibility  
6 for buying a vessel replacement. And so with this idea of  
7 streamlining the compliance extensions for the initial  
8 application, if the California Maritime Academy study  
9 shows that for your type of vessel, Tier 4 plus DPF is not  
10 feasible then that satisfies that requirement and you  
11 would just need to submit company-specific financial  
12 information to show lack of financial feasibility to  
13 purchase a replacement vessel.

14           And this extension is for two years and then you  
15 would renew it up to six years, or up until 2034, and  
16 possibly up to eight years if you have an early compliance  
17 date, so six to eight years.

18           DAVID MCCLOY: Okay. So it wouldn't be for just  
19 the logistics of completing such a large project for us  
20 with three large vessels. It has to be technical and  
21 financial feasibility.

22           TTD AIR RESOURCES ENGINEER HOUCHIN: Yes.

23           DAVID MCCLOY: It can't just be because it's  
24 really difficult.

25           TTD AIR RESOURCES ENGINEER HOUCHIN: Correct.

1 Yeah, you would want both of those parts, that the  
2 retrofit is not technologically feasible and that buying a  
3 replacement is not financially feasible for your  
4 operation.

5 DAVID MCCLOY: Okay. Thank you.

6 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

7 Add I just want to add that both government and  
8 private companies are eligible for that extension. So  
9 there's no exclusions with -- I know you're not  
10 government, but there's no governmental exclusions.

11 DAVID MCCLOY: Understood. Thank you.

12 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

13 Or private company exclusions.

14 TTD AIR RESOURCES ENGINEER BALI: Our next person  
15 with a raised hand would be, let's see here, Markus Medak.  
16 Sorry, if I mispronounced your name. Markus, I'm going to  
17 unmute you, so you may ask your question.

18 MARKUS MEDAK: Hello. I emailed my questions  
19 earlier this morning, but they don't seem to be showing  
20 up, so I'll just read them, I guess. Can you hear me?

21 TTD AIR RESOURCES ENGINEER BALI: Yes, we can  
22 hear you.

23 MARKUS MEDAK: Alrighty. So I was looking in the  
24 packet of various information that's on the website there,  
25 there's a final report that says characterizing activity

1 and emissions of in-use, commercial harbor craft. And it  
2 explains how you figured out where, you know, in my case,  
3 the sportfishing fleet was operating.

4 And it says that AIS data was used in order to  
5 characterize the spatiotemporal activity of charter  
6 fishing vessels operating out of San Diego Bay. And so I  
7 was just wondering, did you guys know that AIS isn't  
8 required on charter vessels of less than 65 feet in the  
9 San Diego area?

10 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

11 Thanks, Marcus, for the question. And I know  
12 that we've discussed this recently with you offline or in  
13 a separate meeting. So after that meeting, we're very  
14 aware that vessels --

15 MARKUS MEDAK: Okay.

16 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

17 -- below 65 feet aren't required to have it. We  
18 are --

19 MARKUS MEDAK: Okay. I'm just putting it out  
20 there, because I haven't seen it addressed anywhere.

21 Also, in the same report, it shows the -- well,  
22 in the same report, it shows -- actually, I'll skip this  
23 one. I'll just -- I'll just say that you guys are aware  
24 that that is not a very good way of sampling where the  
25 boats are. But I'll go to my next question. And so I was

1 wondering was there ever any statistical analysis that was  
2 conducted to see, you know, because I think there were a  
3 half a dozen charter fishing vessels that were sampled in  
4 the State. So I was wondering if there was any  
5 statistical analysis conducted to see if the sampled  
6 vessels were representative samples of the statewide  
7 population of charter fishing vessels? Was there -- you  
8 know, normally, when you -- when you -- when you're going  
9 to extrapolate to a larger population, I think it's pretty  
10 common when you're sampling a population, you have to do a  
11 statistical analysis to see if your samples are indeed  
12 representative samples. Was that done? I never saw any  
13 evidence of it in that report, but I could have missed it.

14 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

15 AIS data was used to determine the fraction of  
16 operation of all vessel categories either within 24  
17 nautical miles or beyond 24 nautical miles. And that  
18 remains our use and best understanding of the best  
19 available data to make that assumption.

20 Going back to your first question, there were a  
21 number of vessels, I would say at least a third if not a  
22 half, that were in the sample of sportfishing vessels that  
23 were under 65 feet that had AIS data that was considered  
24 in the analysis for the 83 percent of operation within  
25 regulated California waters.

1           MARKUS MEDAK: Yes, but they're not required to  
2 have it -- they're not required to have the AIS on unless  
3 they're in a -- unless they're in a -- I forget the name  
4 that of it, but basically in front of San Diego -- or in  
5 front of LA harbor or San Francisco Bay. If you're not in  
6 a vessel separation scheme, you don't need to have the  
7 AIS. So even though you may have it some of the time, it  
8 doesn't give you an accurate picture of where that vessel  
9 is the whole time.

10           But that wasn't really my question. My question  
11 was, you know, if you're only sampling six boats, which is  
12 what it showed in the charts there, I mean, there are many  
13 different types of boats that have very many different  
14 types of operating parameters. You know, there's some of  
15 us that fish the vast majority of the time offshore or  
16 down in Mexico. And there's a -- you know, there are some  
17 boats also that spend the entire time fishing inside a bay  
18 somewhere, inside San Francisco Bay, or San Diego Bay, or  
19 whatever. But you need to make sure that the samples --  
20 the boats that you pick to sample -- there should have  
21 been a statistical analysis to see if those were actually  
22 representative samples. Otherwise, it's just -- it's not  
23 valid to extrapolate what the rest of the population is  
24 doing using that. So that was my -- that was my question  
25 was whether that had been looked at or not to see if those

1 were indeed representative samples.

2 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

3 Well, thank you for your comment. Did you have  
4 anything else? I did see an email come in from you  
5 earlier that had a lot parts to it.

6 MARKUS MEDAK: No, that was -- that was -- that  
7 was a different question. That was a question on the  
8 Moyer funding.

9 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

10 Okay.

11 MARKUS MEDAK: I do have one more question. It's  
12 basically in the same vein here, once again going back to  
13 the analysis that was -- that you guys did. And so you  
14 guys calculated using AIS data that the sportfishing fleet  
15 spends -- or operates 83 percent of the time within 24  
16 miles of the California coast. If this were to be  
17 wrong -- if this was incorrect, will the calculations of  
18 the contribution of NOx and diesel particulate matter from  
19 the charter fishing fleet change significantly?

20 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

21 So if it's not 83 percent operation, the quantity  
22 of emissions in California from that sector would change  
23 in the model, yes.

24 MARKUS MEDAK: Okay.

25 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

1           There's inherent uncertainty with the best  
2 available data. So the best available projection could  
3 change depending on if the best available input data  
4 changed.

5           MARKUS MEDAK: All right. And would the health  
6 benefit analysis also change?

7           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

8           Yes, the health benefit analysis and input to  
9 that is the quantity of emissions reductions in each air  
10 basin.

11          MARKUS MEDAK: All right. And how about the  
12 economic cost-benefit analysis, would that change too?

13          TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

14          The valuation of the health benefits is tied to  
15 the emissions reductions and so the total cost and  
16 benefits would change. I will point out the cost is  
17 around \$2 billion. The benefits right now is at \$5.25  
18 billion. So we still have a lot greater benefits than  
19 costs as modeled with best available data.

20          MARKUS MEDAK: I think it's arguably best  
21 available, but that's, I guess, beside the point. All  
22 right. Thank you very much. I appreciate it.

23          TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

24          Thanks, Markus.

25          Back to you Aaron.



1           TTD AIR RESOURCES ENGINEER BALI: Next speaker is  
2 Ken Franke. Ken, I'm unmuting your microphone, so you can  
3 ask your question.

4           KEN FRANKE: Good evening. David, thank you for  
5 the opportunity to speak with you. A couple of items real  
6 quick. Number one, we believe -- I'm representing the  
7 Sportfishing Association of California, an emissions  
8 reduction is really a high priority. We get it. Our  
9 ultimate goal is towards that, long-term zero emissions,  
10 et cetera. So a couple of comments to hopefully speed  
11 things up or help all of us help each other.

12           With regard to the extensions, I'd like to give  
13 input. I would recommend on the commercial passenger  
14 sportfishing vessels that the CMA report be accepted as  
15 the terms and conditions of the extensions won't change  
16 depending on the existence of the equipment and fitment.  
17 So that would basically make it a lot more affordable for  
18 people to actually continue to apply for the extensions.

19           The second item. You commented about 22 engines  
20 that were available. We've been looking hard. We've  
21 talked with your staff as well. And specific to the  
22 commercial passenger sportfishing fleet, we've never found  
23 a Tier 4 engine plus DPF that is certified that will fit  
24 in a single boat. So we welcome that information, if  
25 somebody has it. I have had many members ask for it and

1 they've gotten a spread sheet back from staff with  
2 merchant ship engines, et cetera. So we could -- we would  
3 definitely welcome that, because it keeps getting put out  
4 there in the public that there's 22 engines in existence,  
5 and nobody can seem to find them. So I think that's  
6 something that needs to be, just to be fair to everybody,  
7 straight up, if it doesn't exist, it doesn't exist. We  
8 get it that down the road we'd like to see it come, but in  
9 the here and now, it doesn't seem to be there.

10           The other thing for Anthony, his comments from  
11 Carl Moyer, I think what we're seeing here is a great  
12 opportunity for some strategic planning within State  
13 government and those local air pollution districts to  
14 target the marine side of it. We know there's a couple  
15 hundred full-time commercial passengers sportfishing boats  
16 in the states, 80 of them have already gone to Tier 3. I  
17 think the ultimate goal, at least in the here and now, is  
18 get the rest of them to Tier 3 quickly. I think some good  
19 strategic planning can help get everybody across that  
20 finish line. You're looking at about \$40 million. So I  
21 think some good organization and discussions within staff  
22 and those outlying districts might get that done in an  
23 efficient manner.

24           And then finally, the AIS data, Markus said it  
25 pretty well. So most of the boats don't have AIS. And I

1 get it that that's the best available material that you  
2 had at the time. But as an example, the southern  
3 California area, you'd see a lot of straight lines going  
4 straight offshore or to Mexico, you know, 10 days at a  
5 time or two days at a time, whatever it is. You don't see  
6 any of that in the AIS data.

7           So one recommendation would be frankly for the  
8 commercial passenger sportfishing sector, I would  
9 eliminate the AIS data as being a data point, because it's  
10 inaccurate as it's not reflective but of a tiny portion of  
11 the actual fleet. So I know we have a meeting coming up  
12 soon. I wanted to have this be on the record, but we look  
13 forward to talking with you in person and hopefully work  
14 through some of the challenges.

15           Thank you.

16           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

17           Thank you very much, Ken. We look forward to  
18 meeting with you all shortly.

19           TTD AIR RESOURCES ENGINEER BALI: Okay. Sorry.  
20 Next speaker is Peter Schrappen. Peter, I'm unmuting your  
21 microphone, so you may ask your question.

22           PETER SCHRAPPEN: Good evening. Hi David and  
23 Nick. Can you hear me okay?

24           TTD AIR RESOURCES ENGINEER BALI: Yeah, we can  
25 hear you.

1           PETER SCHRAPPEN: Great. Well, thanks. This is  
2 Peter Schrappen. I'm here on behalf of the American  
3 Waterways Operators. We're the national trade association  
4 for the tugboat, towboat, and barge industry representing  
5 the most environmentally friendly and most economical mode  
6 of freight transportation.

7           And I just wanted to weigh in a little bit on a  
8 question for you. You know, the \$1.6 billion CARB Harbor  
9 Craft Rule is scheduled to be finalized in March and we've  
10 sent in some comments, but the Harbor Craft Rule it does  
11 not provide a technically achievable path to compliance,  
12 particularly for vessels that would need to be retrofitted  
13 to comply. As you know, retrofits are either technically  
14 impossible or prohibitively high cost necessitating an  
15 almost complete rebuild and sell off of the existing  
16 harbor craft fleet.

17           You've heard a lot of it -- a lot of that --  
18 those comments this evening. The CARB's rule is based on  
19 inaccurate vessel population counts. We've pointed that  
20 out time and time again. The emission inventories are  
21 inflated. There's a misrepresentation of harbor craft  
22 pollution impacts. And I'm going to just put a little  
23 finer point on that. CARB's model emissions from harbor  
24 craft are as much as four times higher than actual  
25 measured emissions from all sources in four major coastal

1 areas. It's not possible that harbor craft alone could  
2 produce more emissions than all nearby sources.

3 You know, even another specific one that was  
4 acknowledged by CARB that you've refused to address is the  
5 fact that, you know, we've proven under a -- without a  
6 shadow of doubt that the unreported hours are 2.3 percent  
7 not the 29 percent that CARB has factored. And based on  
8 this key number, emissions are a fraction of what you have  
9 in the model.

10 So I'm getting to my question here, but the fact  
11 that this model and the data is so inaccurate and there  
12 continues to be a willful plotting towards and end result  
13 here that's based on faulty data and just an atrocious  
14 model, why is CARB staff continuing to move forward  
15 without any sort of input from an industry as important as  
16 the tugboat, towboat, and barge industry?

