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BEFORE THE

SUBCOMMITTEE ON COAST GUARD AND MARITIME TRANSPORTATION
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE
UNITED STATES HOUSE OF REPRESENTATIVES

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Thank you for the opportunity to testify before the Committee on implementation of *The International Convention on the Control of Harmful Anti-Fouling Systems on Ships*, which we believe will reap environmental benefits here at home and for the world's oceans.

The Agency supports the passage of legislation to implement the anti-fouling treaty as a means of protecting domestic waters, safeguarding the global environment, and promoting the development of safer technologies for controlling fouling on ship hulls. The treaty relies on rigorous scientific review as the basis for determining when controls are needed to limit the negative impacts of anti-fouling systems, and implementation of the treaty will uphold the standing of the United States as an environmental leader. We are eager to assist the Congress in implementing the protections afforded by the treaty.

Current Authorities Reduce Domestic Inputs of the Riskiest Anti-Fouling System

Organotin-based anti-fouling systems, mainly those containing tributyltin, are extremely effective and have long service lives, but, as noted earlier by my colleague with the Coast Guard, they are extremely hazardous to aquatic organisms in general, including economically

important species like oysters. In the 1980's, research began to reveal that tributyltin was a potent endocrine disruptor[1] and immunotoxin[2] responsible for reproductive anomalies and other adverse effects in marine animals, and that tributyltin from hull coatings would persist for many years in aquatic sediments[3]. In 1988, the US enacted the *Organotin Antifouling Paint Control Act* (OAPCA), restricting the use of tributyltin anti-fouling coatings and prohibiting application on most recreational vessels. Concern about tributyltin continued to grow, and in 2005 EPA approved the registrant's voluntary cancellation for the last domestic uses of tributyltin anti-fouling paints in accordance with Section 6 of FIFRA. A pesticide product may not be legally sold or distributed in the US after the effective date of cancellation except in accordance with any existing stocks provisions affecting the product. A cancelled pesticide product may continue to be produced even though its registration (and thereby its sale and distribution) has been cancelled. Neither OAPCA nor product cancellations directly affected the use of tributyltin on ships painted overseas and traveling in US waters. Other US laws and

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[1] Peter Matthiessen and Gibbs, P.E., 1998, Critical Appraisal Of The Evidence For Tributyltin-Mediated Endocrine Disruption In Mollusks, *Environmental Toxicology and Chemistry* 17:37–43. http://www.setacjournals.org/perlserv/?request=get-abstract&doi=10.1897%2F1551-5028(1998)017%3C0037:CAOTEF%3E2.3.CO%3B2&ct=1

[2] H. Nakata, et al., 2002.Evaluation of mitogen-induced responses in marine mammal and human lymphocytes by in-vitro exposure of butyltins and non-*ortho* coplanar PCBs. *Environmental Pollution* 120:245-253, http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6VB5-456WRVR-4&_user=10&_rdoc=1&_fmt=&_orig=search&_sort=d&view=c&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=6322feec251785bc59118300be5770fe

[3] Dowson P. H.[a], et al., 1996. Persistence and Degradation Pathways of Tributyltin in Freshwater and Estuarine Sediments. *Estuarine, Coastal and Shelf Science*, 42: 551-562. http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WDV-45PTXDS-14&_user=10&_rdoc=1&_fmt=&_orig=search&_sort=d&view=c&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=65cb701de6bc48771c06540cff4e7cf7

regulations[4] have addressed the risks associated with tributyltin in anti-fouling systems, but none had any effect on environmental inputs of organotin from sources outside the US. Under the treaty, U.S. and foreign-flagged vessels would be subject to the organotin prohibition, with the exception of ships used for government non-commercial service.

