

**State of California  
Air Resources Board  
Board Item Summary**

**Item # 21-12-6: Public Hearing to Consider Proposed  
Amendments to the Commercial Harbor Craft  
Regulation**

**Staff Recommendation:**

This is the first of two hearings on this item. While no Board action is required at this hearing, staff recommends that the California Air Resources Board (CARB or the Board) direct the staff, among other things, to bring final Proposed Amendments to the Commercial Harbor Craft Regulation (Current Regulation) back to the Board for its consideration in a subsequent hearing in approximately the Spring of 2022.

**Discussion:**

Since 2009, the existing Commercial Harbor Craft (CHC) regulation has required vessel owners to replace older engines with newer and cleaner engines, which has reduced the emissions of air pollutants including diesel particulate matter (DPM), fine particulate matter (PM<sub>2.5</sub>), oxides of nitrogen (NO<sub>x</sub>), oxides of sulfur (SO<sub>x</sub>), and reactive organic gases (ROG). The Current CHC Regulation applies to a subset of CHCs operating in California waters, including barges, dredges, crew and supply, ferries, excursion vessels, and tug and towboats. In-use vessels in these regulated categories must meet Tier 2 or Tier 3 engine requirements, and new ferries carrying 75 passengers or more must operate in conjunction with the use of Best Available Control Technology (BACT) if not meeting Tier 4 engine standards. Additionally, the Current Regulation requires the use of CARB ultra-low sulfur diesel (ULSD, 15 parts-per-million [ppm] sulfur) and the use of non-resettable hour meters.

Even after the Current Regulation is fully implemented by the end of 2022, there is an additional need to reduce emissions from CHC. Many vessels operate in or adjacent to disadvantaged communities (DAC), and emission reductions from these vessels will directly benefit these communities experiencing cumulative exposure burden. Governor Newsom's Executive Order N-79-20 directed CARB to transition off-road vehicles and equipment to 100 percent zero emissions by 2035, where feasible. Additionally, there is a need to maximize emission reductions from all sources to minimize health impacts and attain the federally mandated National Ambient Air Quality Standards (NAAQS).

The Proposed Amendments would apply more stringent requirements to in-use and new vessels and expand the regulatory requirements to vessel categories that were previously exempt from in-use vessel requirements. Furthermore, it would apply reporting, infrastructure, and other requirements onto facilities, such as seaports, terminals, marinas,

and harbors that conduct business with CHC. It would also require the use of renewable diesel, biennial opacity testing, and fee collection from vessel operators to cover CARB's costs associated with the certification, audit, and compliance of CHCs, as allowed by Health and Safety Code section 43019.1.

The rulemaking process for the Proposed Amendments began in 2018. During this process, CARB staff conducted more than 400 meetings, conference calls, and site visits with members of impacted communities, environmental justice advocates, public agencies at federal, state, and local levels, and industry stakeholders (including vessel operators, seaports, marine terminals, industry associations, as well as manufacturers of emission control and Zero-Emission and Advanced Technology systems). The format of these conversations included agency working groups, public workshops, community meetings, and meetings with individual stakeholders. In Spring 2020, all meetings transitioned to remote formats such as webinars and web conferences.

### **Summary and Impacts:**

The Proposed Amendments are expected to reduce emissions of PM<sub>2.5</sub>, DPM, NO<sub>x</sub>, ROG, and greenhouse gases (GHG) beyond levels achieved under the Current Regulation. Emission reductions would begin in 2023 when the Proposed Amendments impose new emission reduction and fuel requirements. Staff estimated that from 2023 through 2038, the Proposed Amendments would further reduce cumulative statewide emissions by approximately 1,610 tons of PM<sub>2.5</sub>, 1,680 tons of DPM, 34,340 tons of NO<sub>x</sub>, 2,460 tons of ROG, and 415,060 metric tons (MT) of GHG, relative to the Current Regulation.

These emission reductions benefit individuals by reducing the incidence of premature deaths, hospital admissions, and emergency room visits, as well as reducing criteria pollutants and GHGs. Overall, staff estimated the statewide valuation of health benefits from avoided adverse health outcomes due to the Proposed Amendments at \$5.25 billion between 2023 and 2038, far exceeding the direct economic costs of \$1.98 billion for the same time period during implementation of the Proposed Amendments.

Implementation of the Proposed Amendments would also significantly reduce total DPM emissions in coastal and other areas where harbor craft operate. Staff evaluated the health impacts in South Coast and the San Francisco Bay Area Basins and estimated that population-weighted average cancer risk would be reduced from 10 and 12 chances per million, respectively, to one chance per million. The Proposed Amendments would eliminate CHC-related cancer risk of 100 chances in a million and above for any location within the two air basins. Additionally, customers and workers onboard CHC and workers employed in the CHC sector will both benefit from reduced exposure to DPM and other air pollutants.

In addition, the Proposed Amendments would provide a strong signal for the development and transfer of cleaner combustion and zero-emission technologies into the off-road and maritime sectors. The Proposed Amendments would spur technological innovation by developing a robust market for these technologies, which could be deployed globally.

The Draft Environmental Analysis (EA) concluded that the implementation of the Proposed Amendments has the potential to result in less than significant impacts to energy demand; long-term operational-related air quality; greenhouse gases; land use and planning; mineral resources; population; employment and housing; public services; recreation; and wildfire. Implementation of the Proposed Amendments has the potential to result in potentially significant and unavoidable adverse impacts to aesthetics, agriculture and forestry resources, short-term construction-related impacts to air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise and vibration, transportation and traffic, tribal cultural resources, and utilities and service systems.