17 Thank you.

18 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

19 Peter, thank for your comment. We strive to use  
20 the best available data. We met with The American  
21 Waterways Operators dating back to May 2018. I think your  
22 organization was the first trade group we met with before  
23 the first workshop that we hosted. Regarding that  
24 modeling question you brought up, we had met in direct  
25 meeting with your organization and consultant a couple

1 days ago and have a path forward to explain that it  
2 appears that your consultant used the wrong data when  
3 generating your comment letter. So I think we have a path  
4 forward there.

5 The Board did not direct us to redo any of our  
6 modeling and we're proposing the response to Board  
7 direction today with these four items. So thank you for  
8 your comment.

9 PETER SCHRAPPEN: You and I guess the fact --  
10 just one last question for you then. It's not more a  
11 question, a comment. It's the unreported hour though --  
12 hours though that we pointed out with real-time accurate  
13 information, David, 2.3 percent versus 29 percent. That's  
14 outside of the consultant and we're working with you on  
15 that working with our consultant. But really that 2.3 to  
16 29 percent delta is, I'm going to say, mind-boggling. I  
17 don't want to be too dramatic here, but I think that we --  
18 given the fact that you have not been able to look at the  
19 model again based on this difference, it's time to be  
20 dramatic.

21 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
22 Comment received. Thank you.

23 TTD AIR RESOURCES ENGINEER BALI: So our next  
24 speaker is Luke Burson. Luke, I'm going to unmute your  
25 microphone so you can ask your question.

1           Hi, Luke. I see you're unmuted, but we can't  
2 hear you.

3           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

4           Yeah, Luke, we still can't hear you. Aaron, why  
5 don't we circle back to a different caller and then call  
6 on Luke next, just one more time.

7           TTD AIR RESOURCES ENGINEER BALI: Okay.

8           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

9           And I recommend we go to the chat, as we've been  
10 calling on callers and just read through the comments and  
11 try to get through some of them.

12          TTD AIR RESOURCES ENGINEER BALI: Yes. Okay.

13 This next question is from an anonymous attendee who asks,  
14 "The cost of replacing the 92 sportfishing vessels in San  
15 Diego would, at the estimated given in the Cal Maritime  
16 for per-vessel replacement cost, total 119 million.  
17 Replacement, by the same study, appears likely. How  
18 likely is it funding will be provided to pay for these  
19 replacements or will these costs outstrip the ability of  
20 these programs to the meet that need"?

21          TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS: I  
22 believe that might have been covered before in brief. The  
23 incentive funding is not sufficient likely to cover all  
24 the regulatory costs. Although we're here to maximize  
25 operator use of those funds.

1 TTD AIR RESOURCES ENGINEER BALI: We have another  
2 question from an anonymous attendee saying, "Renewable  
3 diesel requirements appear to be effective in a matter of  
4 months. Can you describe what kind of outreach has been  
5 done to make the fuel companies aware of this upcoming  
6 requirement before enforcing the regulation"?

7 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

8 Yeah. That's a really good question. We, in our  
9 analysis for the proposed amendments, determined that  
10 there was enough renewable diesel to fuel all the harbor  
11 craft, around 60 million gallons a year, and it's also  
12 available across the state. Our activities right now are  
13 focused on returning to the Board and responding to their  
14 direction, and we're taking input on areas for  
15 prioritizing implementation, which would be for the  
16 requirement starting January 1st, 2023, if the Board does  
17 approve.

18 Thank you for emphasizing the importance of that  
19 fuel requirement.

20 TTD AIR RESOURCES ENGINEER BALI: Okay. I have  
21 here Luke Burson's comment. "This question pertains to  
22 the second part of today's session. When I registered, I  
23 was asked if I had a specific question. I submitted a  
24 question. We'll these submitted questions be in the  
25 following session break"? Luke, I noticed you're on right



1 now. Are you able to speak?

2 LUKE BURSON: Okay. I think I've got this  
3 figured out.

4 TTD AIR RESOURCES ENGINEER BALI: All right.  
5 Yeah, we can hear you.

6 LUKE BURSON: You should -- can you hear me now?

7 TTD AIR RESOURCES ENGINEER BALI: Yeah, we can  
8 hear you.

9 LUKE BURSON: Okay. First question, and it's a  
10 simple one, when I registered, I got an email back that  
11 says do you have any questions? And I believe not only  
12 myself but probably some others submitted questions, but I  
13 haven't heard any of those questions offered today. Was  
14 that part of the program or has that been eliminated?

15 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

16 Thanks, Luke. A number of questions did come in  
17 over email and we are going to prioritize the questions  
18 that come in live today and we'll follow up with everyone  
19 whose questions came in by email before the meeting that  
20 we don't get a chance to circle back to at the end.

21 LUKE BURSON: Okay. So let me ask the question  
22 that's most important to me. First off, I am a fisherman.  
23 I'm the president of a local fishing club. I have been  
24 doing this for about 60 years and it's a legacy that I've  
25 passed on to my children and I hope to pass on to my

1 grandchildren. My question is regarding the Tier 4  
2 engines and the boats I fish in today, and it centers  
3 around safety. And my question real simple, what role has  
4 the Coast Guard played in the process to date - so what's  
5 occurred to date by you folks - and specifically in  
6 reviewing the draft recommendations, which are moving  
7 forward, and providing specific feedback regarding these  
8 changes and any impact they'll have on passenger safety  
9 being me? Thank you.

10 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

11 Well, thanks, Luke, for the question. Safety is  
12 a top priority. That's first. The Coast Guard is the  
13 agency, the organization that oversees safety and inspects  
14 vessels. One example is that our process for undergoing  
15 DPF verification requires that the manufacturers comply  
16 with all applicable State and federal safety regulations.

17 We've met with the Coast Guard a handful of times  
18 over the course of the amendments to tell them what we're  
19 proposing to get their feedback, and we continue to work  
20 with them to better understand how their safety  
21 regulations intersect with our proposed amendments.

22 LUKE BURSON: I'll accept your answer, but I  
23 struggle with it. From what I understand, that that  
24 interaction has been limited and has only occurred when  
25 asked by organizations that own boats, and I would have

1 thought you would have started there not end there, but  
2 thank you for your answer.

3 TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO: So,  
4 David, this is Bonnie. I'm going to address this a little  
5 bit. I think -- I think that there's been maybe some  
6 misunderstanding or mischaracterization about how often  
7 we've met with the Coast Guard. We've met with the Coast  
8 Guard numerous times. The Coast Guard doesn't always  
9 provide input on regulations directly, but are always  
10 available to talk about safety and to educate us on what  
11 their safety procedures are. We've met with the Coast  
12 Guard I'm thinking at least 10 times over the course of  
13 this regulatory development.

14 The Coast Guard does inspect the vessels. They  
15 are -- they are involved in certain cases in doing -- in  
16 reviewing designs of vessel updates. And so I just -- I  
17 just want to clarify that we've had quite an intensive --  
18 quite intensive discussions with the Coast Guard. We  
19 continue to have meetings with the Coast Guard. We've had  
20 one that I know of since our Board hearing. So I just  
21 wanted to kind of recharacterize our interaction with the  
22 Coast Guard and the role the Coast Guard plays in working  
23 with us.

24 And I do agree with you and with David that  
25 safety is always, you know, a paramount issue with us, and

1 that's why we do feel, just like -- just like you're  
2 saying that it is very important to work with the Coast  
3 Guard.

4 LUKE BURSON: So is it fair to say that the Coast  
5 Guard is partially responsible for the conclusion that  
6 many of the operators of fiberglass and wood vessels will  
7 have to decommission them and take them out of service,  
8 because there would be a safety issue?

9 TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO: I'm  
10 not sure that -- that characterization -- I mean, what  
11 we're finding is it's a fitment issue, is that the  
12 equipment that's available does not fit in the engine  
13 compartment of those vessels. They're hard to  
14 reconfigure, because they are fiberglass and wood, so it's  
15 a fitment issue. Of course, you wouldn't want to put any  
16 equipment in a vessel that would change its buoyancy or,  
17 you know, would change its seaworthiness, and -- but that  
18 stems from I think the finding from CMA is that they --  
19 that this equipment, while it does exist, the equipment is  
20 safe. There are Tier 4 engines. DPFs have been used  
21 across the board on all sorts of different types of  
22 equipment. It's a fitment issue. And if something  
23 doesn't fit in a vessel, of course, it's -- you know, it's  
24 not going to be the appropriate -- the appropriate  
25 situation for that vessel. And I think that those are the

1 findings that, you know, the study that we -- that we  
2 worked on with CMA found.

3 TTD AIR RESOURCES ENGINEER BALI: If there are no  
4 further questions, I can move on to the next. The next  
5 comment, this is from Shawn A. Bennett who asked, "Do  
6 shipyards -- shipyard availability impact the possibility  
7 of extensions? We have done Tier 4 repowers on our tugs  
8 and its challenging to find yards with the skills to  
9 perform the work".

10 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

11 Yeah. Thank you for that question. Later in the  
12 amendment process, but included in the proposal that went  
13 out in September, I believe its extension E5 does include  
14 a scheduling extension for shipyard delays, if there is a  
15 challenge with regard to the shipyard, so...

16 TTD AIR RESOURCES ENGINEER BALI: Shawn, and I've  
17 unmuted you, so if you have any follow up.

18 SHAWN BENNETT: Okay. Great. No, that's  
19 certainly helpful, just given our specificity, the, you  
20 know, uniqueness of our equipment and how many yards are  
21 available that can do the work on the coast. It's -- if  
22 there are several tugs that are looking to do this at the  
23 same time, I think it's going to take quite a long time to  
24 get them all done, so that's an important consideration  
25 for us. Thanks.

1 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

2 Thank you for the comment.

3 TTD AIR RESOURCES ENGINEER BALI: We have this  
4 next question from Frank Ursitti. I apologize if I  
5 mispronounced your name. Yeah. He says, "In the draft  
6 regulation, CARB requires that CHC be retrofitted with  
7 Tier 4 engines. The inclusion of these technologies on  
8 boats would be a major overall. These types of systems  
9 require support. What effort has CARB done to address the  
10 infrastructure necessary to support this equipment? DEF  
11 will be required for the SCR units and marine fuel  
12 terminals will need to carry this product to support the  
13 required machinery". You have a rather long comment, so  
14 Frank, if you want to clear some stuff up, I'll unmute  
15 your microphone. And you can go ahead and ask.

16 FRANK URSITTI: All right. Thanks. I  
17 appreciate -- I appreciate everybody taking the time for  
18 public engagement tonight. A couple things. I know it  
19 was a long wordy question or comment and I'll break it  
20 down, but I wanted to add something else while I'm on  
21 here. I would really appreciate it, and I think all of us  
22 here would appreciate it, if staff would stop, just stop  
23 stating that there's Tier 4 marinized and certified  
24 options available for CPFVs. We all know that it's beyond  
25 a fitment issue. There isn't something of the

1 displacement or size for CPFVs in the entire state.

2 Dave, we recognize that Tier 4 is out there. We  
3 all recognize that, but what you always leave off, and  
4 what staff always leaves off in front of decision-makers,  
5 most notably your Board, is that marinized and certified  
6 Tier 4 is not available for our fleet. We always leave  
7 that little caveat off the end. So I just wanted to get  
8 that comment out of the way right out of the gate.

9 But in terms of the other -- my initial comment  
10 that I drafted in, in the draft regulation, CARB requires  
11 that commercial harbor craft be retrofitted with Tier 4  
12 engines with DPF and SCR, Tier 3 with DPF in some limited  
13 cases. But the inclusion of these technologies on our  
14 boats would be a major overall for how we operate today.  
15 They're going to require additional support. What efforts  
16 has CARB made to address the infrastructure necessary to  
17 support this type of equipment?

18 Diesel exhaust fluid will be required for the SCR  
19 units and marine fuel terminals will need to carry this  
20 product to support this fleet. So the biggest challenge  
21 here is going to be the tankage or storage for diesel  
22 exhaust fluid to support a fleet of boats that now have,  
23 you know, Tier 4, that's dependent upon this type of  
24 technology.

25 Fuel terminals, as you all know, are located on

1 port tidelands or leased lands from cities and counties  
2 and permitting is going to be required to provide tankage  
3 either above ground or below ground, and that permission  
4 is going to have to come from governing bodies. In San  
5 Diego, for example - I'll just speak for that, because  
6 that's where I am - I know space does not exist at current  
7 marine fuel terminals, and more than likely a coastal  
8 development permit will be required to place a tank or to  
9 dig for new tanks. What engagement have you had with the  
10 Coastal Commission with regards to that type of issue and  
11 have you canvassed marine fuel terminals to see what their  
12 willingness is to support DPF -- or to support DEF  
13 dispersion or dispensing DEF to boats and what they're  
14 going to have to go through, what process they're going to  
15 have to go to or through with Coastal, and is it  
16 worthwhile? I just -- we haven't even addressed that yet.

17 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

18 Well, Frank, thank you for your comments. I  
19 think that the diesel exhaust fluid to -- that is required  
20 to effectively reduce NOx emissions in Tier 4 engines it's  
21 required because that's the way they're designed. That's  
22 been something that's been ruled out nationwide on  
23 on-highway trucks since 2010. There's tens of millions of  
24 on-road vehicles that require it. Marine vessels with  
25 engines model year 2014 and newer that have been required



1 to meet Tier 4 limits have required to use DEF since then.  
2 So that is a change and we'll acknowledge that, that that  
3 will have to be provided at a higher scale for marine  
4 vessel due to the turnover to Tier 4 technology.

