The American Waterways Operators

999 N. Northlake Way
Suite 223
Seattle, WA 98103

PHONE: 206.406.3922
EMAIL: pschrappen@americanwaterways.com

Peter J. Schrappen, CAE
Pacific Region Vice President & Regional Team Lead

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Ms. Lauren Sanchez
Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

RE: Proposed Revisions to the Carl Moyer Program for Off-Road Equipment, Locomotives, Marine Vessels, Lawn and Garden Equipment Replacement, and to Initiate a 45-Day Public Comment Period

Dear Ms. Sanchez:

The American Waterways Operators (AWO) is the tugboat, towboat, and barge industry's advocate, resource, and united voice for safe, sustainable, and efficient transportation on America's waterways, oceans, and coasts. As the largest segment of the nation's 40,000-vessel domestic maritime fleet, our industry safely and efficiently moves 665 million tons of cargo each year and enables the flow of goods through ports on the inland and intracoastal waterways; the Atlantic, Pacific and Gulf coasts; and the Great Lakes.

On behalf of our more than 300 member companies, we appreciate the opportunity to comment on the proposed updates to the Carl Moyer Memorial Air Quality Standards Attainment Program Guidelines.

AWO members are proud to operate the safest, most environmentally responsible, and most fuel-efficient mode of freight transportation in the nation. Our members' commitment to reducing emissions has driven their long-standing participation in state and federal incentive programs – including the Carl Moyer Program – which have historically helped vessel owners voluntarily install cleaner-than-required engines and technology. With California home to the largest and busiest ports on the West Coast, the program's effectiveness and accessibility are particularly critical for commercial harbor craft operators serving the state. In the spirit of our shared goals to improve air quality and support practical, real-world emissions reductions, AWO is pleased to offer the following comments.

Expand Funding Eligibility by Revising the Compliance Deadline Requirement

We recommend that CARB modify the requirement that repowers be completed one year prior to an engine's compliance date. This is difficult to achieve given that Tier 1 engines on tugs and barges, and many tugs with Tier 2-3 engines of model year 2012 and earlier, are already past compliance deadlines. Only a narrow subset of engines – those with model years 2013 or later – are eligible for funding, effectively limiting funding opportunities to vessels built within the last decade. A more flexible

timeline, such as allowing repowers up to the compliance date, would better reflect operational realities and increase program accessibility for vessel owners.

Permit Multi-Year or Conditional Compliance Extensions for Projects

The current guidelines require that regulatory compliance extensions be obtained in accordance with the extension application and renewal deadlines. However, compliance extensions are only granted in one-year increments. We encourage CARB to allow multi-year extensions for participants or pre-approval of extensions so operators can meet program timing requirements without risking non-compliance.

Address the Lack of Tier 4 Options Below 600 kilowatts (kW)

Newer engines' emission reductions must be surplus to the Environmental Protection Agency's (EPA) marine engine emission standard (i.e., Tier 3, 4, or cleaner), or the currently required EPA Tier 4. However, EPA only assigns Tier 4 for engines greater than 600 kW, and some engines can only feasibly be replaced up to Tier 3. When this is the case, operators cannot be expected to find an engine in surplus of Tier 3 (i.e., Tier 4) if none is available. This inability does not reflect a lack of incentive to repower, but merely an infeasibility, and operators should not be disqualified from funding opportunities due to circumstances that are out of their control. To remedy this, we encourage CARB to allow Tier 3 repowers to qualify as surplus where a Tier 4 pathway is technologically infeasible.

Provide Realistic Emission-Factor Methodologies

Due to the absence of emission factors for Tier 4 engines below 600 kW – the equivalent of 800 horsepower (HP) – Tier 4 emission standards will be used for emission reduction calculations. The guidelines advise applicants to use Table D-24b for emission factors for Tier 4 propulsion engines above 800 HP and Appendix D, Table D-25b for Tier 4 auxiliary engines above 800 HP. However, there are no certified Tier 4 engines below 800 HP, meaning it is not possible to obtain the needed results and calculations. CARB needs to provide verified, realistic emissions factors, or allow operators to submit third-party engineering analyses to quantify reductions. Without such clarity, calculations will remain unreliable.

Increase Predictability and Minimum Funding Levels

Vessel owners can currently receive a maximum of 50-85 percent funding to upgrade a vessel. Air districts have the option of calculating the project cost-effectiveness on a per-vessel basis, creating a potentially subjective framework. This option, combined with the range in maximum funding percentages, creates uncertainty, potentially leaving operators with insufficient support for high-cost repower projects. Establishing a higher minimum floor, such as 75 percent of funding, would greatly improve the financial feasibility of the program for operators.

Recognize the Absence of Diesel Particulate Filter (DPF)-Equipped Engines and Adjust Requirements

All new engines and replacement engines purchased for the program's marine vessel repower projects must meet the requirements of the Commercial Harbor Craft (CHC) rule, which includes requirements for newly acquired engines and for replacement engines in vessels subject to Tier 3 and Tier 4 +DPF standards. This requirement is not viable since no engines equipped with DPF technology currently exist for marine vessels. To ensure vessel owners can still participate in the program, especially since engine and DPF availability is beyond the industry's control, we recommend that CARB allow

repowers without DPFs until such technologies exist, or allow alternative compliance demonstrations, such as aftertreatment retrofits or vessel-level emission reductions.

Align Project Life with Vessel Lifecycles

The current nine-year maximum project life for marine vessel repower projects fails to reflect both regulatory realities and actual vessel service life. Regulatory requirements can reduce the effective project life well below the stated maximum, in some cases to fewer than nine years. Given that the average commercial vessel has a service life of at least 25 years, the current project life limit significantly undervalues long-term emission reductions. CARB should revise project life assumptions to better align with vessel service life or permit applicants to demonstrate vessel-specific lifespans. Longer project lives would also reduce the disruptive effects of frequent regulatory changes, which have already occurred twice under the CHC rule.

Increase Funding Caps for Vessel Replacement Projects

Vessel replacement projects are eligible when the applicant can demonstrate that no suitable engines or CARB-verified Level 3 DPFs physically fit within the existing vessel structure, and modifications cannot be made to the vessel structure without compromising its structural integrity or stability. Some air districts have placed a $100,000 cap per project for marine vessel replacement under the standard program's cost-effectiveness thresholds. The typical cost of a replacement project for an articulated tug barge can exceed $40 million, making the program cap wholly unrealistic to industry costs.

Create a Dedicated CHC Track Within the Program

Because tugboat, towboat, and barge operations differ significantly from other maritime sectors, CARB should create a CHC-specific funding category with tailored timelines, cost-effectiveness thresholds, technology requirements, and emission-reduction metrics. This would provide more predictable access to funding and recognize the unique operational nuances of the commercial maritime industry.

Thank you again for the opportunity to comment on the proposed updates to the Carl Moyer Memorial Air Quality Standards Attainment Program Guidelines. We appreciate CARB's consideration of our comments and would be pleased to answer any questions or provide further information to assist with your review and decision-making.

Sincerely,

Peter Schrappen
Pacific Region Vice President & Regional Team Lead