State of California Air Resources Board

Board Item Summary

Item # 22-5-1: Public Hearing to Consider Proposed Amendments to the Commercial Harbor Craft Regulation

Staff Recommendation:

Staff recommends that the California Air Resources Board (CARB or the Board) approve the Proposed Amendments to the Commercial Harbor Craft Regulation (Proposed Amendments) and direct staff to finalize the rulemaking with minor modifications to the regulatory language to include an optional extension pathway for commercial passenger fishing vessels as suggested in the staff presentation. This is the second of two public hearings on this item. The first public hearing was held on November 19, 2021.

Discussion:

Since 2009, under the requirements of the current Commercial Harbor Craft (CHC) regulation (Current Regulation), vessel owners have replaced older engines with newer and cleaner engines, which reduced the emissions of air pollutants including diesel particulate matter (DPM), fine particulate matter (PM2.5), oxides of nitrogen (NOx), oxides of sulfur (SOx), and reactive organic gases (ROG). The Current Regulation applies to a subset of CHC operating in California 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 requirements, and new ferries carrying 75 passengers or more must operate with the use of Best Available Control Technology (BACT) if not meeting Tier 4 standards. Additionally, the Current Regulation requires the use of CARB ultralow sulfur diesel fuel (ULSD, 15 parts per million [ppm] sulfur) and the use of non-resettable hour meters.

The Current Regulation will be fully implemented by the end of 2022; however, there is an additional need to reduce emissions from CHC. Many vessels operate in or adjacent to disadvantaged communities (DAC) and further emission reductions from CHC 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-emission 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, the amendments would apply reporting, infrastructure, and other requirements to facilities, such as seaports, terminals, marinas, and harbors that conduct business with CHC. The Proposed Amendments 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 CHC, 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, and 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, with the onset of COVID-19, all meetings transitioned to remote formats such as webinars and web conferences. The first hearing for the proposal was held in November 2021 where the Board directed staff to conduct additional outreach including providing information regarding incentive opportunities, explore opportunities for simplification of the extension request process, commit to conducting technology assessments in the future to report on technology advancement progress, and explore opportunities for CHC zero-emission contingency measures to include in the State Implementation Plan.

Since the first hearing in November 2021, CARB staff has continued to engage in dialogue with affected parties, particularly owners and operators with small fleets of vessels. Staff held a four-and-a-half-hour public webinar, which was recorded and posted to CARB's CHC website, to discuss suggested responses to Board direction from November and highlighted existing and potential funding opportunities; held over 30 individual meetings with stakeholders; traveled to San Diego and Newport Beach to see additional sportfishing operations and hear from stakeholders; responded to public records and data requests by making supporting data available on CARB's website; and corresponded with stakeholders in over 80 additional emails and phone calls.

Summary and Impacts:

The Proposed Amendments are expected to reduce emissions of PM2.5, DPM, NOx, 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 estimate that from 2023 through 2038, the Proposed Amendments would further reduce cumulative statewide emissions by approximately 1,610 tons of PM 2.5, 1,680 tons of DPM, 34,340 tons of NOx, 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 criteria pollutants and GHGs. These reductions would result in 531 avoided premature deaths, as well as reduce the incidences of hospital admissions, and emergency room visits. Overall, staff estimates 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 that reach over 50 miles inland from the coast and other areas where harbor craft

operate. Staff evaluated the health impacts in the South Coast and the San Francisco Bay Area Air Basins and estimated that the population weighted average cancer risk from CHC emissions 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 per 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 all 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.

To be responsive to the Board's direction from November, staff conducted additional outreach as described above and is recommending resolution language that directs the Executive Officer to take specified actions regarding compliance extensions, technology assessments, and contingency measures. In addition, staff is recommending for the Board to direct the Executive Officer to finalize and modify regulatory language to include an additional extension pathway option through 2034 for commercial passenger fishing vessels that have provided early emissions reductions by replacing all onboard engines to meet Tier 3 or newer standards by the end of 2024. In addition, the resolution language directs the Executive Officer to continue collaborating with the sportfishing industry on the advancement of zero-emission technology and conduct a Midterm Review by 2028 on the status of both cleaner combustion and zero-emission technology for the sportfishing vessel category.

The Final 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, hazardous materials, hydrology and water quality, noise and vibration, transportation and traffic, tribal cultural resources, and utilities and service systems.

If CARB had the authority to require mitigation for project-specific impacts from anticipated compliance responses, many of these potentially significant impacts could be feasibly avoided or mitigated to a less-than-significant level. However, such mitigation is beyond CARB's authority and, thus, the suggested mitigation measures in the Final EA are considered legally infeasible for CARB to implement and enforce. Therefore, the Final EA takes the conservative approach in its post-mitigation significance conclusions and discloses, for California Environmental Quality Act (CEQA) compliance purposes, that potentially significant environmental impacts may be unavoidable since other lead agencies are tasked with implementing the suggested mitigation measures and they may not be sufficient to mitigate an impact to less-than-significant and/or the lead agencies may not impose the full extent of the suggested mitigation measures in future project approvals.