Comments of the

World Shipping Council

Submitted to the

California State Lands Commission

In the matter of

Proposed Amendments to Article 4.8 Biofouling Management Regulations for Vessels Operating in California State Marine Waters

Second Round Comments

January 30, 2012
The World Shipping Council\(^1\) files these comments in response to the revised proposed rules on hull fouling released by the Commission on December 29, 2011 (the “Revised Notice”). The Council filed comments on November 21, 2011, on the Commission’s original proposal. Those earlier comments and the associated attachments are incorporated herein by reference.

Although the Commission has made some adjustments to the proposed rules, the regulations as proposed in the Revised Notice continue to suffer from several fundamental flaws:

- With the exception of the safe harbor provisions for sea chests, the revised regulations still provide no discussion of, and bear no relation to the statutory mandate to employ the “best available technology economically achievable.”
- Although the Revised Notice deletes the numeric labels of the “Level of Fouling Ranking Scale,” it retains the “percentage cover” structure of that scale and thus retains the unrealistic performance standards of the original proposal. Changing the label does not change the problem.
- The Revised Notice would establish an “inspect and clean” approach that would effectively require in-water hull cleaning every six months for most vessels that regularly call California. During the January 26 Meeting of the CSLC, Commission staff asserted that the “intent of the regulations is not more cleaning” but to “encourage better planning.” The Commission staff further stated that many vessels would not need to clean more frequently than what is already existing practice. This is incorrect. Compliance with the \textit{de minimis} thresholds of 1 and 5% macrofouling cover would require most vessels regularly calling California, including those using best available, state-of-the-art coatings, to clean every six months.
- The American Coatings Association and other leading coating experts have testified that such excessive cleaning will degrade coating performance and shorten the effective life of coatings. This will result in more, not less, hull fouling over the life of the coating. Such a result undermines the effectiveness of the technologies that the California legislation seeks to promote, as well as California’s environmental protection objectives.

1. **The Commission Has Not Conducted an Analysis of What Constitutes “Best Available Technology Economically Achievable.”**

The Council addressed in detail in its first round of comments the fact that the performance standards that the Commission has proposed are not informed by any analysis of what constitutes best available technology. We will not repeat that analysis here except to point out that the Revised Notice does not correct the problem. The fact remains that, with respect to the “percentage cover” and inspection/cleaning intervals, the proposed rules are contrary to law because the Commission has made no attempt to comply with the legislature’s explicit instruction to base regulations on the best available technology economically achievable despite the fact that multiple commenters have raised the issue.

\(^1\) A full description of the Council may be found in our November 21, 2011, comments on the original hull fouling proposal and at www.worldshipping.org.
The Revised Notice does make one proposed change that is in the nature of a technology-based standard. Specifically, new subsection 2298.3(a)(1)(A) provides for a technology-based compliance mechanism for sea chests. The new subsection states that sea chests shall be deemed to be in compliance if they meet each of three technical requirements. Although there is no analysis provided in the docket to explain the science behind the sea chest compliance option, this approach is nevertheless more consistent with the statutory mandate that CSLC base its regulations on best available technology, and is more acceptable than the arbitrary and non-technology based “percentage cover” standard that continues to apply to other areas of the hull.

In his statement attached to the Council’s November 21, 2011, comments, John Lewis noted the following:

“There are numerous issues and uncertainties in the use, benefits and relative performance of MGPSs in sea chests, including:

- MGPS systems are designed to keep inboard seawater pipework free of biofouling, not sea chests;
- The relative effectiveness of the three primary MGPS types (anodic copper, electro-chlorination, chemical dosing) has not been evaluated in commercial ship piping systems to my knowledge, and definitely not in sea chests. Reports on performance in sea chests are largely anecdotal;
- MGPS systems are commonly fitted to sea strainers inboard of the sea chests, and redesign is needed to fit them to sea chests; . . . .” (John Lewis Statement at 7-8).

In light of these uncertainties, the Council would prefer the Commission to allow MGPS systems installed in the sea strainer as well as in the sea chest to be used in this sea chest technology-based compliance option.

2. The Change in the Location of Compliance Testing and the Deletion of the “Level of Fouling Ranking Scale” Label Do Not Change the Fact that The Performance Standards are Unrealistic.

