



Proposed Amendments to the Commercial Harbor Craft Regulation

WEBINAR

January 12, 2022

4:00 – 7:00 PM Pacific Standard Time (GMT-8)

Before We Get Started

- Please note that although the **comment record for the Proposed Amendments is not being opened**, the webinar will be recorded and will be available to the public
- Please **mute yourself**
 - On Zoom: **Mute/Unmute** button on bottom left
 - On phone: Dial ***6** to mute/unmute
- **Questions?** Type your question or raise your hand to speak
- **Need help?** Use the "Chat" function to request assistance

Webinar Agenda

- Background
- Funding Programs for Harbor Craft
- Streamlining Compliance Extensions
- Technology and Implementation Review
- Zero-Emission Contingency Measure
- Next Steps

Regulatory Background

- Current Regulation: accelerated turnover to Tier 2 and 3 engines for select categories between 2009 and 2022*
- At November 2021 Board Meeting, after 3 years and 400 meetings, staff proposed amendments to:
 - Transition vessels to zero-emission and cleaner combustion standards between 2023 and 2035
 - Establish alternative compliance options, facility infrastructure, renewable diesel, and other requirements to meet air quality and public health goals

Purpose of Today's Webinar

- Proposed amendments to CHC were initially heard by Board on November 19, 2021
- Presentation, recording, and transcript are available here: <https://ww2.arb.ca.gov/ma111921>
- Board provided direction in four areas that will be highlighted today
- Input and suggestions received will be considered prior to final consideration by Board in Spring 2022

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CHC Funding Response to Board Direction

- Continued outreach and meetings with vessel owners, operators and affected industry
- Expanded dialogue internally at CARB between regulatory and incentive teams to identify and maximize use of funding opportunities
- Coordination with local air districts on incentive funding options

Funding Programs for Harbor Craft

- Low Carbon Transportation (LCT) – demos and pilots
- Clean Off-Road Equipment (CORE) – vouchers
- Carl Moyer – repower and replace in-use fleet
- Other opportunities

Low Carbon Transportation (LCT)

- Started in Fiscal Year (FY) 13/14 supporting Clean Vehicle Rebate Project (CVRP) & Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP), with demonstrations and pilots seeing funding in FY 14/15
- Annual LCT funding allocations have been growing
- \$400 million for on and off-road demonstration and pilot projects representing about 35 projects
- Examples of marine LCT projects include hybrid tugboats, fuel cell ferry, and IMO Tier 3 ocean-going vessels (OGVs)

Current LCT Funding Opportunities

- Board approved \$40 million for Advanced Technology Demonstration and Pilot Projects
- Five categories will be solicited for including a Zero-Emission Commercial Harbor Craft Resilient and Renewable Infrastructure project in coordination with the California Energy Commission (CEC).
- Solicitation timeline: Workgroup meetings over the next 2 months with release of solicitation mid-Spring

Compliance Schedules – Zero Emission and Advanced Technology (ZEAT)

Marine Technology Type	Vessel Category Requirement	Phase-In Date
Zero Emission Capable Hybrid*	New Excursion Vessels	Jan. 1, 2025
Zero Emission	New and In-Use Short Run (< 3 nm) Ferries	Jan. 1, 2026

- Alternative compliance pathways provide additional opportunity to deploy ZEAT where feasible

For More Information on LCT

- Earl Landberg Earl.Landberg@arb.ca.gov
- LCT Solicitation Webpage: <https://ww2.arb.ca.gov/our-work/programs/low-carbon-transportation-investments-and-air-quality-improvement-program/low>

Clean Off-Road Equipment (CORE) Voucher Incentive Project

- Focused on zero-emission technology
- Accelerates deployment of advanced technology in off-road sector helping to offset higher cost of technology
- Maintain simple fleet-friendly process, support CARB strategies and regulatory efforts, and equitable investments
- FY 21/22 funding \$164.95 million to fund freight, small off-road, and heavy-duty equipment

CORE Eligibility

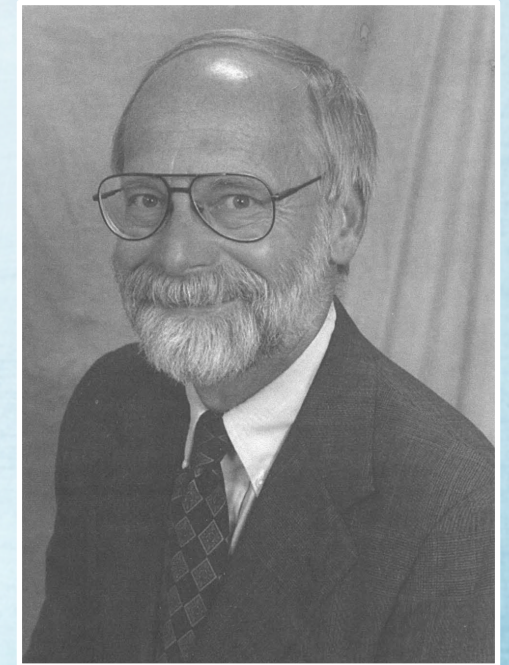
- Commercially available equipment
- Ease of getting funds
 - First come – first served
 - Additional funding for projects: in disadvantaged communities, and including infrastructure (i.e. “plus ups”)
- Equipment Eligibility Application to determine voucher \$
- Dealer facilitates sale and voucher
- \$500,000 cap for all projects
- Starts summer 2022

For More Information on CORE

- First workgroup upcoming – January 18th
- CORE General Information
 - Todd Sterling Todd.Sterling@arb.ca.gov
- CORE Equipment Eligibility Application
 - Matthew Diener Matthew.Diener@arb.ca.gov
- <https://www.arb.ca.gov/calcore>

