November 21, 2011

Mr. Ravindra Varma  
Supervisor, Planning Branch  
California State Lands Commission  
Marine Facilities Division  
200 Oceangate, Suite 900  
Long Beach, CA 90802


Dear Mr. Varma:

On behalf of the American Waterways Operators, the national trade association for the coastal and inland tugboat, towboat, and barge industry, thank you for the opportunity to comment on the California State Lands Commission’s Notice of Proposed Regulatory Action, published on September 16, 2011, to establish biofouling management regulations for vessels operating in California waters under Article 4.8 in Title 2, Division 3, Chapter 1 of the California Code of Regulations.

The U.S. tugboat, towboat, and barge industry is a vital segment of America’s transportation system. The industry safely and efficiently moves over 800 million tons of cargo each year, including more than 60 percent of U.S. export grain, energy sources such as coal and petroleum, and other bulk commodities that are the building blocks of the U.S. economy. The fleet consists of nearly 4,000 tugboats and towboats, and over 27,000 barges of all types. These vessels transit 25,000 miles of inland and intracoastal waterways, the Great Lakes, and the Atlantic, Pacific, and Gulf coasts. Tugboats also provide essential harbor services in ports and harbors around the country. The tugboat, towboat, and barge industry provides the nation with a safe, secure, low-cost, environmentally friendly means of transportation for America’s domestic commerce.

AWO’s 350 member companies are proud to be part of an industry that is the safest and most fuel-efficient, and has the smallest carbon footprint, of any surface transportation mode. AWO is committed to building on the natural advantages of marine transportation and leading the development of higher standards of marine safety and environmental protection. In 1994, AWO became the first transportation trade association to adopt a code of safe practice and environmental stewardship for member companies. Today, third party-audited compliance with the AWO Responsible Carrier Program is a condition of membership in AWO.
AWO is also a member of the Shipping Industry Coalition, a group of maritime trade associations that, together, represent more than 90 percent of all vessels calling at U.S. ports, in both the domestic and international trades. The Coalition is committed to working with legislators, regulators, and non-governmental organizations to develop and implement environmentally sound and economically practicable solutions to prevent the introduction and spread of aquatic invasive species in U.S. waters.

Nine AWO member companies are headquartered in California, and many more operate tugboats, tank barges, and deck barges in California waters. These vessels help to move tens of millions of tons of freight every year on California waterways, reducing congestion on the state’s highways and railroads while producing fewer pollutants than trucks and trains. In addition, harbor and ship assist tugboats perform shipdocking, tanker escort, and bunkering services in California’s harbors and ports.

AWO appreciates the Commission’s efforts to protect California waters from aquatic invasive species. However, AWO believes that the biofouling performance standards and inspection schedule proposed by the Commission are operationally infeasible for the towing industry, and the record does not support their adoption consistent with the Commission’s statutory authority. AWO also strongly disagrees with the Commission’s determination that these regulations will not affect small businesses.

**The Proposed Regulations are Operationally Infeasible**

For “all vessels, United States and foreign, carrying, or capable of carrying, ballast water into the coastal waters of the state after operating outside of the coastal waters of the state”\(^1\) of 300 gross registered tons or more, the Commission has proposed establishing biofouling management performance standards, described in Section 2298.3 of the proposed regulatory text, based on a Level of Fouling Ranking Scale. Beginning January 1, 2013, vessels arriving at a California port or place would be required to be maintained or cleaned so that identified niche areas are at or below Rank Two, light biofouling, with “[w]etted portions of the vessel…covered in microfouling with small patches of macrofouling covering no more than five percent of the wetted surface being evaluated.”\(^2\) Further, non-niche areas of the wetted portions of the vessel would be required to be at or below Rank One, microfouling only, “with no observable macrofouling.”\(^3\)

AWO and its members find these performance standards unrealistic. Although the majority of the Pacific tugboat fleet is less than 300 GRT and would be exempt from the requirements, more than 100 barges would be subject to the proposed regulations. Barges ride higher in the water than most ships, and therefore accumulate less biofouling, but they travel at relatively slower speeds and are sometimes laid up for periods of time. If even a single barnacle were found attached to the hull of a barge, it would be in violation of the Rank One performance standard. It is not reasonable for the Commission to expect hull conditions to be maintained at or regularly

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\(^1\) California Public Resources Code Section 71201(a).
\(^2\) Proposed Regulatory Text, Section 2298.3(b)(1).
\(^3\) Proposed Regulatory Text, Section 2298.3(b)(2).
cleaned to that level, not because barge operators are not performing proper hull husbandry, but because it is operationally impossible and economically impracticable.

