The American Waterways Operators

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Peter J. Schrappen, CAE
Vice President – Pacific Region

June 8, 2022

The Honorable Nancy Skinner, Chair
Senate Committee on Budget & Fiscal Review
State Capitol, Room 5094
Sacramento, CA 95814

The Honorable Philip C. Ting, Chair
Assembly Committee on Budget
State Capitol, Room 6026
Sacramento, CA 95814

The Honorable Bob Wieckowski, Chair
Senate Budget Sub. No. 2
State Capitol, Room 4085
Sacramento, CA 95814

The Honorable Richard Bloom, Chair
Assembly Budget Sub. No. 3
State Capitol, Room 2003
Sacramento, CA 95814

RE: Proposed 2022-2023 Budget to Transition Commercial Harbor Craft Vessels to Low, Zero and Near-Zero Emissions

Dear Budget Chairs Skinner and Ting and Subcommittee Chairs Wieckowski and Bloom,

The American Waterways Operators (AWO) requests that the California budget include dedicated funding to help the maritime industry comply with the California Air Resources Board's (CARB) new Commercial Harbor Craft (CHC) regulations and accelerate the creation and adoption of zero and near zero-emissions engines.

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. Our industry safely and efficiently moves over 665 million tons of cargo each year, including more than 60% of U.S. export grain and significant bulk and containerized cargoes transported along the Pacific Coast. These vessels emit significantly less greenhouse gasses than other modes – rail emits 43% more and trucks emit 832% more – while also reducing congestion and improving safety.

This is particularly significant given the importance of waterborne commerce to the state of California. According to recent studies, California ranks third in the U.S. in waterborne

commerce by tonnage and fourth in economic impact, driving more than $12.2 billion in annual economic activity and supporting over 51,000 jobs. Seven AWO member companies are headquartered in California, and many more operate tugboats, tank barges, and deck barges in Regulated California Waters. The industry enables the movement of tens of millions of tons of freight on California waterways, ensuring the state's essential role in global trade and significantly decreasing congestion on the state's highways and railroads while also reducing air pollutants.

In March 2022, CARB approved new CHC regulations that will bring California, and the industry as a whole, one step closer to the goal of zero emissions goals by requiring vessels to upgrade to cleaner diesel technologies or choose alternative zero-emissions pathways. However, complying with these new regulations will require significant investment. Industry experts estimate that it will cost, at a minimum, $1.3 billion to retrofit all tugboats, towboats, and barges that are regulated under the new CARB CHC rule. This is roughly $3.7 to $4.5 million per vessel[1]. However, retrofits may not be possible given certain vessel structures and the current state of technology. Construction of a new vessel can easily cost between $16 and $24 million[2], putting small businesses or a business with multiple vessels to repower in an untenable position, unable to afford the investment. To ensure the industry is able to meet the technical requirements prescribed in this new rule, dedicated funding for the purpose of helping operators retrofit, repower, or purchase new vessels will be required. AWO requests that $260 million be appropriated annually from Fiscal Year (FY) 2023 until FY 2028 for the purpose of assisting with the transition to 100 percent compliance with the 2022 CARB CHC rule.

The tugboat, towboat, and barge industry has a proven track record of adopting the cleanest technology as it becomes available. Foss Maritime introduced the first two hybrid tugboats to California in 2009 and 2011 and had carbon canister filtration systems installed on its bunker barge fleet to reduce hydrocarbon emissions during loading operations. These improvements were made well ahead of any regulatory requirement. Crowley Maritime is also planning to introduce the first zero-emission capable ship assist and escort tug later this year. In order for such innovations to be implemented at scale, additional investment is needed. AWO supports the requests made in the attached Pacific Environment coalition letter as initial funding for zero and near zero-emissions technology and their recommendation to double what was proposed in the Governor's budget to $400 million to invest in demonstration and pilot projects in transportation sectors, such as maritime, aviation, rail, and other off-road applications. AWO also supports the coalition's request that $200 million from the emerging technology fund be dedicated to advancing zero-emission technology for the maritime sector. Building out a dedicated funding program for zero-emission marine vessels would advance state regulations, CARB's Ocean-Going Vessels at Berth Regulation and Commercial Harbor Craft (CHC) Rule.

