

TITLE 3. DEPARTMENT OF PESTICIDE REGULATION
Copper-Based Antifouling Paint and Coating Products
DPR Regulation No. 16-005

NOTICE OF PROPOSED REGULATORY ACTION

The Department of Pesticide Regulation (DPR) proposes to adopt 3 CCR section 6190. In summary, the proposed action requires registrants of all new copper-based antifouling paint and coating (AFP) products to submit estimated daily mean copper release rate (also referred to as leach rate) data as a requirement for registration. In addition, effective July 1, 2018, the proposed action establishes a maximum allowable copper leach rate for copper-based AFP products registered in California for use on recreational vessels and states that currently registered products exceeding the leach rate will be subject to cancellation. This proposed action also defines "recreational vessel" and "commercial vessel."

SUBMITTAL OF COMMENTS

Any interested person may present comments in writing about the proposed action to the agency contact person named below. Written comments must be received no later than 5:00 p.m. on January 4, 2017. Comments regarding this proposed action may also be transmitted via e-mail to <dpr16005@cdpr.ca.gov> or by facsimile at 916-324-1491.

A public hearing is not scheduled. However, one will be scheduled if any interested person submits a written request to DPR no later than 15 days prior to the close of the written comment period.¹

EFFECT ON SMALL BUSINESS

DPR has determined that the proposed regulatory action does affect small businesses.

INFORMATIVE DIGEST/POLICY STATEMENT OVERVIEW

DPR protects human health and the environment by regulating pesticide sales and use and by fostering reduced-risk pest management. DPR's strict oversight includes: product evaluation and registration; statewide licensing of commercial and private pesticide applicators, pest control businesses, dealers, and advisers; environmental monitoring; and residue testing of fresh produce. This statutory scheme is set forth primarily in Food and Agricultural Code (FAC) Divisions 6 and 7.

Pesticides must be registered (licensed for sale and use) with the U.S. Environmental Protection Agency (U.S. EPA) before they can be registered in California. DPR's preregistration evaluation is in addition to, and complements, U.S. EPA's evaluation. Before a pesticide can be sold or used, both agencies require data on a product's toxicology and chemistry--how it behaves in the

¹ If you have special accommodation or language needs, please include this in your request for a public hearing. TTY/TDD speech-to-speech users may dial 7-1-1 for the California Relay Service.

environment; its effectiveness against targeted pests and the hazards it poses to nontarget organisms; its effect on fish and wildlife; and its degree of worker exposure.

DPR continues to evaluate pesticides after they are registered. DPR's continuous evaluation program includes evaluating potential adverse effects resulting from the use of pesticide products and monitoring surface water for compliance with aquatic benchmarks.

In 2006, DPR initiated a study to sample water and sediment from 23 marinas in California to assess the geographical scope and severity of pollution stemming from the use of AFP products containing copper, zinc, and Irgarol[®]. During this multi-regional scientific investigation of AFP pollution across freshwater, brackish water, and saltwater marinas in California, DPR found that dissolved copper concentrations in saltwater and brackish water marinas often exceeded the U.S. EPA's California Toxics Rule (CTR) copper water quality standards set forth in Title 40 Code of Federal Regulations section 131.38. Specifically, DPR detected dissolved copper concentrations exceeding the CTR chronic water quality standard of 3.1 micrograms per liter ($\mu\text{g/L}$) in more than half of these water samples, and exceeding the CTR acute water quality standard of 4.8 $\mu\text{g/L}$ in about one third of these water samples. DPR also observed toxicity to aquatic test organisms in some marina samples that was likely caused by high dissolved copper concentrations.

Based on the results of the study, DPR concluded that copper-based AFP products applied to recreational vessels are likely a major source of dissolved copper in salt and brackish water marinas, particularly during dry weather periods. In addition, DPR found that the main pathway of copper contamination in marinas appears to be from passive leaching of copper-painted recreational vessel hulls and in-water hull cleaning of copper-painted recreational vessels.

Due to the frequent detections of dissolved copper concentrations above CTR standards in California saltwater marinas and the study findings, DPR placed copper AFP products containing the active ingredients copper oxide, copper hydroxide, and cuprous thiocyanate into reevaluation in 2010. When a pesticide enters the reevaluation process, DPR reviews existing data and has the authority to require new data to determine the nature or the extent of the potential hazard and identify appropriate mitigation measures, if needed. Pursuant to the reevaluation, DPR required copper-based AFP registrants to generate and submit specific data including each product's paint type (e.g., ablative, epoxy, and vinyl) and copper leach rate.