The Revised Notice makes three changes that apply throughout the proposed regulations, the second and third of which are related. First, the new proposal is that the most stringent percentage cover limits apply at the time of inspection as opposed to the time of vessel arrival in California. (The newly imposed “gross exceedence” standards, however, would apply at the time of arrival in California waters.) Second, the Revised Notice deletes the “Level of Fouling Ranking Scale,” but retains a “percentage cover” structure to set allowable performance standards. Third, the Revised Notice changes the macrofouling tolerance for non-niche portions of the hull from a zero tolerance standard to a 1% standard, again subject to the newly proposed “gross exceedence” standard. The niche area tolerance to be met upon inspection is the same as that previously required at vessel arrival. For the reasons discussed below, the changes in the Revised Notice do not materially address the fundamental problems raised in the first round of comments.
a. **Timing of Compliance**

The change in the point at which compliance with the strictest numeric standards will be measured (from time of arrival in the original rule to time of inspection in the revised rule) is positive to the extent that it eliminates the illogical situation in which the vessel would be held responsible for uncontrollable fouling events that might occur between the last inspection and the vessel’s arrival in California waters. In that respect the Council supports the change. The positive aspect of the change, however, is undermined by the gross exceedence provision, and the change is in any case inadequate to overcome the basic problem with the performance standards, whenever they might be applied. We address that issue next.

b. **Retention of Percentage Cover Standards**

The fact that the Revised Notice deletes the “Level of Fouling Ranking Scale” does nothing to address the industry concerns raised in the first round of comments; namely, that the performance standards are in many cases unattainable under real-world operational conditions. Industry’s concerns had nothing to do with the labels applied to the numerical standards and everything to do with their substance. The Revised Notice only addresses the labels; it does not address the substance.

(1) **Niche Areas**

As the Council discussed at pages 9-11 of its first-round comments, the 5% macrofouling limit for niche areas remains unrealistic. Certain niche areas, such as sea chests and bow and stern thrusters, are physically inaccessible to divers for in-water cleaning. Even if welded or bolted grates could be removed to allow diver access (which in most cases is not realistic), the extreme safety risk to divers entering such enclosed operational spaces would preclude in-water cleaning. If these areas become fouled beyond permitted percentages, they can only be cleaned in dry-dock. These physical constraints were discussed by numerous parties in the first round of comments, but there is no indication in the December 29, 2011 package that indicates that the Commission has considered those concerns. As was the case with the original proposed regulations, if an area cannot be accessed for cleaning while the vessel is in the water, then a regulation that prescribes the standard to which such an area is to be cleaned while the vessel is in the water is illogical and impossible to meet. It is not, therefore, based on the “best available technology economically achievable.”

(2) **Non-Niche Areas**

The Revised Notice changes the inspection and cleaning threshold for non-niche areas of the hull from a zero-tolerance standard for macrofouling to a one percent limit. From a practical perspective, this is no change at all. The first round of comments contained extensive discussions (see Council Comments at 6-7 and referenced statements) of why even well maintained vessels using advanced coatings will often have more than a *de minimis* amount of macrofouling. Specifically, vessels
in operation routinely sustain coating damage from contact between the hull and fenders and wharves. In addition, anchor chains unavoidably cause coating damage in the area of the bulbous bow. As the statement of Brian Constable describes at page 3, the cumulative damaged areas can be well in excess of the revised 1% inspection limit and the 5% so-called “gross exceedence” limit. Even substantially smaller areas of damage than those examples may result in routine findings of macrofouling in excess of 1%, thus triggering the cleaning requirements, the problems with which are discussed in Section 3, below.

Beyond the fact that the proposed macrofouling limit is unlikely to be met by most commercial vessels after a significant period in the water, the standard is unsupported by any risk or technological feasibility analyses, which are required by the governing statute. It is a number picked from the air without any support in the record, and it is therefore arbitrary and capricious. Setting aside these legal failures, however, the numeric limits also fail as effective regulations for practical reasons. Especially at such low percentage levels, the size of the hulls in question coupled with the conditions under which they are routinely inspected while in the water means that any quantification of the percentage of macrofouling on a hull will be a rough estimation at best. The smaller the tolerance – and the tolerance here is very low – the more problematic it is that the measurement is so imprecise. Put differently, the line between compliance and non-compliance would be obliterated by the margin of error in anything approaching a close case.