About the Carl Moyer Program

- Early or extra emissions reductions
- Funded by smog abatement and new tire fees
- Emissions reductions must be permanent, surplus, quantifiable, enforceable
- Project grant awards limited by cost-effectiveness
- Administered by local Air Districts
- District allocations based on applications and community need



Community Air Protection Program

- Projects prioritized for Assembly Bill (AB) 617 communities
- Funds allocated to air districts based on general principles in Community Air Protection (CAP) Guidelines
- CAP Marine Guidelines based on the Carl Moyer Marine Chapter
 - Provides higher maximum funding amounts than Moyer

Carl Moyer & CAP Program Funding Amounts

- Carl Moyer
 - \$70M - \$94M annually from FY 11-12 to FY 20-21
 - \$247M allocation in FY 21-22 and \$130M annually in subsequent years
- Community Air Protection incentives
 - \$704M between FY 17-18 and FY 19-20
 - Additional \$260M in FY 21-22

Moyer CHC Funding by District (2018-2021)

District	2018	2019	2020	2021	TOTAL 2018-2021
South Coast AQMD	\$4,320,000	\$6,460,000	\$6,160,000	\$2,870,000	\$19,810,000
Bay Area AQMD	\$2,410,000	\$1,180,000	\$7,270,000	\$1,970,000	\$12,830,000
San Diego County APCD	\$620,000	\$1,180,000	\$1,460,000	\$60,000	\$3,320,000
Ventura County APCD	\$270,000	\$760,000	\$740,000	\$600,000	\$2,370,000
Monterey Bay Unified APCD	\$160,000	\$440,000	\$120,000	\$0	\$720,000
North Coast Unified AQMD	\$200,000	\$230,000	\$60,000	\$70,000	\$560,000
Santa Barbara County APCD	\$110,000	\$100,000	\$100,000	\$150,000	\$460,000
Mendocino County AQMD	\$120,000	\$70,000	\$0	\$0	\$190,000
San Luis Obispo County APCD	\$0	\$0	\$0	\$50,000	\$50,000
Total	\$8,210,000	\$10,420,000	\$15,910,000	\$5,770,000	\$40,310,000

Carl Moyer – with Compliance Extensions

- Minimum of 3 years of surplus emissions reductions (surplus = early or above required reductions)
 - Example: Vessels with a compliance date by 12/31/2028 would need to be repowered/replaced by 12/31/2025
- Extended compliance dates may be used in project evaluation
 - Example: A vessel with an original compliance date of 12/31/2026 that has been extended to 12/31/2028 would need to be repowered/replaced by 12/31/2025.
- Early action on extension applications is highly encouraged

Carl Moyer – Funding Vessel Replacement and Zero-Emission

- Vessel Replacements and zero-emission technologies eligible on a case-by-case basis
- Determining Factors
 - Cost-effectiveness of repower vs. replacement
 - Technological compatibility with existing vessel
 - Capabilities of proposed zero-emission vessel and infrastructure

For More Information on Carl Moyer

Aaron Hilliard, Manager, Alternative Strategies Section

Aaron.Hilliard@arb.ca.gov

Anthony Poggi, Staff, Alternative Strategies Section

Anthony.Poggi@arb.ca.gov

Additional Funding Opportunities

- Volkswagen Environmental Mitigation Trust
 - Combustion Freight & Marine (e.g. Tier 4)
 - Zero-Emission Freight & Marine and Infrastructure
- Others (EPA DERA, LCTOP, TIRCP, Prop 1B)
- Staff will continue to develop and communicate opportunities to stakeholders*

*Current fact sheet available at this URL:

<https://ww2.arb.ca.gov/sites/default/files/classic/ports/marinevess/harborcraft/workshop/20200930/funding09302020.pdf>

Funding Questions until 5:45 PM Pacific Time

Use chat box to type your question or raise your hand to request to speak.



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Streamlining Compliance Extensions

- Proposed Amendments: 5 compliance extensions
- Extension E3* provides an additional 6 to 8 years when retrofits are not technologically feasible, and replacement is not financially feasible
- Board direction to streamline extension applications, and facilitate the combined use of extensions and funding opportunities for small businesses

Streamlining Compliance Extensions

- Staff is suggesting to allow use of the 2019 California Maritime Academy (CMA) study to support lack of technical feasibility for initial extension applications
- Action would eliminate need for vessel-specific feasibility evaluations for initial extension
- Owners would still need to submit company-specific financial records

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Technology and Implementation Review

- Public comment and Board direction to transition to zero-emission technology where feasible
- Staff is suggesting a Technology and Implementation Review beginning every two years in 2023
- Would track advancement in zero-emission technology and report on implementation progress of Tier 4 and diesel particulate filter (DPF) technology in the marine sector

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Contingency Measure

- Board discussion highlighted importance of attaining air quality standards and possible contingency measure requiring more zero-emission vessels
- Staff proposal maximizes zero-emission technology available for harbor craft today
- Findings of the proposed Technology and Implementation Review would inform future regulatory action, including contingency measure

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Next Steps

- Continued outreach with operators and review of comments submitted and feedback received today
- Return to Board for final vote and consideration in Spring 2022
- Anticipated effective date – January 1, 2023

Contact Information

Melissa Houchin, Regulatory Amendment Questions
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David Quiros, Manager, Freight Technology Section
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CARB Commercial Harbor Craft Website:
<https://ww2.arb.ca.gov/our-work/programs/commercial-harbor-craft>

Questions and Discussion until 7:00 PM Pacific Time

Use chat box to type your question or raise your hand to request to speak.