The only anti-fouling system (AFS) employed by barge owners and operators is an anti-fouling hull coating or paint. It is unfeasible to equip unmanned barges, which do not have adequate independent electrical systems, with the more sophisticated AFS, such as Marine Growth Prevention Systems, found on the deep-draft international fleet. However, even vessels equipped with the most advanced AFS experience some degree of macrofouling. No coating or device, regardless of how technologically advanced or well maintained, can maintain a condition where there is no macrofouling at all over the life of the coating.

The Commission’s proposal would also require vessel operators to have the wetted portions of their vessels evaluated to ensure compliance with the performance standards “no longer than six months prior to arrival to a California port or place,” or no more than 12 months for vessels that have been delivered as new or undergone full application of an anti-fouling coating during drydock within 12 months prior to arrival. For those barges engaged in interstate commerce on the Pacific coast, this proposal would effectively require a costly biofouling inspection every six months after the first year following initial delivery or last drydocking.

The enforcement of this schedule would be financially untenable and operationally burdensome to AWO members doing regular business in California waters. In addition to the significant costs of the inspections themselves, vessels would be idle, significantly decreasing their income during their inspections.

The inspections required by the proposed standards are even more problematic for vessel operators because vessels would need frequent hull cleanings to maintain compliance with the above unrealistic performance standards. The increase in the frequency of hull cleanings under the Commission’s proposal would likely result in the degradation of anti-fouling hull coatings. Even careful in-water hull cleanings reduce the thickness of many coatings, and minor damage or scratches to coatings can result in surfaces that are more susceptible to biofouling. Repeated in-water cleanings between drydocks will diminish the effectiveness of coatings and shorten their useful life, increasing the risk of aquatic invasive species transfer.

This is further complicated by the fact, in the conditions for its section 401 certification of the U.S. Environmental Protection Agency’s Vessel General Permit, California has prohibited in-water hull treatment and cleaning:

“6. Propeller cleaning is allowed until January 1, 2012, after which, propeller cleaning is allowed as specified in regulations adopted by SLC. All other in-water hull cleaning is prohibited unless conducted using the best available technologies economically feasible, as determined by both SLC and the State Water Board. This prohibition includes underwater ship husbandry discharges (Discharge #25).”

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4 Proposed Regulatory Text, Section 2298.3(3)(A).
5 Proposed Regulatory Text, Section 2298.3(3)(B).
6 U.S. Environmental Protection Agency Vessel General Permit, Version Nov. 2010, Section 6.2.
The proposed regulations do not specify what propeller cleaning is allowable, nor do they describe the best available technologies economically feasible to conduct in-water hull cleaning. AWO therefore infers that coastwise vessels found to be in violation of Section 2298.3(b)(1) or (b)(2) of the proposed regulatory text during their biannual inspections must undergo in-water cleaning in the waters of another state. Notably, the state of Washington also prohibits “the manual scraping of hard growth off surfaces painted with anti-foulants,” meaning that domestic vessel operators on the Pacific coast would be forced to perform in-water cleaning in the state of Oregon in order to comply with California’s regulations. The only other option, short of conducting hull cleaning in the open ocean, is for vessels to undergo out-of-water drydocking or slipping. In-water cleaning in the open ocean is an unacceptable safety risk, and a practical requirement for a twice-yearly drydocking is an unacceptable imposition on the AWO member companies that do business in the state of California.

The proposition is especially onerous for vessels that operate exclusively in California, but routinely travel between, as an example, the Port of San Francisco and the Port of Los Angeles/Long Beach, which are individually defined as “shared waters.” According to Section 2298.6 of the proposed regulations, if a vessel remains in one port, place, or shared waters for 90 days or more (an “extended residency period”), it must “[u]ndergo in-water inspection following the extended residency period to ensure compliance with the performance standards […] upon arrival to a California port or place.” If the vessel is found to be in violation of the performance standards, it must undergo in-water cleaning or out-of-water drydocking or slipping to come into compliance. Under these proposed rules, a barge that has spent three months tied up in Richmond and is scheduled to be towed to southern California must undergo an in-water inspection and, if it fails that inspection, must either be drydocked or sailed out of California waters to be cleaned (a considerable expenditure of time and fuel) before it is permitted to enter the Port of Los Angeles/Long Beach.