Specifically, DPR required registrants of copper-based AFPs to submit an estimated copper leach rate for each product calculated using the International Organization for Standardization (ISO) method 10890:2010, as well as the supporting data used for the calculation. The ISO method describes a mass-balance calculation that estimates the mean biocide leach rate over the lifetime of an AFP, based on product specific data provided in the safety data sheet, technical data sheet, or confidential statement of formulation. Although the ISO method 10890:2010 is one of the most reliable methods to calculate a product leach rate, it tends to overestimate the actual release of copper into the environment. The ISO method strongly recommends the use of a correction factor to generate a more accurate real-world leach rate.

After DPR initiated its reevaluation, Assembly Bill (AB) 425 (Chapter 587, Statutes of 2013) required DPR “to determine a leach rate for copper-based AFPs used on recreational vessels and to make recommendations for appropriate mitigation measures that may be implemented to protect aquatic environments from the effects of exposure to that paint if it is registered as a pesticide.”

Therefore, DPR is proposing to adopt section 6190 to address copper contamination in surface water from copper-based AFPs. DPR proposes to require registrants of all new copper-based AFP products submitted for registration to submit product-specific copper leach rate data calculated using ISO method 10890:2010.

For new products submitted for registration, DPR will verify the ISO calculation submitted by the registrant. As previously mentioned, since the ISO calculation tends to overestimate the real-world release of copper, DPR proposes using a recommended correction factor of 2.9 to calculate an adjusted daily mean copper leach rate.

DPR determined that a maximum allowable leach rate of 9.5 micrograms per square centimeter per day ($\mu\text{g}/\text{cm}^2/\text{day}$) for copper-based AFP products used on recreation vessels would effectively reduce copper contamination of surface waters. Proposed subsection (c) establishes that the maximum allowable copper leach rate of $9.5 \mu\text{g}/\text{cm}^2/\text{day}$ will apply to copper-based AFP products labeled to allow use on recreational vessels in California. Proposed subsection (c) provides definitions for the terms “recreational vessel” and “commercial vessel.”

DPR proposes to deny registration of any new copper-based AFP product that is labeled to allow use on recreational vessels in California if it exceeds the adjusted daily mean copper release rate of $9.5 \mu\text{g}/\text{cm}^2/\text{day}$, as calculated by DPR. Also, this proposed action specifies that any currently registered copper-based AFP product that exceeds the adjusted daily mean copper release rate of $9.5 \mu\text{g}/\text{cm}^2/\text{day}$, as calculated by DPR, and is labeled to allow use on a recreational vessel in California, will be subject to cancellation pursuant to FAC section 12825. DPR proposes to delay the effective date for implementing the maximum allowable copper leach rate for use on recreational vessels until July 1, 2018, to ensure there is adequate time for registrants impacted by these regulations to make modifications to their product and/or product label.

Adoption of this regulation will be a benefit to the environment. It will increase protection of aquatic organisms from potential adverse impacts by ensuring that all copper-based AFP products allowed for use on recreational vessels comply with a copper leach rate requirement that is intended to reduce the amount of copper in surface water.

During the process of developing these regulations, DPR conducted a search of any similar regulations on this topic and concluded that the proposed regulation is not inconsistent or incompatible with existing state regulations. DPR is the only agency that has the authority to regulate the sale and use of pesticides.

IMPACT ON LOCAL AGENCIES OR SCHOOL DISTRICTS

DPR determined that the proposed regulatory action does not impose a mandate on local agencies or school districts. DPR also determined that there are no costs to any local agency or school district requiring reimbursement pursuant to Government Code section 17500 et seq. There are no other nondiscretionary costs or savings imposed upon local agencies that are expected to result from the proposed regulation action.

COSTS OR SAVINGS TO STATE AGENCIES

DPR determined that no savings or increased costs to any state agency will result from the proposed regulatory action.

EFFECT ON FEDERAL FUNDING TO THE STATE

DPR determined that no costs or savings in federal funding to the state will result from the proposed action.