5 Thank you for your comment

6 FRANK URSITTI: Well, I understand that, Dave. I  
7 appreciate your answer there. I understand that. I've  
8 owned several vehicles and am very familiar with DPFs and  
9 DEF et cetera. My question is have we -- have we engaged  
10 Coastal with how we are going to store and dispense DEF.  
11 It's a -- it's a footprint issue. Most marine fuel  
12 terminals, especially here in San Diego, sit on a limited  
13 piece of port tidelands. And so in order for them to  
14 install new tankage to provide DEF, there's going to be a  
15 process. And I'm not quite sure that's going to fit  
16 within your timeline.

17 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

18 Yeah. Thanks for the comment. We'll take that  
19 into consideration. We did meet with the Marine  
20 Recreation Association in 2019 and that wasn't raised as a  
21 concern and we'll keep our eyes out for that. So thank  
22 you.

23 FRANK URSITTI: Thank you.

24 TTD AIR RESOURCES ENGINEER BALI: Our next caller  
25 is Max Rosenberg. Max, I'm going to unmute your

1 microphone so you may speak.

2           MAX ROSENBERG: Thank you. Good evening. My  
3 name is Max Rosenberg. I'm with Vane Brothers. We are a  
4 tug and barge company whose core business is petroleum  
5 transportation. And in LA, and Long Beach, and many other  
6 ports, we're a critical link in the infrastructure chain  
7 that keeps cargo moving and products on our shelves.

8           So in conjunction with The American Waterways  
9 Operators, we've pointed out on countless occasions that  
10 there are, you know, significant flaws in the inventory  
11 and subsequent modeling of emissions contributions from  
12 regulated towing vessels. The inventory counts some  
13 vessels that don't operate in California at all and  
14 overstates the operating hours for many other vessels that  
15 call on California infrequently.

16           Modeling suggestions that commercial harbor craft  
17 contribute more emissions than all sources including CHC  
18 combined, a clear impossibility. CARB has recognized some  
19 of our comments and outright dismissed others, but  
20 continues to grossly overstate the emissions contribution  
21 of CHC, and most critically, you know, uses this falsified  
22 data as the core justification for this incredibly costly  
23 and waste -- (inaudible) CHC emission missions climate to  
24 the Board and more importantly to the California public to  
25 justify incremental gains in emissions reductions for

1 political purposes, I assume, you know, rather than  
2 steering efforts and funding for more significant goals.

3           So my question that -- you know, at the risk of  
4 kind of repeating other questions that have been asked  
5 tonight is why is CARB staff unwilling to revisit the data  
6 and validate the modeling to ensure that emissions  
7 contributions from commercial harbor craft are accurately  
8 portrayed and appropriately justify the proposed  
9 regulation?

10           And, you know, I've heard several times this  
11 evening, you know, David in particular use the term, you  
12 know, "best available data", but you've also recognized  
13 that there are -- there are errors in your data  
14 collection. So, you know, why are you unwilling to  
15 revisit this?

16           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

17           Well, thank you, Max, for the comment today. And  
18 I also want to thank you for your engagement with me and  
19 with my staff over the last couple of years. Your input  
20 has been reflected into provisions of the regulation, but  
21 I do recognize the proposal that went to our Board was a  
22 Tier 4 plus DPF requirement for the majority of your  
23 articulated tug barge fleet.

24           So with regard to the ATB fleet specifically, our  
25 staff worked with each of the ATB operators in California

1 to make sure that the exact amount of operating hours in  
2 California were included in our data. We took the best  
3 available data and really focused on the ATB fleet through  
4 the process to our Board, and our Board directed us to  
5 look at the four things we're discussing today, so that's  
6 where we're focusing our efforts and trying to get input  
7 on.

8           MAX ROSENBERG: Wouldn't it be in yours and the  
9 public's best interest for the actual best available data  
10 to be represented and used to justify the regulation, you  
11 know, rather than -- I mean, you've recognized, you know,  
12 on a couple callers this evening that, you know, that  
13 there were opportunities for better data.

14           TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO: I  
15 think -- this is Bonnie Soriano. You know, we -- as David  
16 mentioned, we spoke with you. We've spoken with different  
17 organizations on data over, you know, the course of two  
18 years and we continue to get additional data where it's  
19 available. And we're, you know, very thankful to those  
20 operators that have provided us additional data. And in  
21 terms of response, you know, when you raise concerns about  
22 ATBs, we went back and we looked through all the data just  
23 like David mentioned.

24           There are places that we get additional data that  
25 will go into the next round of updates, because these are

1 living documents. They continue -- we continue to get  
2 better data. In some cases, that data comes in after  
3 we've frozen the inventory, but we're always updating our  
4 inventory. I don't -- I didn't hear staff say that, you  
5 know, there were places that there was better data at the  
6 time that we incorporated this information into our  
7 inventory.

8 I know my staff is extremely detailed and, you  
9 know, very proud of going out and looking for the best  
10 data that's available at the time and we incorporate that  
11 data into our models. And these are models. They can  
12 continually be refined as we get additional data. We will  
13 respond to -- you know, we met with you a couple of days  
14 ago again and said that we would go through this data with  
15 you to figure out where the discrepancies are.

16 We believe that this is the best model there is  
17 based on data available. Will -- can we get more data?  
18 Yes, we would like to get more data. We will refine it as  
19 we get additional data. But at this point, we believe  
20 that this is based on the best data available, the best  
21 model that we have at this time.

22 And we will continue to work with stakeholders  
23 and continue to evaluate data as it becomes available and  
24 as we have the opportunity to update these models. I  
25 mean, the health risk assessment takes essentially nine

1 months to complete a health risk assessment. And so at  
2 some point, we freeze the data. We do the health risk  
3 assessment. We've gone back with you about the numbers in  
4 the health risk assessment. We stand behind those  
5 numbers. We've compared them to ambient levels and found  
6 that they're below the ambient levels -- far below the  
7 ambient levels that you're quoting.

8           And so -- and so we feel that this, at this  
9 point, is a very accurate representation of the emissions  
10 and very accurate representation of the air quality  
11 modeling and health risk assessment.

12           MAX ROSENBERG: Can you share with us at what  
13 point you froze your data, so that we can understand  
14 when -- you know, when the best available data was -- you  
15 know, was accumulated?

16           TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO: Yes,  
17 we can do that. And as we circle back with you, we made a  
18 commitment to circle back with you on two things, one to  
19 talk about the health risk assessment and the second was  
20 to talk about the inventory. And we'd be happy to include  
21 that into that meeting.

22           MAX ROSENBERG: Thank you.

23           TTD AIR RESOURCES ENGINEER BALI: Okay. Next, we  
24 have two questions from two different anonymous attendees.  
25           The first one is, "Can you tell me what engine

1 manufacturers offer a Tier 4 engine with a DPF as of  
2 today? I don't know of any especially in the higher  
3 horsepower applications like tugboats".

4           And the second one is, "What are the penalties  
5 for not selling or using the renewable diesel fuel?  
6 Again, I'm concerned that local fuel retailers may not be  
7 aware of the upcoming requirement if CARB isn't telling  
8 them".

9           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

10           Yeah. To those attendees, those are good  
11 questions. So the first one is regarding the Tier 4  
12 engine. So in our Appendix E to the staff report that is  
13 available at the links in the presentation, there's a list  
14 of the 22 engine models and manufacturers. Those are Tier  
15 4 engines certified by U.S. EPA. The plus DPF component  
16 is not available from those manufacturers. And there's  
17 extensions in place that's separate from the E3 extension,  
18 the six to eight years that would allow extensions if  
19 those DPFs don't become verified by CARB or certified as  
20 part of those Tier 4 engines conforms by the first  
21 compliance dates.

22           Then the second question was in regard to -- it  
23 was something about fuel docks. Aaron, could you repeat  
24 it?

25           TTD AIR RESOURCES ENGINEER BALI: Yeah. So the

1 question is, "What are the penalties for not using or  
2 selling renewable diesel fuel? Again, I'm concerned that  
3 local fuel retailers may not be aware of the upcoming  
4 requirement if CARB isn't telling them".

5 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

6 Okay. The requirement for renewable diesel is  
7 for the owners and the operators of the vessels. So  
8 there's not a diesel fuel sale requirement on facilities  
9 in the proposed regulatory text. The penalties are set in  
10 statute and it depends on a number of factors, but there's  
11 a per day violation if an operator of a vessel is not  
12 using the correct compliant fuel, if the proposal is  
13 approved by our Board and is adopted by CARB and approved  
14 by the Office of Administrative Law.

15 So there's a number of questions left. It's  
16 seven o'clock. We are going to stay on to get through as  
17 many of these questions as we can. If you have your hand  
18 raised and you don't have a questions anymore, if you can  
19 lower it, that would be helpful. Otherwise we'll continue  
20 to toggle between the phone, the raised hands, and also  
21 the submitted questions in either the chat or the question  
22 and answer. So back to you, Aaron.

23 TTD AIR RESOURCES ENGINEER BALI: Thank you,  
24 David.

25 Next person is Teresa Bui. I don't know if I



1 pronounced your name right, but I'm unmuting your phone so  
2 you can speak.

3           TERESA BUI: Thank you. Hi. This is Teresa Bui  
4 with Pacific Environment. We're an environmental  
5 non-profit group. Thank you so much for hosting this  
6 workshop. It's been very helpful. I just wanted to  
7 express our support for the zero-emission contingency  
8 measures. And I hope that it applies to the tugboats and  
9 ferries. Harbor craft are one of the top three  
10 cancer-causing emissions at ports and it's clear that we  
11 have to move to zero emission in places like South Coast  
12 and the San Diego Air Basin to address the acute public  
13 health crisis from port pollution.

14           And since the November Board hearing, we've seen  
15 a number of new vessel projects that have been announced  
16 that's zero emission. So we see the frequent technology  
17 assessment as very important.

18           And with that, we encourage CARB staff to adopt  
19 this rule as possible -- soon as possible. Thank you so  
20 much.

21           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

22           Thank you, Teresa, for your comment.

23           TTD AIR RESOURCES ENGINEER BALI: Our next  
24 commenter is Michael Breslin. Michael, I am unmuting your  
25 microphone so you can speak.

1           Okay. We can't hear you, Michael. I don't know  
2 if you've unmuted yourself.

3           MICHAEL BRESLIN: I'm sorry about that. Can you  
4 hear me -- can you hear me now?

5           TTD AIR RESOURCES ENGINEER BALI: We can hear you  
6 now.

7           MICHAEL BRESLIN: Sorry about that. My name s  
8 Mike Breslin. I'm the Director of Safety and  
9 Sustainability for American Waterways Operators. I work  
10 with Mr. Peter Schrappen who spoke earlier, and Max, who  
11 you just called on, who spoke the feasibility of this act.

12           I want to echo their sentiments that the  
13 technology that you're talking about simply doesn't exist.  
14 It isn't feasible to put into the boats that we have. And  
15 also the data that you're relying on doesn't seem to be in  
16 line with the -- with the peer-reviewed data that we  
17 presented to you as an organization. So my question is  
18 how does CARB see moving forward with this proposal for  
19 Tier 4, which requires diesel exhaust fluid tanks around  
20 5,000 gallons for a 2,000 horsepower engine, 100 cubic  
21 feet of space for the diesel particulate filters that are  
22 going to be above those engines? The existing vessel  
23 fleet doesn't have the ability to do that. What is your  
24 guidance for our operators as they look to see the correct  
25 path forward to making sure that their fleet meets the

1 requirements of your act?

2 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

3 Thank you, Michael, for the comment. Feasibility  
4 issues will be worked out between a vessel owner/operator,  
5 their naval architect, and the shipyard. To the extent  
6 that modifications can't meet the standard, there is a  
7 number of compliance extensions that are available if the  
8 owner/operator qualifies.

9 MICHAEL BRESLIN: Thank you. And I do want to  
10 thank all the fishermen I've heard, all the operators that  
11 I've heard on this call, just hearing the engagement and  
12 knowing that we have a community that's so active with  
13 this and is trying to advocate for real solutions is  
14 exciting and I hope that we can work towards a good  
15 conclusion.

16 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

17 Thank you, Michael, for your comment.

18 TTD AIR RESOURCES ENGINEER BALI: Okay. Our next  
19 speaker is Michael Thompson. Michael, I'm unmuting you.

20 MICHAEL THOMPSON: How about now, you hear me  
21 now?

22 TTD AIR RESOURCES ENGINEER BALI: Yeah, I can  
23 hear you.

24 MICHAEL THOMPSON: Okay. Fine. I've got a  
25 question and a comment. Question is this E3 exemption out

1 to eight years, the 2035 is still the absolute drop-dead  
2 date, right?

3 TTD AIR RESOURCES ENGINEER HOUCHIN: Hi, Michael.  
4 I can answer that. Yes, the extensions are six to eight  
5 years with a cap at 20 -- at the end of 2034, so January  
6 1st, 2035 would be when those extensions would expire.

7 MICHAEL THOMPSON: Okay. So you've just -- that  
8 little extra two years, the eight year one is just put a  
9 little pretty bow on a bone and tossed it to us, but it's  
10 basically meaningless. Okay. All right. Thanks for  
11 that.

12 My comment is I've been involved in fisheries --  
13 by the way, I'm the owner of Newport Landing and Davey's  
14 Locker, Sportfishing and Whale Watching in Newport Beach.  
15 I've been involved in fisheries management for the last 20  
16 years, and I can't even tell you how tired I am of  
17 government entities crushing people's jobs and livelihoods  
18 based on best available science. I am so sick of that  
19 term.

