



Friends of
the Earth



**Union of
Concerned Scientists**



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California Air Resources Board
1001 I Street,
Sacramento, California 95814
Via Electronic submittal

Re: INCREASE AMBITION AND STRINGENCY TO GENERATE GREATER EMISSIONS REDUCTIONS IN COMMERCIAL HARBOR CRAFT RULE

The undersigned organizations are writing to submit comments on California Air Resources Board ("CARB") Draft Proposed Regulation Order for the Commercial Harbor Craft Regulation ("CHC"). As the Proposed Draft and staff presentations make clear, this proposed regulation is critical to protecting public health in California, including by producing real immediate emissions reductions and helping accelerate the zero-emission vessel market within the shipping industry. We appreciate the work that CARB staff have done on the proposal. As written, however, the rule is insufficient.

Even with the existing harbor craft regulation in the books, harbor craft continue to contribute a large portion of health and cancer risks to communities near ports. According to CARB's latest inventory model, statewide emissions of nitrogen oxides and fine particulate matter from commercial harbor craft have increased by up to 10 percent¹ In the South Coast Air Basin, NOx and PM2.5 emissions from commercial harbor craft have increased by 40 to 60 percent.² In the areas surrounding the San Pedro Bay Ports, harbor craft constitute one of the top three sources of cancer risk attributable to diesel particulate matter exposure³ The State of California needs to ramp up its criteria pollutant and toxic emission reduction targets and greenhouse gas emission reduction targets in order to urgently save lives, meet bare minimum federal clean air attainment standards, and align its decarbonization trajectory with the Paris Climate Agreements' 1.5C global warming mitigation target. It is therefore imperative that no potential emissions reductions be left on the table as CARB finalizes its CHC rule.

To these ends, we urge CARB to increase the ambition, stringency, and timelines of the proposed rule in the following ways.

1. Phase in zero-emissions and advanced technologies sooner and for all segments
2. Include aggressive performance standards for methane emissions
3. Cap compliance extensions at 2028

I. Phase in zero-emissions and advanced technologies sooner and for all segments

As written, the regulation only requires a zero-emission transition for ferries traveling 3 nautical miles. This is a missed opportunity for life-saving emissions reduction and risks creating a stranded asset scenario for harbor craft owners who may pay to retrofit to Tier III or IV engines only to be forced to make a full zero-emission transition in quickly proceeding years later.

Electric and hydrogen fuel cell tugboats are now developed and in operation in [Turkey](#) and [Belgium](#), respectively. Long haul (40+ nautical miles) electric ferries are now deployed in [Norway](#). [South Korea](#) has plans to build at least 140 all-electric ferries by 2030, and [British Columbia](#) plans to go all-electric for its entire ferry fleet starting 2022 and finished by 2025.

CARB should amend the regulation so that absolute zero-emissions deadlines are introduced for all harbor craft segments. Regions like the South Coast need significant NOx reductions in order to attain state and federal ozone standards and moving to all-electric harbor craft is critical to meeting these air quality goals. CARB should reconsider incentives or grant funding accordingly to support this more stringent pathway.

II. Include aggressive performance standards for methane emissions

¹ California Air Resources Board, *Webinar: Overview of Proposed Concepts for Amendments to the Commercial Harbor Craft Regulation* (Mar. 5, 2020), slide 47, https://ww2.arb.ca.gov/sites/default/files/2020-03/CHC%20Webinar%20Presentation%20March%202020_1.pdf/.

² *Id.* at slide 48.

³ California Air Resources Board, *Public Workshop to Discuss Additional Requirements for the Commercial Harbor Craft (CHC) Regulation* (Dec. 2018), slide 10, <https://ww2.arb.ca.gov/sites/default/files/2020-07/chc120418pres.pdf>.

The International Maritime Organization's Fourth Greenhouse Gas Study found that greenhouse gas (GHG) emissions from the global shipping sector rose 10% from 2012 to 2018, with an exceptionally alarming increase in short term climate super pollutants: a 12% increase in black carbon emissions and a 150% increase in methane emissions. This alarming increase in methane emissions is a result of a short-sighted industry-wide shift to Liquefied Natural Gas (LNG).

Put simply: a shift to LNG in shipping risks increasing total lifecycle GHG emissions from ships.

CARB must get ahead of this potential unintended consequence and not inadvertently encourage LNG as a means of compliance. We urge CARB to add to its rule performance standards for methane, preferably by introducing progressive carbon dioxide *equivalent* emission reductions for all harbor craft segments into this rule.

III. Cap compliance extensions at 2028

As written, the rule extends compliance until 2037. We urge CARB to set a firm compliance date of 2028. From a public health perspective, the South Coast Air Quality Management District is already failing to attain several ambient air quality standards under the federal and state clean air acts. Allowing nearly two decades for an emissions segment to comply with a pollution rule is too lenient, given the urgent need to protect public health from polluted air in the region.

From a climate crisis perspective, according to the EU-based Clean Shipping Coalition and Pacific Environment in their submission to the International Maritime Organization's Marine Environmental Protection Committee, the shipping industry needs to close to fully decarbonized by 2035 to do its fair share to achieve the Paris Agreement's 1.5C global warming target. Harbor craft globally in California should be close to zero-emission well before 2030.

From a regulatory effectiveness perspective, it is not clear why an operator would need more than a three-year delay in compliance. To the extent CARB feels like a second extension is needed given this sector, the extension should allow for only one additional year for compliance.

In conclusion, it is vital that CARB make its CHC rule as close as possible to requiring absolute zero emissions. Californians, the nation and the world are facing interrelated existential public health, racial justice, and climate crises. The technology to create zero emission harbor craft is well on its way to meeting the deadlines called for in this letter.

Sincerely,

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