Due to the nature of the towing industry, it is not uncommon to have some barges tied up for extended periods of time. The proposed regulations for vessels with extended residency periods could require some of these vessels to undergo hull inspections and cleanings or drydockings with greater frequency than twice a year. If a vessel complying with the effective requirement for twice-yearly inspections spends 90 days or more in one port, place, or shared waters following its second annual inspection, it must undergo a third in-water inspection before arriving at a California port or place – and, potentially, its third in-water cleaning or drydocking in a calendar year.

These frequent hull inspection and cleaning requirements, taken together with the high likelihood that even the most meticulously maintained vessels will be unable to meet the Commission’s proposed performance standards, will result in an unreasonable economic and operational imposition on the barge companies that transport commerce to and from California.

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8 Proposed Regulatory Text, Section 2298.6(a).
9 Proposed Regulatory Text, Section 2298.6(b) and (c).
The Proposed Regulations Are Not Based on BATEA, as Required by Statute

The docket does not demonstrate that the proposed performance standards or the proposed inspection schedule are based on the best available technology economically achievable (BATEA), as required by the Commission’s statutory authority. The Commission writes in its Notice that its proposal would establish biofouling management regulations “as required by Public Resources Code (PRC) Section 71204.6.” [10] California PRC Section 71204.6, part of the Marine Invasive Species Act, reads:

“On or before January 1, 2012, the commission, in consultation with the board, the United States Coast Guard, and a technical advisory group consisting of interested persons including, but not limited to, shipping, port, and environmental conservation representatives, shall develop and adopt regulations governing the management of hull fouling on vessels arriving at a California port or place. The commission shall consider vessel design and voyage duration in developing the regulations. The regulations shall be based on the best available technology economically achievable and shall be designed to protect the waters of the state.” [Emphasis added.]

The Notice also cites PRC Section 71201(d), in which the California legislature declares that the purpose of the Marine Invasive Species Act “is to move the state expeditiously toward elimination of the discharge of nonindigenous species into the waters of the state or into waters that may impact the waters of the state, based on the best available technology economically achievable.” [Emphasis added.]

BATEA is not defined in the PRC, but California has adopted the EPA’s regulations for the implementation of its delegated responsibilities under the federal National Pollutant Discharge Elimination System program. The adoption or revision of BATEA under 33 USC 1311(b)(2)(A)(i) requires an identification of “the degree of effluent reduction attainable through the application of the best conventional pollutant control technology (including measures and practices) for classes and categories of point sources,” [11] as well as:

“[The specification of f]actors relating to the assessment of best practicable control technology currently available [that] shall include consideration of the total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application, and shall also take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate.” [12]

AWO’s review of the record does not indicate that the Commission conducted any review of available anti-fouling technologies, their suitability for different classes of vessels and types of voyages, their effectiveness, their commercial availability, or their cost. The

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question of what constitutes best available technology is never asked or acknowledged. There is no scientific evidence or factual information on the docket that supports a finding that the utilization BATEA would result in a hull condition that meets the Rank 1 standard after any substantial time in the water.

In fact, according to the Initial Statement of Reasons\textsuperscript{13}, the Level of Fouling Ranking Scale is not based on an analysis of available technology or presented risk, but instead

\begin{quote}
"is a modified version of a well-known, well-vetted, peer-reviewed scale that has been used widely for research, inspection, and general assessment purposes on a wide variety of vessel types since its introduction in 2005 (Floerl et al. 2005, Floerl et al. 2010, Hopkins and Forrest 2010, Floerl personal communication 2011). The proposed scale is also based on organism percent cover, a metric currently used by many in-water maintenance contractors hired by shipping companies to complete underwater hull husbandry and inspection."
\end{quote}

While the ranking scale has been used to help divers and other observers measure hull fouling consistently, it was never intended to serve as a regulatory hull cleanliness standard. First, the scale was not developed to identify conditions that can be achieved by a given technology over a set amount of time. The scale cannot indicate anything about the technologies and operational practices that a vessel would have to employ to meet a particular rank. Further, there is no evidence that the ranking system is derived from an analysis that associates a given level of risk of invasion with the scale’s specific rankings. It is merely a narrative description of a physical condition, namely, the percentage of fouling cover on an examined portion of the hull. The designation of ranks One and Two as the maximum permissible coverage for non-niche and niche areas, respectively, is completely arbitrary and unsupported by the record. The Commission’s proposed adoption of this scale is no substitute for the evaluation that it is required by law to conduct of the effectiveness of available, economically achievable anti-fouling technologies for different vessel designs and voyage durations.

\textbf{The Proposed Regulations Will Affect Small Businesses}

AWO’s concerns about the economic implications of the Commission’s proposed biofouling management regulations are acute because several of AWO’s member companies that operate on the Pacific coast have been classified as small businesses.