20 Just the whole over -- going back to what Markus  
21 Medak and Ken Franke were saying, you know, there's a lot  
22 of overnight boats in the CPFV fleet. I am going to say  
23 probably 40 percent, maybe more. That number those guys  
24 would have that travel through regulated waters for an  
25 hour or two and then disappear from anywhere for the rest

1 of that day for two, three, or longer days. And how you  
2 come up with 83 percent of our time is spent in regulated  
3 waters I have no idea, and I think that you need to  
4 address that before you go any further with this. That's  
5 all I have to say.

6 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

7 Thank you, Michael, for your comment. And to the  
8 extent that those vessels are operating an above average  
9 amount beyond regulated California waters. There is that  
10 low-use provision. And for your fleet in Newport Beach,  
11 there's only a certain part of that harbor that would be  
12 within two miles of a disadvantaged community, so it's  
13 possible that you would maximize your low-use hours,  
14 especially if you're in Tier 3. We do appreciate your  
15 feedback generally and we'll take it under consideration.

16 MICHAEL THOMPSON: Thank you.

17 TTD AIR RESOURCES ENGINEER BALI: Our next  
18 speaker is Scott Merritt. Scott, I'm unmuting you to  
19 speak.

20 SCOTT MERRITT: Thanks, Aaron.

21 I guess this question is for David and Bonnie.  
22 And, you know, I won't reiterate, but I do want to say  
23 thanks for staying late and taking the additional  
24 question, and thank you for agreeing to meet with -- oh, I  
25 guess I should say I represent Foss Maritime The American

1 Waterways Operators towing industry.

2           Thank you for agreeing to meet with us on vessel  
3 inventory. I think and I'm hopeful that we can come to  
4 agreement on what that true inventory is. I am the one  
5 that actually met with your staff and identified some ATBs  
6 that they didn't have. I will say that while they may  
7 have reached out to the ATB operators to verify hours,  
8 they're still assuming there's five ATBs out there that  
9 are calling California waters at average vessel hours of  
10 the existing fleet. And we demonstrated in our comments,  
11 which is leading into my question, that that's just not  
12 true. Those vessels are not calling with anywhere near  
13 that frequency. And that's where the overstatement is in  
14 your assumption that the unreported vessels are accruing  
15 hours at the same as the average vessels. And that -- you  
16 know, I just appreciate the opportunity to sit down and  
17 finally clarify that.

18           But it really brings me to my question. You've  
19 talked about four things the Board has directed you to do.  
20 But underlying all this is a lot of public comment was  
21 made. This is our fourth go-round of public comment. And  
22 I know you didn't review all the public comment before you  
23 met with the Board or I can't believe you could have gone  
24 through it. And so my question is that's still part of  
25 the task for CARB staff is to, you know, dig through the

1 public comments, a lot of it was highly technical, a lot  
2 of what the towing industry submitted was highly  
3 technical, a lot of what the sportfishing community  
4 passenger fishing community put forward was very  
5 technical, and really should be information that's built  
6 into the modeling and the tech. So I guess my question  
7 is, is that -- am I wrong, is that not going to occur, or  
8 is that not occurring, or is that still underway?

9 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

10 Well, thank you, Scott, for the comment. We do  
11 have to respond all of the comments that were submitted in  
12 writing before the hearing, and at the hearing, and the  
13 verbal testimony at the hearing. I'm going to turn that  
14 question to Bonnie Soriano to add anything that she thinks  
15 we might have missed.

16 TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO:

17 Great. Thanks. Thanks, David, and thanks,  
18 Scott. We do have -- we are required to respond to every  
19 comment. And you're correct, there was a lot of technical  
20 information provided. And, you know, reflected in the  
21 meeting yesterday and what we decided to, you know, have  
22 two follow-up meetings to talk about what you did report,  
23 and how your conclusions are very different than our  
24 conclusions. And so we do have a -- you know, we have a  
25 requirement to respond, and -- as part of the Final

1 Statement of Reasons. And so, yes, we'll be -- we'll be  
2 doing that.

3 SCOTT MERRITT: But also incorporating, am I not  
4 correct? I mean, it's still the plan to incorporate where  
5 you -- you know, where you find that the comments are  
6 actually indeed accurate and worthy of incorporating into  
7 the rule?

8 TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO: So in  
9 reviewing this, and part of what we review is does it lead  
10 us to a set -- a different conclusion than what we came  
11 from than what was made originally, based on the data that  
12 we used in the 45-day package. So to the extent that  
13 it changes the consideration, then yes we would bring that  
14 to our management and we would decide, you know, what are  
15 the next steps for that.

16 SCOTT MERRITT: Okay. Thanks, Bonnie.

17 TTD AIR RESOURCES ENGINEER BALI: Okay. Our next  
18 speaker is Michael Myers. Mike, I'm unmuting your  
19 microphone so you can speak.

20 MICHAEL MYERS: Good evening. Can you hear me?

21 TTD AIR RESOURCES ENGINEER BALI: Yes, we can  
22 hear you.

23 MICHAEL MYERS: Thank you. Michael Myers with  
24 Centerline Logistics also a member of The American  
25 Waterways Operators. We provide transportation services



1 for the communities of California both locally and  
2 interstate between the west coast ports along the coast.

3 And I noticed that you did do a carve-out for the  
4 commercial fishing fleet, primarily due to some, you know,  
5 profit margin issues and retrofit feasibilities and most  
6 of the operations were offshore. Well, that applies to a  
7 great deal of the transportation that we do in California.  
8 We're just hitting the ports inbound for a few days and  
9 back out on the ocean again. Why is the offshore  
10 coastwise ton trade not carved out like the fishing fleet?

11 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

12 Thank you, Michael, for the comment and the  
13 question. The key difference between the commercial  
14 fishing fleet and the other 17 categories of harbor craft  
15 is they're not in a strong position to pass costs on to  
16 the next user. And that was not something that we were  
17 able to identify or determine was the case for the other  
18 17 categories of harbor craft. So they have a requirement  
19 that if operating in California waters to upgrade to Tier  
20 3 or 4 post-DPF depending on the size of their engine.

21 MICHAEL MYERS: So I mean basically what -- you  
22 know, I had no doubt that we can qualify through an E3  
23 feasibility type extension, but for a towing vessel, you  
24 know, a six-year or eight-year extension is maybe 25  
25 percent of its -- of the asset life, you know, amortized

1 life. So that's kind of like me telling you back in 2005  
2 that, hey, you know, your house is not meeting the new  
3 codes and so you're going to have to tear it down and  
4 build a new house even though, you -- you know, you've got  
5 a 20-year mortgage on it, coming back 10 years later and  
6 saying hey, oh, by the way, you're going to have to  
7 condemn your house again, because we just changed the  
8 codes on you. So you've got to go get another 30-year  
9 mortgage and you haven't paid off either one of the first  
10 two mortgages.

11 So that's kind of what you're asking the -- all  
12 the commercial folks out here as well as the sports  
13 fishermen, it sounds like.

14 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

15 We hear your comment and thank you for sharing it  
16 with us.

17 TTD AIR RESOURCES ENGINEER BALI: Okay. Our next  
18 commenter is William Wilkerson. William, I'm unmuting  
19 your microphone.

20 WILLIAM WILKERSON: Can you guys hear me?

21 TTD AIR RESOURCES ENGINEER BALI: Yes, we can  
22 hear you.

23 WILLIAM WILKERSON: Good evening. On behalf of  
24 myself being, B&M Sportfishing, aka Malihini Sportfishing,  
25 Inc., I just -- I have a comment and then a question. I

1 want to express my concern for the proposed California Air  
2 Resource Board, CARB, Harbor Craft Regulation. Under the  
3 amendment, beginning January 23rd of 2023, commercial  
4 passenger fishing vessels will be required to replace  
5 engines with cleaner tiered engines, perform testing, and  
6 pay annual fees.

7 I've been a fisherman for 30-plus years. I know  
8 my colleagues, our communities, and the benefits of the  
9 challenges of our industry as well. We act as stewards of  
10 the land and water, not only for our benefit, but for the  
11 benefit of future generations to come. We make this an  
12 active choice to bear much of the cost and responsibility  
13 of protecting our natural resources.

14 While we value the importance of quality air, we  
15 also believe the importance of the three pillars of  
16 sustainability, economic viability, environmental  
17 protection, and social equity. As the current amendment  
18 stands, the regulation is not sustainable -- is not a  
19 sustainable option. For our industry, it is not  
20 equitable, for Californians, and CPF operators. That's my  
21 comment.

22 Based on -- this is my -- that's my comment.  
23 This is my question. Based on the new information just  
24 heard today -- that I heard today from Peter from American  
25 Waterways about the numbers being skewed, when -- to 29

1 percent when the true number is 2.9 percent, why would  
2 staff not address this? And why was a graph on the 19th  
3 of November when the first one I came to showed 150 school  
4 buses equals to one sport boat? To me that doesn't make  
5 sense. Can you guys please explain that? I'd appreciate  
6 it.

7 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

8 Thank you, William, for the comment. And I'll  
9 just correct that the graphic on November 19th was 162  
10 school buses is equivalent to one Tier 2 engine. That's  
11 just an emission factor comparison, because the emission  
12 controls in the marine sector have lagged behind other  
13 source categories. The proposed amendments would mitigate  
14 and bridge some of that gap. Alluding to what Bonnie  
15 Soriano said in response to the comment from Centerline  
16 Logistics a moment ago. The -- we've set up a meeting to  
17 talk with the American Waterway Operators and their  
18 consultant to address and better understand any impacts of  
19 the data that they provided in their comment letter and  
20 whether it would change the best available conclusion.

21 The inventory is a document that's evolving.  
22 It's living. If there is something that comes to light in  
23 those discussions that would change our conclusion, we  
24 would make the necessary updates. However, as Bonnie  
25 alluded to, we're not going to make updates to adjust

1 something that would be not impacting the bottom line or  
2 the recommendations from our proposal.

3 WILLIAM WILKERSON: But if -- can you guys still  
4 hear me?

5 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
6 We can still hear you.

7 WILLIAM WILKERSON: Okay. If your analysis is  
8 skewed, your analysis is skewed regardless, correct?

9 TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO: I'm  
10 going to miss -- I believe skewed is a  
11 mischaracterization. I mean, we -- there were vessels  
12 that had not reported, so we did not have data on them.  
13 And we use a number of data sources. This is with any  
14 inventory. You don't have information on every vessel.  
15 We use every data source we can find. And I have to tell  
16 you, my team is out there scouring the -- for data, you  
17 know, AIS data, reporting data on where vessels operate,  
18 the number of vessels that we get from the U.S. Coast  
19 Guard, that we get from Fish and Game, that we -- that we  
20 find through other sources, activity. As somebody  
21 mentioned, they're not required to have AIS data. We use  
22 what we can find for the vessels that have AIS data on  
23 them. That's the best available information we have at  
24 the time.

25 We take all that data and compile it together.

1 Are there places there could potentially be gaps? We need  
2 to fill those gaps in as we get that data. And I think  
3 that -- and I think that we relied on a number of  
4 different organizations within this group to get that  
5 information together and fill those gaps where we didn't  
6 have information, and that might have been because the  
7 vessel didn't report. It might have been because they  
8 weren't required to report. It might have been because  
9 they didn't have AIS data. We took all the information  
10 that we could gather, we synthesized all of that, and we  
11 put that into an inventory. And that represents, at that  
12 time, the best data we have.

13           As we get additional data, we fill in the places  
14 that we didn't have data originally. That doesn't mean  
15 the data is skewed, it means that we are refining the  
16 data. When the -- when AWO came to us a couple years ago  
17 and said our numbers are different than your numbers, my  
18 staff went through those vessels line by line, called the  
19 vessel operators, got information about operating hours.  
20 And so we did respond to that. Were -- are there some  
21 vessels that maybe didn't get incorporated all the way?  
22 You know, we're talking -- I heard a number like five  
23 vessels. We have an inventory of something like 3,500  
24 vessels.

25           And so we have taken all that data and we have

1 put it together. And I have to say my staff did extremely  
2 meticulous and very aware of needing a very robust data  
3 set. And so the characterization of the data being skewed  
4 is just inaccurate. Are there places that we could use  
5 more data as more data becomes available? Yes, and we  
6 will continue to do that. We've made a commitment to AWO  
7 to meet with them to try to understand what data they have  
8 versus what data we have and what conclusions may be -- or  
9 what data doesn't quite match.

10 That doesn't mean the data is skewed. It means  
11 that maybe there is additional data that we can use to  
12 refine the inventory. But the other thing I was  
13 mentioning is that these inventories take like a year to  
14 do, the health risk assessment a year to do. I mean, we  
15 have been working on this regulation for two years and  
16 we -- when we get data, we can't always just slot it in.  
17 I mean, it takes a long time of very -- of very exacting  
18 modeling to get this information. And so I'm proud of the  
19 work that the staff has done and I just -- the  
20 characterization that the data is skewed, I just have to  
21 recharacterize that.

22 WILLIAM WILKERSON: Okay. With that being said,  
23 if you have numbers of 29 percent, okay, and -- in a  
24 certain category and it's actually 2.9 percent, could you  
25 not just take that 2.9 percent, replace that 29 percent to

1 get an accurate number?