EFFECT ON HOUSING COSTS

DPR made an initial determination that the proposed action will have no effect on housing costs.

SIGNIFICANT STATEWIDE ADVERSE ECONOMIC IMPACT DIRECTLY AFFECTING BUSINESSES

DPR made an initial determination that adoption of this regulation will not have a significant statewide adverse economic impact directly affecting businesses, including the ability of California businesses to compete with businesses in other states.

COST IMPACTS ON REPRESENTATIVE PRIVATE PERSONS OR BUSINESSES

DPR is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action. DPR recognizes that the cost of modifying labels is more than the DPR application fee of \$25 and includes printing, repackaging, and other fees. Label amendments are a common part of standard business operations for pesticide registrants, and therefore, DPR is assuming that all copper-based AFP labels will be modified with other changes prior to the effective date of this regulation, which DPR intends to delay by six months.

RESULTS OF THE ECONOMIC IMPACT ANALYSIS

Impact on the Creation, Elimination, or Expansion of Job/Businesses: DPR determined it is not likely the proposed regulatory action will impact the creation or elimination of jobs, the creation of new businesses or the elimination of existing businesses, or the expansion of businesses currently doing business with the State of California because the additional registration

requirement imposed can be handled by existing registrant's staff as part of standard business operations. It would not impact those using AFPs on recreational vessels because there are many copper-based AFPs already in compliance with the proposed leach rate.

Adopting a maximum allowable copper leach rate limit for AFP products used on recreational vessels will benefit the environment by reducing the potential for adverse impacts to aquatic organisms in California marinas.

CONSIDERATION OF ALTERNATIVES

DPR must determine that no reasonable alternative considered by the agency, or that has otherwise been identified and brought to the attention of the agency, would be more effective in carrying out the purpose for which the action is proposed, would be as effective and less burdensome to affected private persons than the proposed regulatory action, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provision of the law.

AUTHORITY

This regulatory action is taken pursuant to the authority vested by FAC sections 11456, 12781, and 12976.

REFERENCE

This regulatory action is to implement, interpret, or make specific FAC sections 11501, 12824, 12825, and 14012.

AVAILABILITY OF STATEMENT OF REASONS AND TEXT OF PROPOSED REGULATIONS

DPR prepared an Initial Statement of Reasons and is making available the express terms of the proposed action, all of the information upon which the proposal is based, and a rulemaking file. A copy of the Initial Statement of Reasons and the proposed text of the regulation may be obtained from the agency contact person named in this notice. The information upon which DPR relied in preparing this proposal and the rulemaking file are available for review at the address specified below.

AVAILABILITY OF CHANGED OR MODIFIED TEXT

After the close of the comment period, DPR may make the regulation permanent if it remains substantially the same as described in the Informative Digest. If DPR does make substantial changes to the regulation, the modified text will be made available for at least 15 days prior to adoption. Requests for the modified text should be addressed to the agency contact person named in this notice. DPR will accept written comments on any changes for 15 days after the modified text is made available.

AGENCY CONTACT

Written comments about the proposed regulatory action; requests for a copy of the Initial Statement of Reasons, and the proposed text of the regulation; and inquiries regarding the rulemaking file may be directed to:

Linda Irokawa-Otani, Regulations Coordinator
Department of Pesticide Regulation
1001 I Street, P.O. Box 4015
Sacramento, California 95812-4015
916-445-3991

Note: In the event the contact person is unavailable, questions on the substance of the proposed regulatory action may be directed to the following back-up person at the same address as noted above:

Ann Hanger, Senior Environmental Scientist (Specialist)
Registration Branch
916-324-3535

This Notice of Proposed Action, the Initial Statement of Reasons, and the proposed text of the regulation are also available on DPR's Internet Home Page <<http://www.cdpr.ca.gov>>. Upon request, the documents can be made available in another language, or an alternate form as a disability-related accommodation.

AVAILABILITY OF FINAL STATEMENT OF REASONS

Following its preparation, a copy of the Final Statement of Reasons mandated by Government Code section 11346.9(a) may be obtained from the contact person named above. In addition, the Final Statement of Reasons will be posted on DPR's Internet Home Page and accessed at <<http://www.cdpr.ca.gov>>.

DEPARTMENT OF PESTICIDE REGULATION

Director