In its Notice, the Commission writes:

\begin{quote}
"The Commission has determined that these regulations do not affect small businesses as defined in Government Code (Gov. C.) Section 11342.610, because all affected businesses are commercial maritime transport owners and operators, as specified under Gov. C. Section 11342.610(c)(7) and having annual gross receipts of more than $1,500,000."
\end{quote}

Likewise, in its Initial Statement of Reasons, the Commission “finds that the adoption of this regulation will not have a significant adverse economic impact on small businesses. None of the businesses that will be governed by the proposed regulation can be considered to be a “small business” as defined in Government Code Section 11342.610.”

The relevant section of California Government Code, Section 11342.610(a), defines “small business” as a “business activity” that is both: (1) “Independently owned and operated,” and (2) “Not dominant in its field of operation.” Section 11342.610(c)(7) disqualifies as small businesses business activities in “[t]ransportation and warehousing, where the annual gross receipts exceed one million five hundred thousand dollars ($1,500,000).”

This definition of small business is extraordinarily restrictive. According to the current Small Business Size Standards used by the Small Business Administration, which are based on North American Industry Classification System codes, for NAICS code 483113, Coastal and Great Lakes Freight Transportation, a business concern must have a maximum number of 500 employees in order to be considered small.\(^\text{14}\) The Congressionally authorized Towing Safety Advisory Committee estimated in a 2008 analysis that some 90 percent of barge and towing companies qualify as small businesses under the SBA definition.

Curtin Maritime Corporation, an AWO member and sole proprietorship based in Long Beach, CA, is a small business under the SBA’s definition. Further, Curtin Maritime is certified as a Very Small Business Enterprise by the Port of Long Beach. The Port of Long Beach’s definition of a VSBE is a small business with $3.5 million or less in annual gross revenue, averaged over three years, or a small business with 25 or fewer employees (which mirrors the California Department of General Services Procurement Division’s eligibility requirements for microbusinesses). Curtin Maritime participates in the Port of Long Beach’s Very Small Business Enterprises Program, which is designed to ensure that small businesses have the opportunity to participate in the Port’s contracts and procurements. As the operator of a small barge fleet that is available for charter, Curtin Maritime is one example of the small businesses that would be directly impacted by the proposed regulations.

In addition to those AWO members that qualify as small businesses, many of our member companies’ customers are small businesses. If the costs of frequent hull inspections and cleanings must be added to the costs of towing the barge, barging freight – currently the most affordable and efficient mode of freight transportation – could become economically infeasible for these customers, driving cargoes to land-based modes of transportation with much larger carbon footprints.

**Conclusion**

There are many different factors involved in the accumulation of hull fouling, including vessel types, geographic areas of operation, speeds, hull coatings, and husbandry practices. The variables that can affect the choice of coatings, the need for and frequency of cleaning, and the effects of cleaning on long-term coating performance are numerous and interdependent. The Commission’s failure to thoroughly and rigorously evaluate these factors has resulted in a

\(^{14}\) 13 Code of Federal Regulations 121.201.
proposed rule that is unrealistic and unsupported by the record, contrary to its authorizing statute, and would have a crippling effect on towing vessel and barge operators in California.

AWO urges the Commission to eliminate Sections 2298.3 and 2298.6 of its proposed regulatory text in favor of a biofouling management plan requirement that allows vessel operators to develop and maintain biofouling mitigation strategies specific to their vessel’s physical characteristics and operational profile.

As the Commission is aware, the International Maritime Organization recently adopted guidelines that are based on each vessel having a tailored biofouling management plan coupled with recordkeeping requirements designed both to demonstrate compliance with the plan and to generate information on which management approaches work best. Several AWO members who do business in California also tow barges internationally, where they are subject to the IMO standards, and strongly oppose the establishment of a confusing and contradictory patchwork of requirements for vessels that routinely travel among multiple jurisdictions. A uniform standard for the management of biofouling is necessary for the clear and consistent regulation of vessels engaged in interstate and international commerce.

Given the diversity of vessels impacted by these proposed regulations, from domestic barges to international liners, **AWO strongly believes that the most practicable and effective way for the Commission to reduce the risk of aquatic invasive species introduction from biofouling is to harmonize its approach with IMO’s guidelines, and delete its proposal for prescriptive, unachievable performance standards and inspection schedules that are inconsistent with its statutory mandate and harmful to a wide range of maritime business concerns, including small, family-owned businesses.**

Thank you again for the opportunity to comment. I would be pleased to answer any questions or provide further information as the Commission sees fit.

Sincerely,

Charles P. Costanzo