2 TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO: We  
3 would -- we -- our response to that is that we said that  
4 we would meet with AWO. We've -- we're working on that  
5 now. And our response to that is we will meet with them  
6 in the next -- we're meeting with them both on the health  
7 risk assessment and on the inventory numbers. And based  
8 on that, we're going to look at those numbers and see what  
9 their data -- we will run, you know, a sensitivity  
10 analysis to see how much we think that that would impact  
11 the inventory. We will provide that information to our  
12 management and give them an idea of, you know, will it  
13 change the inventory by one percent? Will it -- you know,  
14 what is going to be the impact? We made a commitment with  
15 AWO two days ago to do that. And we are committed to  
16 doing that. Staff is in the process of pulling that  
17 information together and doing those comparisons.

18 WILLIAM WILKERSON: Can I ask a -- just one more  
19 questions, if I may. When was the discrepancy or the  
20 difference found? Do you have a timeline for that?

21 WILLIAM WILKERSON: I -- we've been working with  
22 them to update data. I mean, data doesn't always come at  
23 one single day. We've been working with AWO. As David  
24 said, they were one of our first stakeholders that we  
25 started working with.



1 WILLIAM WILKERSON: Okay. Did --

2 TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO: And  
3 so we have gotten -- we have gotten information back and  
4 forth with them. And I think the Partnership has been  
5 helpful. There are some areas that maybe we don't  
6 necessarily agree, or that we didn't have the data, or  
7 that we didn't have enough data to incorporate it at the  
8 time that we needed to incorporate it. So it's an  
9 iterative process. It's not like there's one day that --

10 WILLIAM WILKERSON: No, I understand that.

11 TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO:  
12 -- they provided us data and we didn't use that  
13 data.

14 WILLIAM WILKERSON: I understand that. Data is  
15 changing every day --

16 TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO:  
17 Um-hmm.

18 WILLIAM WILKERSON: -- because of the  
19 environment. I get that. But okay, did -- I guess -- I  
20 guess the question I'm trying to ask, did we -- did you  
21 guys have this information prior to the 19th of November,  
22 1, would be my first question?

23 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

24 This is David. I believe that the AWO's comment  
25 letter that expressed a difference of opinion came in

1 during the 45-day comment period. It was one of the  
2 3,000 -- 3,200 comment letters that came in. So as we've  
3 been doing outreach since the hearing --

4 WILLIAM WILKERSON: Does that mean --

5 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
6 -- and meeting with the operators.

7 WILLIAM WILKERSON: Does that mean you had the  
8 information prior to November 19th?

9 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
10 We received AWO's comment letter during the  
11 45-day comment, which closed before the 19th of November.

12 WILLIAM WILKERSON: Okay. So with that  
13 information, would that not have given you enough time to  
14 rework your numbers to present a accurate picture to the  
15 Board, if, in fact, there was an accurate picture?

16 TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO: We  
17 present to the Board -- we -- the 45-day comment -- the  
18 45-day package freezes what we present to the Board. We  
19 are in the process of taking all those comments, reviewing  
20 them, and determining what impact that they will have.  
21 And that is reflected in our final statement of reasons.

22 WILLIAM WILKERSON: Yes.

23 TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO: So we  
24 can't run a nine-month analysis in three weeks, No.

25 WILLIAM WILKERSON: So, no, you didn't. Okay.

1 That's all I wanted to know. Will -- when that meeting  
2 comes up, I do believe it's -- when? When is the next  
3 meeting, January?

4 Oh, this is January. February or something?

5 TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO:  
6 Business, yeah. You mean the next Board hearing?

7 WILLIAM WILKERSON: Yes.

8 TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO: It  
9 hasn't been scheduled yet. It's going to be in the  
10 spring.

11 WILLIAM WILKERSON: Okay. Will those analysis be  
12 brought forward then at that time?

13 TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO: We're  
14 going to look at what -- we're going to evaluate the  
15 differences between what AWO's provided and what we have.  
16 And we will, based on that, we'll bring the information to  
17 our management. I don't know what the outcome is of  
18 that -- of what those analyses will be, so I can't tell  
19 you what we'll -- what we're going to do at this point.

20 WILLIAM WILKERSON: Okay. But, I mean, if me --  
21 to me -- honestly, to me thinking about this, if -- I'm  
22 looking out for the best possible results for all  
23 individuals involved, correct, is that not what we're  
24 doing?

25 TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO: We

1 are -- yes, of course.

2 TTD CHIEF ARIAS: Okay. I'm going to -- I'm  
3 going to interrupt here.

4 TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO: Okay.  
5 Thank you.

6 TTD CHIEF ARIAS: So I'm Heather Arias. I'm  
7 Division Chief.

8 WILLIAM WILKERSON: Hi, Heather.

9 TTD CHIEF ARIAS: All the teams report to me.  
10 William, we're happy to have this conversation with you  
11 off-line. You're asking a bunch questions that this team  
12 has not had a chance to look at. They've already multiple  
13 times indicated that we are having follow-up meetings. We  
14 can't tell you what's going to be the result of those  
15 meetings. Possibly the result of that meeting could be  
16 that we do not agree with the assessment that's been  
17 provided and it may not change our data or any of our  
18 analyses, but what we are committing to is that if there  
19 is new data, that we need to update our analyses, we will  
20 make sure that our bosses are aware of that. We will make  
21 sure that we make that available.

22 At this point, we have nothing more to tell you  
23 and we can't speculate as to what will be the result of  
24 those meetings. If you would like, we'd be happy to  
25 follow up with you after those meetings to give you some

1 more information, if that's something that you're  
2 interested in and anybody else. But at this point, we  
3 cannot speculate as to what the conversations are going to  
4 be with American Waterways.

5 I would like to be able to move on please,  
6 because we've already told everybody multiple times that  
7 we need to meet with American Waterways. We need to be  
8 able to talk with them. We've already had some initial  
9 discussions with them that we believe that some of the  
10 numbers that their consultant pulled were the incorrect  
11 numbers, but we do want to get on the line with them and  
12 be able to compare very specific. If, in fact, we have  
13 errors, we will make sure that we work to adjust those and  
14 provide those to our bosses. But at this point, we do not  
15 believe that there are any errors.

16 WILLIAM WILKERSON: Okay.

17 TTD CHIEF ARIAS: So if your -- if you'd like to  
18 meet with the staff after, please let us know, otherwise,  
19 we need to move on.

20 WILLIAM WILKERSON: Yes, I would -- can I get  
21 email addresses and I can email -- we can Email back and  
22 forth. That would be fine. I'd appreciate that.

23 TTD CHIEF ARIAS: Yes. They are right here on  
24 the screen and in the posted slide deck.

25 WILLIAM WILKERSON: Got it.

1 TTD CHIEF ARIAS: Thank you.

2 WILLIAM WILKERSON: Thank you.

3 TTD AIR RESOURCES ENGINEER BALI: Our next  
4 speaker is Regina Hsu. I don't know I pronounced your  
5 name correctly or not. I'm unmuting your microphone, so  
6 you can speak.

7 REGINA HSU: Thank you. Can you hear me?

8 TTD AIR RESOURCES ENGINEER BALI: Yes, we can  
9 hear you.

10 REGINA HSU: Hi. This is Regina Hsu with  
11 Earthjustice. I just want to thank the staff for the  
12 update on the technology and implementation review and the  
13 contingency measure. Given, the massive increase in port  
14 pollution throughout the State since the pandemic,  
15 particularly around the San Pedro Bay Ports. We think  
16 that this Harbor Craft Regulation is really critical to  
17 alleviating the pollution burdens, particularly on nearby  
18 port communities. And I think more action is needed,  
19 specifically for equipment such as barges and tugboats.

20 We're also supportive of the technology  
21 assessment beginning in 2023. This will be important,  
22 especially considering the rapid development from  
23 technology and deployment of zero-emission harbor craft in  
24 other areas of the country as well as abroad. And to meet  
25 clean air standards in certain regions of the state moving

1 to zero emissions for all sectors, including growing  
2 sources of pollution such as harbor craft is really  
3 necessary and we agree that technological developments  
4 should inform potential future amendments to speed this  
5 transition to zero emissions.

6 And I also just want to echo the need to move  
7 forward with this rule as soon as possible and no later  
8 than March. And thanks to the staff for all their hard  
9 work on this rule.

10 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

11 Thank you, Regina, for your comment. I'll take  
12 it into consideration.

13 TTD AIR RESOURCES ENGINEER BALI: Our last

14 commenter is Max Cohen. Max, I'm unmuting you, so you may  
15 speak

16 MAX COHEN: Hi. Can you hear me?

17 TTD AIR RESOURCES ENGINEER BALI: Yes, we can

18 hear you.

19 MAX COHEN: Okay. My name is Max Cohen and I

20 represent Curtin Maritime. We're a tug and barge operator  
21 based out of Long Beach, California. We engage in marine  
22 construction and transportation services along the coast  
23 of California. We -- I've also been working with AWO, and  
24 Peter, and the other Max who spoke earlier. Curtin  
25 Maritime, we take -- we take immense pride in our

1 aggressive pursuit of fleet innovation, while actively  
2 integrating best management practices within our current  
3 business operations.

4 Commercial harbor craft operations are paramount  
5 to our state's ability to properly maintain our waterways  
6 and ports, which are crucial to American trade.  
7 Additionally, long-haul barge transport operations provide  
8 grossly overlooked benefits to the general public by  
9 connecting commodities to distant markets without  
10 congesting California's already strained freeway system.

11 We understand the importance of taking the  
12 important steps to reducing harmful particulate matter and  
13 greenhouse gas emissions within our areas of operations.  
14 And our -- we have dedicated resources towards researching  
15 and implementing new technologies within our fleets.

16 However, the newly proposed C -- commercial  
17 harbor craft amendment promulgates an impractical  
18 expansion of existing CHC regulations. This amendment  
19 will now include engine upgrade requirements to be met  
20 within a time frame that is simple not feasible for  
21 subchapter M operators. Concerns regarding these  
22 additional regulations have arisen based on valid  
23 observations of blatant discrepancies littered throughout  
24 the new amendment proposal process.

25 I don't want to beat a dead horse. I just kind



1 of wanted to reiterate some of the AWO talking points and,  
2 you know, the data discrepancies. And I wanted to commend  
3 Ms. Soriano for committing to take a look at that with  
4 AWO. The one question I did have was about the CMA study  
5 for compliance extensions. You mentioned that this was  
6 going to be -- was for commercial fishing vessels. I was  
7 wondering this applied to our tug -- our tugs as well due  
8 to the fact that this can raise the vertical center of  
9 gravity putting us out of Code of Federal Regulations.  
10 And I was wondering if the U.S. Coast Guard had anything  
11 to say about that.

12 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

13 Well, thanks you -- thank you, Max, for your  
14 comment and your question. So I heard two parts to your  
15 question. One was about the scope of the streamlining of  
16 the feasibility extension. I'm going to ask Melissa  
17 Houchin to respond to that and then I'll just repeat the  
18 second part of your question, which was about changes to  
19 the center of gravity and how that would affect the Coast  
20 Guard approval process.

21 TTD AIR RESOURCES ENGINEER HOUCHIN: Thanks,  
22 David. So on the streamlining of the compliance extension  
23 process, that CMA study would be available for any  
24 operator to use to demonstrate lack of feasibility for the  
25 initial application. Let me know if that answers that

1 question for you.

2 MAX COHEN: It does. And that's -- what's the  
3 extension for the initial application again?

4 TTD AIR RESOURCES ENGINEER HOUCHIN: So if you're  
5 applying for the E3 feasibility extension, you could use  
6 that CMA study for the initial extension application and  
7 then that applying window would just depend on the  
8 compliance date for the vessel you're applying for the  
9 extension for.

10 MAX COHEN: Okay.

11 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

12 And, Max, I'll just add some. Melissa said  
13 correctly, it's -- any vessel operator can apply for the  
14 extension. Any vessel operator, like public or private,  
15 could get the streamlined process. What we're proposing  
16 or suggesting today is it would be based on the results of  
17 the feasibility study. So unless you have a vessel that  
18 didn't have a fitment identified in the CMA feasibility  
19 study, that would not mean that ever vessel in every  
20 category, regardless of fitment and material, would be  
21 streamlined.

22 So let's just say for instance, you have a vessel  
23 and it has a challenge, but it was identified as really  
24 feasible in the CMA study, there would just be no  
25 streamlining, but you could still do your vessel-specific

1 analysis, submit it to us, along with the financial  
2 records and get that extension.

3 MAX COHEN: Okay. But so if I -- if, you know,  
4 we did a feasibility study -- or we were able to find that  
5 implementing this new technology did, in fact, raise the  
6 vertical center of gravity on one of our vessels, we  
7 would -- that would be a reason for an extension, correct,  
8 or...

9 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

10 So the technical part is a little bit above my  
11 head. But if you get to the point where you can  
12 demonstrate there's no way to put a Tier 4 engine and  
13 modify your vessel, then that would be grounds for getting  
14 the technical component of your extension granted. So if  
15 there's a center of gravity problem that's raised and it  
16 can't be mitigated in any way, then that would be a way to  
17 satisfy the extension requirement.

18 MAX COHEN: And just a little follow-up question  
19 to that. Have you guys taken into consideration the  
20 population of vessels that that might actually apply to?  
21 Has this feasibility study kind of accounted for that or  
22 is it kind of like what vessels are most feasible for this  
23 technology to go into?

