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California Air Resource Board

Attn: Clerk of the Board
P.O. Box 2815
Sacramento, CA 95812

Dear Board Members:

Thank you for the opportunity to comment on the California Harbor Craft Rulemaking process. My name is Scott Merritt, and I've spent my entire 39-year professional career serving the tug and barge industry. I've served as the Chief Operating Officer of Foss Maritime, Chairman of the Board of AWO, and Vice Chair of the Harbor Safety Committee of the San Francisco Bay Area. I have been involved in multiple rule-making process through my years, and have spent the last three years supporting Foss, her sister companies and AWO members in attempting to understand these regulations, and to provide meaningful input to CARB staff in support of a responsible regulation.

Unfortunately, these efforts have failed as the proposed rules, for which you are scheduled to vote today, are anything but responsible. The rule as written will be difficult, "if not impossible", to comply with, challenging to administer and enforce, disruptive to the flow of commerce, lead to the loss of living wage jobs and most importantly be counter-productive to the goal of achieving zero-emissions as soon as possible.

Because I know your time is valuable, I'm going to start with an ask and provide you the support for them afterwards. We ask that you allow low emission, Tier 3 and Tier 4 engines, to operate without modification for their useful life of 25 years from the Engine Model Year (EMY). When adjusting for the useful life of the vessels, this is consistent with the CARB regulations governing Class 8 trucks. In exchange vessel owners would agree to remove the vessels from service at the 25-year point and either a) replace it with a new zero emission tug, b) convert the existing tug to zero-emission technology, or c) contribute \$1 million dollars per engine to fund other Zero-Emission tug projects. This would all but guarantee the steady transformation of the harbor towing fleets in California from diesel to zero emission technology starting in the early 2030's and completing by the mid 2040's. Short of this, we'd at least ask for the same pathway considerations for towing vessels as Resolution 22-6 provides Commercial Passenger Fishing Vessels.

Why? Because the process has ignored the realities of our industry and has created an irresponsible piece of regulation. CARB staff lacks the subject matter expertise to understand the nature of our

operations and the technological limitations of installing unproven and unapproved devices on our vessels. The comment and outreach process, critical to any rulemaking process, is intended to provide regulators with this understanding. While staff would lead you to believe this took place, **it has not**. Our comments and input to staff were all but completely ignored and the intent of the comment periods were undermined by sloppy staff work. I will highlight the CARB staff's responses that demonstrate the failure in the process.

- CARB staff continues to compare tugboats to cars and trucks that have documented lifespans of less than 13 years. Tugboats have an average lifespan of well over 40 years, with engines often last the age of the tug. The regulations for Class 8 trucks take life cycle into account. These trucks were granted a minimum of 9 and a maximum of 16 years from their EMY to implement DPF technology, and 14 – 21 years to upgrade to the latest tier requirements. This against a vehicle life of 13 years. We are only asking for a 25-year compliance date against an average life span of 40 years.
- CARB staff keep pushing that they've offered up to 3, 2-year extensions, potentially giving qualified owners up to 6 years to comply. Unfortunately, 2-year increments do not work for our industry. Developing an approval package for United States Coast Guard and our vessel class society (as required by federal law) takes upwards of a year to complete. Only then can you begin putting together the final drawings, engineering plans and solicit bids for equipment. This takes months, if not years to implement and then a shipyard must be sourced. As we've explained numerous times, by federal regulation, marine maintenance is generally governed in 5-year cycles and nothing short of a 5-year extension interval will prove helpful to industry. Staff does not understand the impact of trying to install a yet to be designed, much less approved DPF on a vessel only a couple of years of planning time. It is analogous telling someone in Los Angeles that you will provide them 2 hours' notice on when to be in New York City.
- Particularly concerning to industry is the risk to mariners of rushing the implementation of technology that is unproven. One only need to google "DPF and Fire" to see multiple examples of trains, cars and trucks that burnt to the ground because of DPF implementation. A key component of eliminating this risk is not implementing the technology until it is approved and tested in a controlled environment. DPFs are not currently available or approved for the engines or vessels use. It will take years after they are to ensure they are safe to use in a marine environment and that a particular vessel can be properly altered to handle the weight and heat issues inherent to these systems. Unlike truck drivers, mariners can't walk away from a burning vessel, they must stay and fight for their lives.
- CARB has stated that there is a significant under-reporting of hours among towing vessels. From the start of this process CARB has grossed up towing vessel hours by between 29% and 36%. The original basis for CARB Staff's actions was information gathered from an USCG database. When AWO provided evidence that demonstrated the database was an inaccurate and inappropriate tool for that purpose, CARB staff claimed they no longer relied on it. But they continue to inflate the numbers and have offered no explanation beyond "other sources" and "they talked with industry". Further, they have tried to write off AWO's input claiming we used AIS data and the fact that some vessels do not carry AIS. While true, they neglected to point out that we provided evidence that AIS identified over 92% of towing vessels that "could" have operated in California waters, and of those that don't carry AIS, are smaller vessels, most less than 26' long. AWO provided numbers that including the vessels without AIS that "may" have operated in California AWO demonstrated

that the vessel population, and corresponding emissions were inflated in each category of vessels. Specifically,

- ATBs by 36%. Only 14 ATBs, not the 19 in CARBs data called in both 2019 and 2021.
 - Escort Tugs by 15%. Only 55 Ship Assist and Escort tugs, not the 63 in CARBS data operated in the referenced years.
 - Tugboat-push/tow by 70%. We found 143 tugboat-push tow operated, 124 identified with AIS. CARB estimates showed nearly the same number of vessels but attributed over 1.7 times (70%) more operating hours, and thus 70% emissions. The hour estimates by AWO were supported by detailed AIS data, CARBs estimates were not based on any supporting data.
- Finally, we'd point out that CARB staff made an error in labeling their data set released during the open comment period in the fall of 2021. This error not only cost us an opportunity to assess the efficacy of the emission and health study, but also wasted thousands of dollars and all the hundreds of hours of resources we put into the effort. What we found especially egregious was in their response they blamed our consultant for the mistake and did not acknowledge their own error. Such an error should have invalidated the comment period and restarted the clock. You as Board members should appreciate the unfairness of this situation and should be offended that staff chose to intentionally leave their error out of the response. Ramboll compared the model data provided by CARB staff, labeled as PM, to actual PM figures from shore-based sampling points. CARB staff rightly pointed out in their response to our comments, that Ramboll instead compared modeled cancer risk (in chances per million) to ambient PM_{2.5}.

Thank you for your time and attention. We the towing industry are as committed as CARB to achieving zero emission in as safe and expedient manner as possible. But the rule as written will only serve to drive responsible companies out of California and discourage anyone from investing in California. We urge you to be responsible regulators and implement rules that are practical and that focus on zero emission as the goal. Should you have any questions or would like more detail on what we have shared today, or previously to CARB staff, I can be reached at the number and email below.

Sincerely,



Scott Merritt

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Cc: Peter Schrapen, VP Pacific Region for AWO
Lynn Muench, SVP Regional Advocacy for AWO