New Authorities Needed To Control Organotin From Ships Treated Outside the US

The International Maritime Organization (IMO) adopted a global ban on anti-fouling systems containing organotin biocides in 2001, as part of the anti-fouling treaty. The treaty took effect last year, The United States Senate gave advice and consent to ratification of the treaty in September 2008, but the US has not yet become a Party, because implementing legislation is needed before it can be ratified by the President. Implementing legislation will allow the US to inspect and exclude most tributyltin-treated ships from US waters, regardless of where the ship is registered, or where the TBT was applied. In response to entry into force of the anti-fouling treaty, the marine paint industry, shippers, and the cruise industry are turning to other technologies, but production and use of TBT in some parts of the world continues to pose a problem that can be addressed only through a coordinated global effort. Joining with other nations that have implemented treaty controls, we would limit the negative impacts of organotin anti-fouling systems in our own waters and throughout the world's oceans.

Implementing the Treaty Will Garner Benefits for the US

Implementation will reduce domestic and global contamination with organotin, but will promote other positive changes as well. These potential benefits will accrue on several fronts,

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[4] Regulations under Sections 304(a)and 301(a) of the Clean Water Act (water quality criteria, general vessel permit for discharges from ship).

from promoting scientific rigor in the assessment of anti-fouling systems, to preserving the benefits associated with anti-fouling technologies.

Treaty Establishes Science-Based Process for Considering Additional Controls

The treaty provides a framework for the consideration of global controls on other anti-fouling systems that may prove to be problematic in the future, the use of which may increase due to the shift away from TBT. The treaty includes detailed requirements for the consideration of proposals by Parties to add controls for other anti-fouling systems.

The treaty identifies a comprehensive data set to be evaluated in developing scientific recommendations for the IMO's Marine Environment Protection Committee. The relevant data are intended to cover all aspects of the toxicity of the material in question, its persistence, and the amount of the material entering the aquatic environment. These data elements will enable a thorough assessment of risks, and go beyond the strictly hazard-based assessments of some governments. The process laid out in the treaty is intended to guarantee the use of robust scientific analysis in decision-making on proposed controls. Transparency is also an important consideration in developing the US government position on any proposed control.

Process Preserves the Benefits of Anti-fouling System Use to Industry

Consideration of a proposed control includes an assessment of impacts to the shipping industry, particularly the operating and energy costs or savings that may be associated with restrictions on a problematic anti-fouling system and the use of alternative systems. By identifying the characteristics that make an anti-fouling system vulnerable to controls, the process also communicates to industry expectations for a new generation of anti-fouling systems.

Preserves Benefits to Energy Use, Air Quality, and Environmental Health

The review process also includes consideration of the impacts to society of controls and the use of potential replacements. Anti-fouling systems that do not adequately prevent the growth of fouling organisms result in increased drag on the vessel hull, increased fuel consumption, and increases in air pollution[5]. Possible benefits of a proposed control on the potential spread of invasive species, biodiversity, and environmental and human health are also relevant. Controls on anti-fouling systems under the treaty will be designed to prevent undesirable trade-offs in environmental and societal impacts. In considering both risks and benefits, the review process parallels our domestic assessment processes. Amendments to the Convention for the regulation of new antifouling systems would need to be approved by two-thirds of the Parties, taking into account the recommendations of the technical group's evaluation. The US may opt out of any such amendments, but the Treaty's rigorous review process should minimize the need to do so.

Other Benefits of Implementing the Treaty

The US developed the base text of the treaty and led the negotiations that resulted in the international agreement. Ratifying and implementing the treaty now would maintain our traditional position as a global environmental leader and may enhance our influence in other international environmental negotiations. As relates to the anti-fouling treaty itself, US ratification at this time would allow us to participate fully, as a Party, in the assessment of proposed future controls under the treaty.

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5 L.D. Chambers, et al. 2006 Modern approaches to marine antifouling coatings. *Surface and Coatings Technology*, 20: 3642-3652

Conclusion

The controls and process to be implemented through the anti-fouling treaty are clearly beneficial to the environment and national interests. There is much to be gained in implementing the global anti-fouling treaty at this time and little controversy about the impacts. The Agency is grateful for the opportunity to speak on behalf of implementation and ready to assist Congress in its efforts to move forward with the environmental protections it affords.