24 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

25 Yeah, that's a good questions, because the CMA

1 study picked a representative vessel from I think it was  
2 13 different vessel categories and they weren't  
3 characterized exactly the way we have them in our  
4 inventory.

5 In the Standardized Regulatory Impact Assessment,  
6 and that's Appendix C1 to the ISOR, we took their  
7 qualitative statements, like moderate reconfiguration  
8 required and then assumed a percentage of the fleet would  
9 have to be replaced versus repowered, based on that  
10 qualitative statement. So there are numbers. I don't  
11 have them at my finger tips, but we did assign numbers and  
12 they're in Appendix C1.

13 MAX COHEN: Appendix C1 of the -- what was that  
14 called again?

15 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
16 It's the Standardized Regulatory Impact  
17 Assessment.

18 MAX COHEN: Okay.

19 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
20 SRIA.

21 MAX COHEN: Gotcha. Oh, and then, yeah, I just  
22 wanted to know if the U.S. Coast Guard had any comments  
23 about any of -- any of that to you guys? Sorry.

24 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
25 I'm trying to think about the specifics of the

1 U.S. Coast Guard comment letters. They may have commented  
2 that some vessels would likely need to be repowered or  
3 they're -- I'm sorry replaced if repower wasn't possible.  
4 That hasn't been a focus of our conversations where  
5 they've indicated that there is going to be challenges  
6 with assessing stability once the new engines are in  
7 place. They have a process for checking the stability of  
8 vessels after new engines are installed.

9 MAX COHEN: Okay. Gotcha. Thank you.

10 TTD AIR RESOURCES ENGINEER BALI: Okay. Our next  
11 speaker is Thomas Babineau. Thomas, I'm unmuting your  
12 microphone to speak.

13 THOMAS BABINEAU: Thank you. Can you hear me  
14 now?

15 TTD AIR RESOURCES ENGINEER BALI: Yeah, we can  
16 hear you.

17 THOMAS BABINEAU: Okay. Great. Well, that last  
18 question actually was an interesting piece. So my name is  
19 Thomas Babineau. I work with Rypos. I'm a silent  
20 majority on this call. We're a DPF manufacturer.

21 Just to kind of bounce right back to that last  
22 question on the center of gravity, we have two DPFs that  
23 were retrofitted in the state of California recently and  
24 the Coast Guard did an extensive study on the center of  
25 gravity. And we had to, of course, provide all the number

1 which were done through a naval architect. In this  
2 particular case, we were able to replace out the existing  
3 silencer. So there was very little change in the center  
4 of gravity, but the point being that that is something  
5 that the Coast Guard is looking at and is deeply involved  
6 with.

7           Originally, I wanted to make a comment on three  
8 basic areas. One is the safety of DPFs, the second was  
9 Coast Guard involvement, and the third is this regulatory  
10 process. With regards to safety of DPFs, DPFs have been  
11 installed on vessels for a decade. And we personally have  
12 over 20,000 hours accrued on DPFs in the state of  
13 California over 10 years.

14           And additionally, we have these two new designs  
15 that are now in service in the state of California. And  
16 we have tens of thousands of DPFs installed out there in  
17 various applications. And I've been through this process.  
18 I'm one of the old guards with some of the other folks  
19 here on this call. I've been through this six times with  
20 the TRU regulation, stationary RTG, APU, off-road and now  
21 marine.

22           And every time, this process is interesting to  
23 me. And I really appreciate the fact that I've been able  
24 to sit in tonight and listen to the concerns from all  
25 sides. It's very educational for us as DPF manufacturers.

1 And I can assure you operators that ARB is as hard on me  
2 as they are on you in this regard. They force us to prove  
3 that we can get to the technological feasibility that is  
4 going to be safe, is going to robust, and is going to meet  
5 the emission reductions.

6           So with regard to my last point, which is the  
7 regulatory process, everybody here is in a difficult  
8 position. We don't move forward until we understand that  
9 there will be a regulation. Although, we did start 10  
10 years ago by installing DPFs on vessels in California.  
11 And those have proven to be very reliable and very robust,  
12 which I think gives ARB some confidence that, okay, this  
13 is a possible path.

14           Then additionally, we have to go through the  
15 verification process, which requires very rigorous study.  
16 I think Bonnie had it right when she mentioned about  
17 whether fitment was going to be the issue or not. I think  
18 from our perspective that's what it comes down to. And  
19 what's interesting as a DPF manufacturer is I can count on  
20 one hand how many of the operators have called us and said  
21 how big is this? How is it going to fit in my boat? And  
22 I understand that there's a lot of the commercial fishing  
23 group here as opposed to barges, et cetera, and that is a  
24 different animal.

25           And what I've noticed with these six times I've

1 been through these regulatory efforts with ARB is that  
2 they always provide these outs, these off-ramps, as I call  
3 them, whether they're low use, whether the technical  
4 readiness is not there, whether the fitment isn't right.  
5 So every time we've been -- we, being the world, the  
6 environment, ARB, the operators have been successful,  
7 because they tend to hit the right balance between, you  
8 know, what is a -- what is feasible and what is not  
9 feasible.

10           So these cost off-ramps, these low use off-ramps,  
11 the fitment off-ramps, all these things seem to come into  
12 play with every previous regulation I've been involved  
13 with. And so I appreciate what you all have done on both  
14 sides of this. I think that it's the right tone to be  
15 challenging each other to get to the right position.

16           And I thank you for giving me the time at this  
17 late our to express those thoughts. And I would tell  
18 David if any of the operators want to reach out directly  
19 to a DPF manufacturer, he's free to share my contact  
20 information. I'm happy to answer questions about our  
21 experiences in the marine environment with regards to DPFs  
22 as it relates to safety, or Coast Guard, or technological  
23 readiness, so I thank you for your time.

24           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
25           Thank you, Thomas, for the comment. And we'll



1 pass your contact information along, if any operators  
2 request it.

3           So Aaron, let's move on to the next question. I  
4 see some raised hands. We're going to do our best to get  
5 through as many of these as possible and wrap things up by  
6 around eight o'clock, if -- so we don't keep everyone  
7 here. So if you have your hand up and you don't need to  
8 be called on, go ahead and lower it. We'll prioritize the  
9 people who have not spoken yet. So Aaron, back to you.

10           TTD AIR RESOURCES ENGINEER BALI: Yeah. Thank  
11 you, David. I see Richard Smith. Richard, I am unlocking  
12 your microphone so you can speak.

13           RICHARD SMITH: Yes. Good evening. My name is  
14 Rich Smith and I'm here representing Westar Marine  
15 Services, which is a small family-owned tugboat and barge  
16 company, and water taxi company in San Francisco Bay.  
17 They specialize in marine construction operations.

18           I just wanted to note, you know, there was a  
19 comment made before that the information provided on the  
20 vessel inventory was provided at the 45-day regulatory  
21 comment period. And actually we brought the whole  
22 situation of the inventory up about two years ago when we  
23 first talked to you, when we first saw your proposals.  
24 So, you know, you folks have known about that for quite a  
25 while, so we look forward to meeting with you and going

1 over the details to help sort out what boats are what.

2 My other -- final comment is that we support all  
3 of the AWO comments. Thank you.

4 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

5 Thank you, Richard, for your comment.

6 Aaron, let's go on to the next question.

7 TTD AIR RESOURCES ENGINEER BALI: Our next

8 speaker is Michael Hoffman. Michael, I'm unmuting your  
9 microphone so you can speak.

10 MICHAEL HOFFMAN: Yeah. Good evening. Can  
11 everybody hear me?

12 TTD AIR RESOURCES ENGINEER BALI: Yeah, we can  
13 hear you.

14 MICHAEL HOFFMAN: I just had a question concern.

15 I believe a hundred percent in the benefits of DPF  
16 technology, as Rich Smith has pointed out. However, I am  
17 concerned, has anyone or has Rypos by chance considered  
18 the application of a DPF technology on the warranty  
19 effects of new engines, specifically around the increased  
20 back-pressure they may cause?

21 THOMAS BABINEAU: Yeah, I can speak to that.

22 Having now tens of thousands of DPFs out there, we've  
23 never had a warranty claim with regards to engine  
24 malfunction due to the DPF in any case with -- you know,  
25 without regard to anything, including high back-pressure.

1 We are an active DPF and that's a little bit different  
2 than a passive DPF. We're, I like to call it, smart  
3 technology. You know, we have computers in there and  
4 we're monitoring back-pressure, and we're increasing  
5 regeneration rates to keep back-pressure in an allowable  
6 range.

7           So, you know, the answer is we've been involved  
8 in this a very long time and that's -- that has not been  
9 an issue. I will also just add that the Coast Guard at  
10 present is, I'm going to use the word, "monitoring" that.  
11 So they definitely have an awareness of back-pressure as  
12 it relates to DPFs. And so they're looking into this as  
13 well. And, of course, we're in that verification stage,  
14 where these tests are ongoing and we're all -- the goal is  
15 to -- is to lock all this down by the time these  
16 regulations come into play. We have a high level of  
17 confidence. We've done it six times. I don't see any  
18 reason why we won't do it again.

19           MICHAEL HOFFMAN: So, Rich, you're not aware of  
20 any engine manufacturer warranty concerns? And the second  
21 part of the question is, I mean for my benefit, what would  
22 you consider the nominal back-pressure increase grease to  
23 be?

24           THOMAS BABINEAU: Well, the vessel we're  
25 operating right on -- on right now, our back-pressure is

1 at four inches of water column. So I think we're equal to  
2 the silencer that we replaced.

3 So that being said, vessels offer a pretty unique  
4 situation with regards to the fact that, you know, you're  
5 going to throw a throttle at some point and, you know,  
6 things are going to change just as they do in the standard  
7 system without DPF.

8 I can't speak to DPFs across the board, because  
9 we are an intelligent DPF. But no, nobody has expressed  
10 warranty issues or claims. We've never had a claim and we  
11 are active technology-controlling back-pressure  
12 specifically. That's how our system works is -- our  
13 number one feedback loop is back-pressure.

14 MICHAEL HOFFMAN: Okay. Thank you, Rich. I  
15 think that answers my question.

16 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

17 Well, thank you, Michael. And just to clarify,  
18 that was Thomas Babineau of Rypos Filters. I just wanted  
19 to clarify the name.

20 Aaron, let's go on to the next commenter. And we  
21 do have phone-in callers, so let's do a check of the  
22 phone-in callers at this point.

23 TTD AIR RESOURCES TECHNICIAN TAYLOR: Okay.  
24 Yeah. Most of our phone-in callers did not rejoin the  
25 meeting after our break. But for those of you who are

1 still on the line, I have unmuted you, so you are welcome  
2 to press star six now, if you would like to ask a question  
3 or comment.

4 Okay. Excuse me. Okay. Hearing none. If you  
5 are on the phone and you have been unable to get through,  
6 please again use our contact information and reach out to  
7 us, but otherwise, Aaron, let's continue with the other  
8 comments.

9 TTD AIR RESOURCES ENGINEER BALI: Okay. Thanks,  
10 Nick.

11 I see Jerry Allen. I'm unmuting your microphone  
12 to speak.

13 JERRY ALLEN: Hey, can you guys hear me okay?

14 TTD AIR RESOURCES ENGINEER BALI: Yeah, we can  
15 hear you.

16 JERRY ALLEN: Okay. I had submitted a couple of  
17 questions, but one specifically about DPFs. And since  
18 we've kind of gone down that road here, I'd like to talk a  
19 little bit about what this gentleman has been offering.  
20 I'm a fleet manager for Foss Maritime. And since 1999,  
21 I've been running or commissioning low-emission tugs. But  
22 in the last six years, I've done nine Tier 4 tugs, five  
23 with SCRs and urea, and four with EGR systems, that G.E.  
24 Diesels. So I have had the opportunity to work directly  
25 with the factory people, MTU, G.E, and Caterpillar,

1 because those are the engines we've been using.

2 I reached out to everyone of the OEMs at the  
3 factory level when this regulation came out. And at this  
4 point, unless something has happened in the last month,  
5 none of them can predict when these devices will be  
6 available. And I was cautioned by two of the OEMs that  
7 installing anything on top of the EPA Tier 4 systems will  
8 make them non-compliant. Now, I know the gentlemen said  
9 there's not a warranty issue, but MTU clearly told me if  
10 we put anything past their after-treatment, it was a  
11 warranty issue.

12 So I would beg to differ that he's -- he -- you  
13 know, I know he's an after-market DPF dealer, and as is  
14 Miratech and others, but my question is kind of with the  
15 timing here is does -- or did CARB have insight that we  
16 don't have knowing -- you know, looking at the vessels  
17 that I was involved in from model year 2017 to 2020, which  
18 we just finished for Tier 4s for California, that there  
19 would be OEMs supplying DPF type systems or was that just  
20 a fantasy based engineering question and we threw it out  
21 there.

22 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

23 Well, thank you, Jerry, for your comment. And we  
24 recognize Foss's experience in the maritime sector and  
25 also on the Tier 4 engine technology, as you've already

1 adopted it within your company. We do recognize that some  
2 engine manufacturers and through the Engine Manufacturers  
3 Association have expressed thoughts, comments about not  
4 wanting DPF technology to be used in conjunction with  
5 their engines between the engine block and the SCR system.

6 The DPF manufacturers that are working in an  
7 aftermarket capacity through our verification process are  
8 focused on proposals that would go down stream of the SCR  
9 system. From CARB's side, we don't have any information  
10 suggesting that we do not have authority to require that  
11 or that the engine manufacturers would be able to violate  
12 a warranty claim, if there's a problem with the engine and  
13 the specifications were followed.

