



Department of Pesticide Regulation



Mary-Ann Warmerdam
Director

MEMORANDUM

Arnold Schwarzenegger
Governor

TO: Tam M. Doduc, Chair
State Water Resources Control Board
1001 I Street
Sacramento, California 95812

original signed by C. Reardon for
FROM: Mary-Ann Warmerdam
Director
(916) 445-4000

DATE: December 3, 2007

SUBJECT: DEPARTMENT OF PESTICIDE REGULATION'S ACTION PLAN TOWARD
ADDRESSING COPPER POLLUTION FROM ANTIFOULING PAINT USE

In September 2005, the State Water Resources Control Board (SWRCB) passed resolution number 2005-0071, in which SWRCB encouraged the Department of Pesticide Regulation (DPR) to pursue the appropriate scientific and regulatory avenues to address water quality concerns associated with copper-based antifouling paints (AFPs). The resolution requested that DPR take appropriate action to adequately address the impacts of copper AFPs on water quality, otherwise SWRCB will work with the Regional Water Quality Control Boards (RWQCBs) to develop a statewide water quality control policy for copper AFPs. As a result of its ongoing analysis, and in response to this resolution, DPR implemented an action plan to determine if regulatory action is warranted.

In recent years, DPR intensified its investigation of water quality issues associated with AFP use. Specifically, DPR conducted a multi-regional study to evaluate the extent and magnitude of copper pollution in California marinas. DPR conducted this study with supplemental funding from SWRCB. The report resulting from the multi-regional study will be submitted separately to SWRCB. Additionally, DPR continued its collaborative examination of AFP-related issues through the Copper Antifouling Paint Sub-Workgroup, a focus group of SWRCB's Marina and Recreational Boating Workgroup of the Nonpoint Source Interagency Coordinating Committee.

As a result of these investigations, DPR concludes that:

- Copper AFPs can be a significant source of copper in marina waters, particularly salt and brackish waters during periods of dry weather.
- Copper concentrations in many salt and brackish water marinas in California exceed water quality standards for copper. The use of copper AFPs contributes to this exceedance.
- Copper AFP pollution is a multi-regional issue in California.



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In response to these conclusions, DPR will:

- Reevaluate all AFPs. For copper-based AFP products, the registrants will be required to identify, demonstrate, and implement mitigation practices to reduce copper loading from AFP use. For noncopper AFP products, registrants will be required to more fully evaluate their products' effects on water quality under various use scenarios.
- Work cooperatively with SWRCB and RWQCBs to identify regulatory options that can be used to effectively prevent the occurrence of high copper concentrations in marinas throughout California.
- Continue collaboration with stakeholders to develop and encourage the adoption of alternative coatings and management practices that effectively and efficiently reduce copper loading from AFP use in California marinas.

These actions represent a comprehensive approach for addressing water quality issues associated with AFP use. If the sum of these actions does not lead to an adequate reduction in copper loading in California marinas, DPR will consider more stringent regulatory actions.

DPR looks forward to continuing collaboration with SWRCB, RWQCBs, and AFP stakeholder groups on this issue. We also welcome the opportunity to discuss these mitigation actions with SWRCB in the near future.

If you have any questions, please feel free to contact me, or Dr. John S. Sanders, of my staff, at (916) 324-4155, or <jsanders@cdpr.ca.gov>.

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