In addition to the fact that estimates of percentage macrofouling cover made by diving contractors will necessarily be imprecise (especially in the case of widely scattered fouling), the documentation of the divers’ observations will compound the imprecision, because it is not feasible to photograph the entire bottom of the vessel. When those multiple sources of data error are stacked upon each other, it becomes clear that enforcement of the regulation, as proposed, would be exceedingly uneven and arbitrary. Such a situation would undermine the credibility of the regulatory regime, encourage gaming of the system, and create competitive distortions among carriers (with the rewards flowing to less conscientious operators). All of these characteristics are undesirable in a regulatory system.

3. **The Frequent In-Water Cleaning That Will Be Triggered By the Combination of an Extremely Low Macrofouling Tolerance With a Frequent Inspection Interval Will Result in More Fouling, Not Less.**

The change of a zero tolerance standard for macrofouling on non-niche areas to a one percent standard is virtually no change at all. The combination of a one percent standard with the six-month inspection interval would result in practical terms to a requirement to clean every six months. For the reasons discussed extensively in the first round of comments (see Council Comments at 11-14 and referenced statements), cleaning on such a frequent basis would lead to reduced effectiveness and accelerated deterioration of coatings, resulting in more, not less, fouling. In terms of impact on vessel operations and in terms of meeting the environmental goals of the governing statute, this issue of excessive cleaning is the most important topic in the rulemaking.
There is an implicit assumption in both the original draft regulation and the revised draft regulation that there are few negative consequences – only benefits – from frequent cleaning. That assumption, however, is not supported by any facts. Indeed, all of the facts in the record support a different conclusion; namely, that cleaning at this frequency will produce results that are directly at odds with the stated purposes (prevention of invasions) and methods (use of best available technology economically achievable) set forth in the governing statute. Respectfully, this is not a mere difference of opinion or approach; the virtually sole reliance on in-water cleaning proposed by the Commission is an admission that the agency has failed to identify and craft rules based on the best available technology.

If the proposed regulations are not fundamentally altered to remove the primary reliance on numeric standards and in-water cleaning, the result will be an unlawful regulation that simultaneously fails in its environmental mission, places unnecessary costs on the regulated industry, increases the overall mass of fouling organisms that are transported around the world on ships, and increases fuel consumption and vessel air emissions.

Anti-fouling coatings are and will remain the primary tool – the best available technology – for minimizing hull fouling. The proposed regulations fundamentally undermine the effectiveness of that tool based on an unexamined and unexplained assumption that frequent cleaning will deliver better environmental results. The assumption is simply wrong, and reliance on that demonstrably incorrect assumption is both irresponsible and contrary to the governing statute. The Council therefore respectfully, but in the strongest possible terms, urges the Commission to reconsider its proposed use of numeric standards for vessels in normal operation.

4. **The Proposed Regulations Are Barred by the Dormant Commerce Clause.**

In its November 21, 2011, comments, the Council noted that the proposed rules are contrary to the approach adopted in the recently published International Maritime Organization (IMO) hull fouling guidelines.

More fundamentally, we pointed out that regulation by one jurisdiction of hull fouling on international vessels necessarily has implications in other jurisdictions. For example, a requirement that a vessel be inspected and/or cleaned before it arrives in California necessarily requires that such inspection and/or cleaning take place in a jurisdiction other than California. California has no authority in those other jurisdictions, which may be anywhere in the world, but California’s regulations by design require vessels to take certain steps in those other jurisdictions, steps that can have environmental impacts in those jurisdictions.

There is a very real question whether California has the authority under the U.S. Constitution to regulate vessels in international commerce when that regulation by its very design has its primary effect on vessels when they are outside of California waters. In the context of a conflict preemption case involving a very similar situation, the United States Supreme Court invalidated Washington State regulations governing the operation of tank vessels. In doing so, although the Court recognized a limited power of states to regulate vessels in interstate and international commerce in order to address unique
local concerns, it invalidated a reporting requirement on the grounds that “it affects a vessel operator’s out-of-state obligations and conduct, where a State’s jurisdiction and authority are most in doubt.” *United States v. Locke*, 529 U.S. 89, 93 (2000).