14 So, for example, if an engine manufacturer has a  
15 back-pressure limit and the DPF installer verifies their  
16 platform for that engine and demonstrates that the  
17 back-pressure limits are not violated, there should be no  
18 concern or claim that anything downstream of that engine  
19 caused the warranty claim. So if you are installing  
20 something on your engine, a DPF, to comply with the  
21 proposal and there is a concern with the engine  
22 manufacturer, please bring it to our attention. We'd like  
23 to work with you to better understand the issue. It's not  
24 something that we're aware has caused any concerns at this  
25 point.

1           JERRY ALLEN: Okay. I understand that. I still  
2 question the fact that, you know, anything you touch on  
3 these -- and nine of these boats have been test engines.  
4 And to tell you the truth, they're still struggling with  
5 the SCR systems even now that they are mostly certified,  
6 not all of them.

7           So, you know, we'd like to see the combination.  
8 We'd like to see the OEMs and after-market, you know, come  
9 up with something here. But at this point, it seems like  
10 the timing of this is kind of unrealistic. You know, even  
11 if, you know, we look back and I've been at this since the  
12 beginning of the first Harbor Craft Rule, you know, 15  
13 years to get us to Tier 4, right, because 2005 is really  
14 when it was written, and 2007 it was implemented.

15           But it seems like, you know, having to supply  
16 every two years more proof and more proof, and, you know,  
17 looking at boats that some of these companies like ours  
18 invested many millions of dollars in, and seeing that  
19 there's a possibility we're going to be changing engines  
20 out in 2028 on engine boats built this year. I mean, can  
21 we just keep kicking the can down the road? And if that's  
22 the case, why don't we just change this -- make this  
23 schedule a little more realistic to technology and reach  
24 out to the OEMs and reach out to us. I mean, we all want  
25 to make improvements, but it seems like the schedule here



1 for tugs and ferries is a little optimistic.

2 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

3 Yeah, thank you for the comment. We recognize  
4 tugs and ferries are in one of those earlier groups for  
5 compliance. With the extensions, the compliance dates  
6 could run out into the 2030s. That's one of the reasons  
7 why we're proposing that technology review every two  
8 years. So we'll look at the Tier 4 technology. If, for  
9 some reason, the DPFs aren't becoming verified by CARB, if  
10 they're not becoming certified by EPA with the engines and  
11 zero-emission technologies proposing, that may warrant  
12 revisiting the proposal and coming back to the Board under  
13 a separate regulatory process. So that technology review  
14 will cut both ways, both on the combustion technology and  
15 the zero-emission technology.

16 We appreciate your comment.

17 JERRY ALLEN: And thank you for your time and  
18 staying late. It's nice to knock some of this out.

19 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

20 And no problem. And we'll take a few more  
21 questions here. So Aaron, go ahead and go next down the  
22 list.

23 TTD AIR RESOURCES ENGINEER BALI: I noticed Jaime  
24 Diamond put a few questions in the chat, so Jaime, I'm  
25 unlocking your microphone so you can speak.

1           JAIME DIAMOND: Hi. Thanks. It was starting to  
2 feel personal there for a minute.

3           Let me just -- so I own Stardust Sportfishing in  
4 Santa Barbara Landing in Santa Barbara. I'm going to  
5 acknowledge the privilege and how lucky I am just to own a  
6 business in California. Not many people get to do that  
7 and I get to live, you know, the life that I've chosen.

8           I'm also really, really lucky to be part of an  
9 industry association that can spend hundreds of people  
10 hours researching in meetings, working with government  
11 relations consultants, environmental engineers,  
12 mathematicians, and PR specialists. With all that on our  
13 side, we've still not been able to get all the data  
14 requested from you. Even after a meeting with the  
15 legislative staff where you said you'd get it to us, and  
16 then a week later you emailed us saying you wouldn't give  
17 us the info that was requested.

18           How can any small business owner be expected to  
19 navigate all of this on their own? The glaring  
20 steamrolling and inequity and lack of transparency have  
21 been horrendous. The data we do have has glaring flaws.

22           For example, we now know much of the boat base  
23 data for CPFV specifically was taken from four CPFV  
24 vessels and extrapolated across the fleet. My high  
25 schooler statistics class knows this is beyond flawed and

1 negligent. Your use of the phrase, "Best available data",  
2 is concerning. There is better data and we've stated that  
3 since the very beginning. If you remember we launched  
4 this whole effort two weeks into the COVID lockdown. If  
5 you were so dedicated to data collection, why have you  
6 still not gotten quotes from ship builders on the various  
7 class of vessels. Commercial fishermen were excluded  
8 without any economic analysis.

9           We provided that, including the cost of  
10 rebuilding, and it shows that we are in the same grouping  
11 as them financially. You cherry pick what the best  
12 available data is. You've taken flawed AIS data, but  
13 refuse to use the actual fishing log data shown where we  
14 spend our time, the blocks we're in, whether we're  
15 anchored, trolling, or drifting, meaning engines on or  
16 off.

17           We's also like to point out 50 percent of the  
18 CPFV fleet is in San Diego. Yet, the reductions don't  
19 reflect a proportional change going forward with this.

20           I'm appalled by the blatant lies that have been  
21 said by several members of your team. For example, one  
22 CPFV is equal to 162 school buses. Your own Board called  
23 BS on that. Have you been -- you've also been incredibly  
24 creative with how you phrase statements, like the one  
25 earlier about the existence of a T -- of a Tier 4. They

1 don't exist under 800 horsepower for a fleet and somebody  
2 else pointed that out as well.

3           Lastly, a little bit ago, you just stated Coast  
4 Guard wrote several comment letters. I believe all  
5 written comment must be made public. Where can I find  
6 these letters, because I've tried and I can't. I also  
7 find it interesting that you had -- that you allowed a DPF  
8 manufacturer to stay on and answer questions from other  
9 people calling in. Nobody else was allowed to do that.  
10 That's a little -- puts some mistrust in there.

11           I also don't like how you snapped at Mr.  
12 Wilkerson a little bit ago. That was incredibly rude. He  
13 had genuine questions and I think it was -- it was  
14 overbearing and heavy-handed the way you guys reacted to  
15 him.

16           I just -- this meeting it's frustrating. I don't  
17 feel that you have asked the questions that were emailed  
18 in. We still have a lack of transparency. Like I said,  
19 you say your data was based on what you had, and it was  
20 too to late to change it. And yet, we've told you since  
21 the beginning AI -- that AIS data is flawed, we've told  
22 you the Fish and Game logs were far more accurate, and  
23 you've been putting the onus of data collection on us.  
24 This is your job, not ours, so why should we have to give  
25 it to you. We've told you where to go get it. We got the

1 quote for a boat build. We have -- you know, I mean, why  
2 should we have to do that? This is your job. You're  
3 trying to have us do the work for you to barrier our own  
4 businesses? No. That's nuts.

5 In no world is the way this has been done okay.  
6 It's just not. There's no transparency. And like I said,  
7 again at that second meeting, it's like you guys are  
8 acting like toddlers just digging your feet in instead of  
9 admitting, hey, you know what, there is another way to do  
10 this. Hey, there is other data and it doesn't go the way  
11 we want it to, but it exists.

12 I mean, I get that you're texting to each other  
13 right now in the chat, whatever. It's just -- this has  
14 been ridiculous. I have a sick kid and I had tonight and  
15 all he wanted was mom and I had to put him off, so I could  
16 sit here and be put off by you till the end of the night  
17 and it's ridiculous what you're doing to people.

18 I've had enough.

19 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

20 Well, thank you, Jaime, for your comments. Good  
21 to hear from you again tonight. I don't know if you  
22 wanted a response to anything, but we can move on to the  
23 next question.

24 TTD AIR RESOURCES ENGINEER BALI: The next caller  
25 is Jared Davis. Jared, I'm unblocking your phone so you

1 can speak.

2 JARED DAVIS: Yeah. Hi, there Jared Davis again.  
3 I made this comment in the first segment. It was kind of  
4 pushed forward. Perhaps, I was in the wrong portion of  
5 the meeting. I'm not going to go through the whole thing  
6 again, but my name is Jared Davis, I am a member of -- a  
7 Board Member of Golden Gate Fishermen's Association,  
8 Golden Gate Salmon Association. I'm also the owner and  
9 operator of a 49-passenger charter boat in Sausalito,  
10 California, and I provide fishing and whale watching trips  
11 to the public with individual fares, as well as a contract  
12 in collaboration with a nonprofit ecotourism organization.

13 My question in short was will CARB be updating  
14 their economic impact to boat owners and will CARB reflect  
15 the loss of revenue to boat owners from individuals and  
16 families that will no longer be able to access the ocean  
17 due to not being able to afford our trips basically.  
18 The data that you put forward on this one was that, you  
19 know, the replacement of our vessels would be possible if  
20 we raised our prices by \$40 per fare. You know, I think  
21 the data on that one is flawed as well. The actual cost  
22 of replacing our vessels with steel-hulled vessels, you  
23 know, could be more around the \$5 million price tag.

24 You know, I mean, that's my specific question,  
25 the economic impact. But I think I want to jump on the

1 bandwagon here with -- you know, I question CARB's data.  
2 We've heard multiple commenters on this meeting talking  
3 about, you know, 85 percent of our time is spent in  
4 regulated waters, 2.9 percent versus 29 percent, one  
5 charter boat equals 162 school buses, 22 Tier 4 engines  
6 are available. You know, I just -- the health -- the  
7 health risk assessment, you know, I just -- it seems to me  
8 that the data throughout this process has been  
9 misrepresented at best and deceptive at worst.

10 I heard Bonnie say that they're working -- you're  
11 working on refining the data, and that's good, because,  
12 you know, with all due respect, it needs to be refined a  
13 lot.

14 And I also heard her say that it takes a long  
15 time to go through this data. And so maybe put the brakes  
16 on this thing a little bit and wait until technology and  
17 the economic feasibility can catch up. That's pretty much  
18 all I have to say. Thank you for your time.

19 TTD FREIGHT INCENTIVES SECTION MANAGER HAYNES:

20 Hi, Jared. This is Tracy Haynes. I'm overseeing  
21 the cost analysis and related documents for the  
22 rulemaking, so I'll address your question specifically to  
23 the economic analysis. And I'll just say that at this  
24 time, we are not planning to change the economic analysis  
25 as a whole, as that was not our -- one of the things that

1 we were directed to do by the Board. However, we have  
2 been following up with stakeholder comments, you know,  
3 specific to the cost, since those have been received. We  
4 are still going through that process to evaluate comments  
5 and do follow-up research to make sure that, you know, the  
6 data that we used in the cost analysis was sound, and that  
7 there's no better data that, you know, changes the  
8 conclusions that the cost analysis reached that we need to  
9 incorporate at this point.

10 So we're continuing through that process. And I  
11 also did want to clarify, you know, that the cost analysis  
12 does not necessarily assert that, you know, CARB believes  
13 that, you know, businesses can absorb a certain level of  
14 increase, you know, to specific costs, you know, that  
15 would result from the regulation. It's simply a  
16 disclosure document to analyze and disclose the cost that  
17 would result. So that's what we've done in the cost  
18 analysis and economic analysis.

19 Does that answer your question?

20 JARED DAVIS: It does. You know, I appreciate  
21 your response.

22 TTD FREIGHT INCENTIVES SECTION MANAGER HAYNES:

23 Okay. Thank you.

24 TTD FREIGHT ACTIVITY BRANCH CHIEF SORIANO: I  
25 wanted to add one more thing is that, you know, we use



1 very conservative cost estimates. And I think that  
2 that's -- you know, the vessel replacement, that -- we're  
3 not saying that every vessel -- every sportfishing vessel  
4 has to be replaced. What we're saying is we're going to  
5 use the most conservative estimate, kind of the worst-case  
6 estimate, and say what happens if everyone has -- if  
7 everyone has to be replaced So in that respect, we took a  
8 very conservative approach in the cost. And so, you  
9 know -- so we did take a conservative approach and that's  
10 why we did that, so that, you know, we could be as  
11 transparent as possible about what those costs would be.  
12 So I just wanted to add that on to what Tracy said.

13 JARED DAVIS: Okay. I appreciate that, Bonnie.  
14 You know one more point that I would make is that, you  
15 know, assuming that the economics can be sorted through  
16 and the funding can be procured in one way or another to  
17 replace all these vessels, Rome wasn't built in a day, and  
18 boats aren't built in a day. Another caller mentioned  
19 this, the boat yards, the -- that are available to  
20 actually take on a project like that, I mean, we would be  
21 very lucky to see all of these boats replaced within our  
22 lifetimes. And I'll leave it at that.

23 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
24 Well, thank you, Jared, for the comment and I  
25 also thank you for waiting patiently till we got back to

1 this part. So we're glad that you were able to stay on.

2 JARED DAVIS: Thank you, David.

3 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

4 So we -- it looks like on our end, we have five  
5 people that have their hands raised still, some of whom  
6 have recently spoken. We are going to stay on and get  
7 through the rest of the comments or questions. So Aaron,  
8 go ahead and pick up in the queue.

9 TTD AIR RESOURCES ENGINEER BALI: Okay. Thank  
10 you, David. Our next speaker is Frank Rescino. Frank,  
11 I'm unmuting your microphone so you can speak.