In addition to the above appropriations, AWO would also like to state its support for AB 2358: Alternative vehicle and vessel technologies: funding programs: commercial harbor craft. This

[1] A full breakdown of these numbers is attached.
[2] This is based on 2019 costs. The cost of steel has risen 200 percent since then, so the number is likely an underestimation.

bill would amend the California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology program to include commercial harbor craft as an eligible funding entity. The current program provides funding for development, demonstration, pre-commercial pilot, and early commercial implementation projects for zero and near-zero emission trucks, buses, and off-road vehicles and equipment. Supporting this bill will not only help vessel owners and operators meet state requirements but will also drive the innovation of zero and near-zero emissions marine engines.

As California looks toward post-pandemic recovery and the opportunity for a zero-emissions future, the tugboat, towboat and barge industry is eager to work with the state to reach these goals and continue to be a leader in sustainable freight transportation.

Sincerely,

Peter Schrappen, CAE
Vice President – Pacific Region

Cc:
Assembly Member Vince Fong, Vice Chair of Assembly Committee of Budget
Senator Jim Nielsen, Vice Chair of Senate Committee on Budget and Fiscal Review
California State Assembly Committee on Budge
California Senate Budget and Fiscal Review Committee

INDUSTRY COST OF CHC COMPLIANCE*

												By 2028	By 2034
Type	Vessels	ME/Vsl	Aux/Vsl	% Tier 4	ME Cost	Aux Cost	DPF ME	DPF Aux	Total Cost	Avg. Per Vessel	Avg. Per Year	Avg. Year
ATB	19	2.00	3.09	0%	$ 2,500,000.00	$ 400,000.00	$ 500,000.00	$ 175,000.00	$ 118,490,909.09	$ 6,236,363.64	$ 16,927,272.73	$ 9,114,685.31
Harbor Assist	63	2.02	2.10	20%	$ 1,650,000.00	$ 350,000.00	$ 650,000.00	$ 150,000.00	$ 225,355,344.83	$ 3,577,068.97	$ 32,193,620.69	$ 17,335,026.53
Tugs/Pushboats	147	1.95	14.73	15%	$ 1,250,000.00	$ 250,000.00	$ 650,000.00	$ 125,000.00	$ 833,780,782.83	$ 5,671,978.11	$ 119,111,540.40	$ 64,136,983.29
ATB Barges	19		6.23	0%	$ -	$ 350,000.00		$ 150,000.00	$ 41,434,615.38	$ 2,180,769.23	$ 5,919,230.77	$ 3,187,278.11
Bunker Barges	31		2.75	0%	$ -	$ 350,000.00		$ 150,000.00	$ 29,837,500.00	$ 962,500.00	$ 4,262,500.00	$ 2,295,192.31
Towed Petrochemical	22		2.89	0%	$ -	$ 275,000.00		$ 150,000.00	$ 17,477,777.78	$ 794,444.44	$ 2,496,825.40	$ 1,344,444.44
Other Barges	88		2.22	0%	$ -	$ 275,000.00		$ 150,000.00	$ 53,660,869.57	$ 609,782.61	$ 7,665,838.51	$ 4,127,759.20
									$ 1,320,037,799.47		$ 188,576,828.50	$ 101,541,369.19

***These numbers are estimates and based on the cost of retrofits only.** The pricing is based on the installation of Tier 4 engines and pre-pandemic cost figures. Due to price increases as a result of inflation, supply chain disruptions, and higher material costs, the cost to retrofit a vessel today is higher. Additionally, this table does not include the cost of labor.

Key
Me – Main Engine
Vsl – Vessel
Aux – Auxiliary Engine