Although *Locke* was a statutory preemption case, the Court there recognized that there are instances in which it is improper under the Commerce Clause of the U.S. Constitution (art. 1, §8, cl.3) for states to regulate navigation even in the absence of federal regulation (an example of the so-called “dormant” Commerce Clause):

“The Court in *Cooley v. Board of Wardens of Port of Philadelphia ex rel. Soc. For Relief of Distressed Pilots*, 53 U.S. 299, 12 How. 299, 13 L.Ed. 996 (1852), stated that there would be instances in which state regulation of maritime commerce is inappropriate even absent the exercise of federal authority, although in the case before it the Court found the challenged state regulations were permitted in light of local needs and conditions.”

*Locke*, 529 U.S. at 99. The *Locke* Court also observed that “[t]he authority of Congress to regulate interstate navigation, without embarrassment from intervention of the separate States and resulting difficulties with foreign nations, was cited in the Federalist Papers as one of the reasons for adopting the Constitution.” *Id.*

Applying those constitutional principles to the current situation, it would be one thing if vessels could comply with the proposed regulations by taking actions that could be carried out in California waters. *By design*, however, that is not the case with these regulations. California has determined that it wants hull fouling to be dealt with before vessels arrive in California, which necessarily requires, for example, that the extensive and frequent hull cleaning upon which the regulations primarily rely be carried out somewhere other than in California. That “somewhere else” cannot, for operational and safety reasons, be on the high seas, so it must be in the jurisdiction of another state or (much more likely) another country. That California is prescribing rules that have direct and potentially negative effects in other countries directly implicates the Supreme Court’s concern about “embarrassment from intervention of the separate States and resulting difficulties with foreign nations.” The very fact that California’s proposed approach to this issue cannot be contained to actions taken in California waters both highlights the need for an international solution and reinforces California’s lack of jurisdiction over vessels in international commerce.

California here seeks to regulate a potential vector for invasive species in a manner that inherently has its greatest effect on vessel operations when vessels are anywhere except in California waters. That approach turns on its head the Commerce Clause analysis that has allowed states to address issues affecting navigation that are “local and not national.” *Cooley v. Bd. of Wardens of Port of Phila. Ex rel. Soc’y for Relief of Distressed Pilots*, 53 U.S. 299, 319 (1851). The fact is that the very nature of hull fouling regulation is international. The Constitution thus exclusively reserves to the federal government the authority to impose regulations or to negotiate international regulations, especially where such regulations affect vessel operations on the high seas and in other countries.
As much as the Council may understand California’s impulse to act within this area, our nation’s Constitution does not allow it. Accordingly, our comments on the substance of the proposed regulations and our suggestions on how those regulations could be improved must be understood as they are offered, which is as practical comments that are without prejudice to our fundamental argument that California lacks the legal authority to promulgate regulations of this sort. The nature of the issue being addressed and the structure of California’s proposed response both underscore the fact that the most appropriate forum for addressing invasive species transfer through hull fouling is at the IMO.

5. Conclusion

The Council recognizes the Commission’s good faith in making the changes reflected in the Revised Notice. Those adjustments, however, cannot overcome the fact that the proposed numeric standards do not reflect application of the best available technology economically achievable as is required by California Public Resources Code § 71204.6. No BATEA analysis has been conducted, and none is offered in support of the proposed regulations. Indeed, by requiring in-water hull cleaning at a frequency that will diminish the effectiveness of hull coatings – coatings that constitute the best available technology for combating fouling – the proposed rule would directly contradict the statutory mandate.

Finally, the nature of hull fouling and the nature of the available tools to address it are such that it can only be effectively dealt with on an international basis. In light of those factors, we respectfully urge the Commission to take the following actions:

a. Delete the numeric performance standards from the regulations;
b. Limit operational directives to extended residency vessels; and
c. For vessels other than extended residency vessels, adopt management plan and recordkeeping requirements that are consistent with the IMO guidelines.

The Council appreciates the opportunity to submit these comments on the Revised Notice, and stands ready to work with the Commission to develop an approach to hull fouling that is consistent with our shared environmental objectives and with state and federal law.

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