12 FRANK RESCINO: Hi. Thank you for -- can you  
13 hear me okay?

14 Hello?

15 TTD AIR RESOURCES ENGINEER BALI: Yeah, we can  
16 hear you.

17 FRANK RESCINO: Okay. Yeah. Thank you for --  
18 well, for one, staying on late enough to get all the  
19 calls. We appreciate that. But there was some question  
20 in these extensions. Do they cost any money? Someone  
21 said they -- there was like 50 or 60 thousand dollars to  
22 keep all the extensions going. Is there -- is that truth  
23 to that?

24 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

25 So this is --

1           TTD AIR RESOURCES ENGINEER HOUCHIN: I can -- oh,  
2 sorry, David.

3           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
4 Go ahead, Melissa.

5           TTD AIR RESOURCES ENGINEER HOUCHIN: I can start  
6 and then you can add if you have more. I was just going  
7 to say there's no cost to apply. There's no cost --  
8 there's nothing you need to pay to CARB to submit the  
9 application. The cost that we're referring to -- or  
10 others are referring to is probably related to the  
11 analysis you would need to provide like on your financial  
12 situation or the feasibility of the Tier 4 or DPF being  
13 installed, if you have to hire a naval architect or  
14 something to perform analysis on your vessel. Like that  
15 would be something that might cost money. So that's part  
16 of why the streamlining of the compliance extension we're  
17 proposing is for the initial application. Using the CMA  
18 study that's already been completed for the technological  
19 feasibility aspect of the application can save money, so  
20 you don't have to fund your own analysis.

21           FRANK RESCINO: No, that pretty much answers it.  
22 And the other thing is what happens after 2034, are the  
23 Tier 4s good then? Is that what -- you have to have a  
24 Tier 4 by then or do you have to go to something else  
25 after that?

1           TTD AIR RESOURCES ENGINEER HOUCHIN: So when  
2 those extensions expire, you would need to be at Tier 4  
3 plus DPF. And so for -- because the feasibility extension  
4 is related to vessel replacement, so those extensions are  
5 for if you can't do a repower, because it's not feasible  
6 and you can't afford a replacement vessel, you could get  
7 this extension. When those extensions expire, if the  
8 technology has not advanced to a place where you can  
9 repower, you would need to replace your vessel to a  
10 compliant vessel.

11           FRANK RESCINO: Okay. Thank you. That pretty  
12 much -- that's -- and I just want to reiterate that, you  
13 know, having a boat that's paid for already and having to  
14 buy one that costs three or four million dollars, the cost  
15 to the public is going to a lot more than \$40 a person.  
16 And if you guys do consider your -- you know, your  
17 emissions again, if you could look at the time that -- you  
18 know, the power that the engines run at, instead of like  
19 say one power is always a hundred percent when -- like we  
20 run an hour at say 50 percent power and then the rest of  
21 the time we're at 10 percent power trolling or drifting.  
22 I would think that would save some, you know, emissions.  
23 But thank you for staying on so late. We appreciate it,  
24 listening to all our questions. And we're just trying to  
25 have a future here. Thank you.

1 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

2 Yeah. Thank you, Frank, for your comment and  
3 staying as well.

4 TTD AIR RESOURCES ENGINEER BALI: Our next  
5 speaker is Rick Powers. Rick, I'm unmuting you so you can  
6 speak.

7 Rick, you're still on mute.

8 RICK POWERS: I'm here. Can you hear me?

9 TTD AIR RESOURCES ENGINEER BALI: Yeah, we can  
10 hear you.

11 RICK POWERS: Yeah. Rick Powers, GGFA.

12 You know, listening to everybody speak this  
13 evening, I think everybody has voiced our concerns  
14 regarding our future. And we just hope that you guys, you  
15 know, take into account what everybody said this evening.  
16 We have taken a path over the years which we thought, in  
17 order to stay in compliance, would help lower emissions.  
18 And some of the things you're asking for are just  
19 unreasonable. And hopefully this whole process, you --  
20 hopefully, we can secure some funding hopefully at a State  
21 level outside of what has been offered in the past. The  
22 Moyer Program has been a wonderful thing, but it doesn't  
23 help a lot of people, depending upon their situation.

24 That's all I have to say. Thanks.

25 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

1 Thank you, Rick.

2 TTD AIR RESOURCES ENGINEER BALI: Our next  
3 speaker is Mark Roest. Mark, I'm unmuting your  
4 microphone.

5 We can't hear you, Mark. You might still be on  
6 mute.

7 We still can't you hear you, Mark.

8 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

9 Yeah, we can't hear you, Mark. We can come back  
10 to you one more time Aaron. Maybe go on to a different  
11 commenter for now.

12 TTD AIR RESOURCES ENGINEER BALI: Okay.

13 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS: I  
14 see there's two other hands raise.

15 TTD AIR RESOURCES ENGINEER BALI: We did get one  
16 question in the chat from a person, "Did you get a chance  
17 to detail for us the technology and implementation review.  
18 Can you describe the process for us a bit more fully"?

19 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
20 Yeah. I didn't hear who that comment came from.

21 TTD AIR RESOURCES ENGINEER BALI: That was from  
22 an anonymous attendee.

23 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

24 There was a -- so the question is what would the  
25 technology and implementation review look like? That's a

1 good question and the Board Resolution might have some  
2 specificity in there. We're looking for input on it. But  
3 essentially, every two years, CARB staff would release  
4 some type of communication, potentially a document that  
5 would be posted publicly that would discuss changes in  
6 Tier 4 technologies as it relates to the marine harbor  
7 craft sector, as well as the progress of implementing the  
8 requirements as proposed, which, for the most part, is a  
9 cleaner combustion Tier 4 plus DPF standard.

10 So potential things in there may include engines  
11 coming to market, number of DPFs that are verified, and  
12 statistics on percentages of vessel categories that are  
13 receiving compliance extensions due to the lack of  
14 feasibility. And that together with the readiness of --  
15 or any changes of zero-emission technology could inform  
16 whether changes to the proposal are warranted. That, I  
17 just want to clarify, would be a separate regulatory  
18 process. So the amendments being proposed have compliance  
19 dates 2023 through 2031 with extensions out to 2035.

20 The technology review would be something separate  
21 from the regulatory process that could trigger the Board  
22 requesting us to change and come up with amendments to the  
23 current proposal.

24 TTD AIR RESOURCES ENGINEER BALI: Thanks, David.  
25 I just want to remind everyone, if you don't have anything

1 additional to add, to please put your hand down.

2 I'm going to try Mark Roest one more time. Mark,  
3 I'm unmuting your microphone.

4 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

5 And, mark, if you're talking, we can't hear you.  
6 Aaron, maybe you can unmute the other two people with  
7 their hand raised just to check them all at one.

8 TTD AIR RESOURCES ENGINEER BALI: All right.  
9 Jared Davis, and William Wilkerson, if you have anything  
10 additional you'd like to add, you've been unmuted.

11 JARED DAVIS: Yeah. This is Jared Davis. I'm  
12 sorry. I just forgot to lower my hand.

13 TTD AIR RESOURCES ENGINEER BALI: No problem.

14 If there's nothing from Mark or William, I  
15 believe that's all the attendees.

16 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

17 And then, Aaron, I know that you've been  
18 monitoring the chat, but I just want to ask for the record  
19 for everyone that's still on the meeting, if anyone has  
20 submitted a comment in the chat that we did not call on  
21 that you'd like a response from us live in this meeting,  
22 please raise your hand now and we'll unmute you, so you  
23 can ask the questions, but I hope that we got to everyone.

24 So I'm not seeing any more hands raised on my  
25 end. So I'll just say that one more time, if there's any



1 final comments before we close, we're going to stay here  
2 until all questions are answered. If anyone submitted  
3 anything over email they want answered right, we can do  
4 that as well.

5 TTD AIR RESOURCES ENGINEER BALI: Wayne Kotow.  
6 Sorry, if I pronounced your last name wrong. I'm going to  
7 unmute you, so you can speak.

8 WAYNE KOTOW: Hi. Thanks for taking this last  
9 question. I get the answer to my first question, which  
10 was, you know, if we put a pilot program together and --  
11 with a Type 4 and we get the funding and put it in and it  
12 doesn't work, then what would be the compliance and  
13 deadline issues going forward. And what you're saying is  
14 we get extensions on that. The question I have is other  
15 opportunities. For the majority of our fleet that goes  
16 offshore and down south, south of the border, what if they  
17 had a hybrid option, is that a possibility, so that they  
18 can continue to use their Tier 3 motors or engines, you  
19 know, offshore outside of jurisdiction for this, but then  
20 have a low-emission or zero-emission option while they're  
21 in port, is that an option?

22 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:  
23 Hi, Wayne. That's a good question. And I think  
24 the first thing that comes to mind is the alternative  
25 control of emissions pathways. So it's Subsection F in

1 the proposed text, where any operator or owner can come up  
2 with a pathway to reduce emissions in regulated California  
3 waters. And we're seeking to maximize zero-emission  
4 operations where feasible. So for some offshore  
5 operation, if it's feasible to operate zero-emission  
6 within regulated California water, so 24 nautical miles  
7 out, and at the Mexico/California border, it's more or  
8 less a straight line, and Tier 3 elsewhere, that could be  
9 something that we could work with you through the  
10 alternative control of emissions process. And there's an  
11 application window for that that's in the first three  
12 years of the regulation taking effect. So you'll want to  
13 jump on that discussion as soon as our Board takes a final  
14 action.

15 WAYNE KOTOW: Okay. Thank you.

16 TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

17 Thank you for the question.

18 TTD AIR RESOURCES ENGINEER BALI: I see Shawn A.  
19 Bennett. Shawn, I am activating your mic so you can  
20 speak.

21 SHAWN BENNETT: Thank you. Yeah, I'm just really  
22 making one comment. You know we've had -- we run  
23 harbor -- I'm with Bay Delta Maritime. We run harbor tugs  
24 in both LA, Long Beach, and in San Francisco bay. And,  
25 you know, run Tier 4 boats. We have a hybrid boat down in

1 LA, the first of its kind running down there. So we have  
2 a lot of experience and had a great relationship with CARB  
3 and have been a benefit of the Carl Moyer funding.

4 And so, you know, I think one point I wanted to  
5 make that I think might not be really clear. It's just  
6 not really only about warranties, but we also have  
7 something called hull and machinery insurance. And we  
8 recently had a engine failure down in Los Angeles and put  
9 a claim in for that. And, you know, it was an eye-opening  
10 experience the survey that they did on the vessel, all the  
11 maintenance records that they checked. They tested the  
12 fuel blend and actually were very curious about how much  
13 ethanol was in the fuel, and it was under the proper  
14 amount. So after going through all of their different  
15 efforts, they approved the claim.

16 And, you know, these engines are a million  
17 dollars. So for a small company like us, that could have  
18 been a pretty devastating thing if that claim had been  
19 denied for any reason at all. And you've got to  
20 understand these are insurance companies, not to pick on  
21 them, but you know, they're looking for reasons not to --  
22 you know, not to approve your claim potentially. And so  
23 we're going to, you know, just -- I really just want to  
24 emphasize the absolute importance to make sure that the  
25 engine companies, Caterpillar, and, you know, anybody --

1 any other companies kind of are willing to shake their  
2 head and say, yeah, yeah, we fully are okay with this.  
3 And actually we can then communicate that to our insurance  
4 companies to make sure that they're okay with any changes  
5 we're doing, including using biofuels and that type of  
6 thing, right, and blend -- different blended fuels,  
7 because if it gives them any opportunity or any window at  
8 all to deny a claim, it can be a million dollar cost to a  
9 company like ours is -- you know, we're -- we have six  
10 people in our office and 50 mariners in the water. You  
11 know, that's -- that would be incredibly devastating.

12           And so we're going to be really, really careful  
13 about making changes to, you know, anything that's not  
14 fully checked off by the manufacturers. So more a point  
15 than a question.

16           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

17           Well, thank you, Shawn for the comment and the  
18 point. And we recognize the importance of the performance  
19 of the equipment, the warranties, and making sure that you  
20 have what you need. We'll take that into consideration.

21           Okay. Back to you, Aaron for a final check for  
22 anyone with final questions.

23           TTD AIR RESOURCES ENGINEER BALI: I'm not seeing  
24 anyone.

25           Nick, do you want to try the phone number again.

1           TTD AIR RESOURCES TECHNICIAN TAYLOR: Sure. So  
2 I'll try this one more time. Phone caller, I have  
3 activated your microphone, if you'd like to participate,  
4 comment, or speak, please do so.

5           Okay. I'm not hearing anything, so I'll say  
6 that's concluded then.

7           TTD FREIGHT TECHNOLOGY SECTION MANAGER QUIROS:

8           Okay. Well thank you, everyone. That's the end  
9 of the webinar tonight. So on behalf of the whole team  
10 here at CARB, thank you for staying on. Thank you for  
11 your input. We're going to take everything we heard into  
12 consideration and we'll be circling back with our upper  
13 management and executive office and returning to the Board  
14 in spring 2022.

15           So the webinar is, as of now, over, and we are  
16 available to take any further questions off-line should  
17 you have them.

18           Thank you.

19           (Thereupon the Air Resources Board webinar  
20 adjourned at 8:31 p.m.)

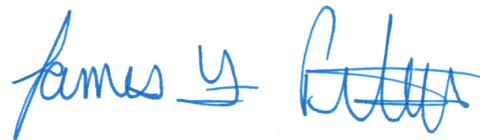
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