



# Department of Pesticide Regulation



Brian R. Leahy  
Director

Edmund G. Brown Jr.  
Governor

November 16, 2018

Mr. Michael W. Graf  
Michael W. Graf Law Offices  
227 Behrens Street  
El Cerrito, California 94530

Dear Mr. Graf:

Thank you for your letter in response to the Department of Pesticide Regulation's (DPR) *Notice of Proposed Decision to Renew Pesticide Product Registrations for 2018*. In your letter and subsequent emails, you provided information indicating possible adverse impacts from pesticide products containing the first-generation anticoagulant rodenticide active ingredients diphacinone, chlorophacinone, and warfarin (FGARs), and the second-generation anticoagulant rodenticide active ingredients brodifacoum, bromadiolone, difethialone, and difenacoum (SGARs). You requested that DPR initiate reevaluation of these pesticides.

As you know, on March 19, 2018, DPR replied to your letter, stating that it was in the process of reviewing data in order to determine if significant adverse impacts to non-target wildlife were likely to occur from the use of FGARs and SGARs. DPR has now completed its investigation. The DPR investigation is attached.

On the basis of this investigation, the Director of DPR is proposing to begin reevaluation of SGARs. The Notice of Proposed Decision to Begin Reevaluation of Second-Generation Anticoagulant Rodenticides, which outlines the basis for placing SGARs into reevaluation, is also attached.

DPR has decided not to reevaluate FGARs at this time. DPR's investigation of the reported impacts found that the rate of FGAR exposure among non-target wildlife is generally decreasing and is lower than for SGARs (investigation report, figure 3). Further, the chemical characteristics of FGARs (toxicity, persistence, and bioaccumulation) are such that any exposure would be less significant than exposure to SGARs (investigation report, table 1 – 3). In U.S. EPA's document entitled, "Potential Risks of Nine Rodenticides to Birds and Non-Target Mammals: A Comparative Approach" (2004), they compared secondary toxicity risks of three FGARs and three SGARs to barn owls. Of significance, there were no mortalities and no observed sublethal effects in any of the owls that were fed rats exposed to FGARs. Due to their lower toxicity, FGARs require multiple doses before producing a lethal effect and so, unlike SGARs, are not likely to result in the accumulation of a concentration above the lethal dose in the body of the target pest. DPR's investigation did not identify significant adverse impacts which have occurred or are likely to occur from the use of FGARs. As a result, the investigation did not analyze the

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availability of alternatives to significantly reduce adverse impacts for FGARs. Based on the investigation, the Director has decided not to reevaluate FGARs.

For information regarding the reevaluation process, please contact Ms. Brenna McNabb, by e-mail at <Brenna.McNabb@cdpr.ca.gov> or by telephone at 916-445-0179.

*Original signed by Ann M. Prichard*

Ann M. Prichard, Chief  
Pesticide Registration Branch  
(916) 324-3931

*November 16, 2018*

Date

Attachments

cc: Ms. Brenna McNabb, DPR, Environmental Scientist

Ms. Lynn Baker, Air Resources Board

Ms. Lori Lim, Ph. D, Office of Environmental Health Hazard Assessment

Ms. Crystal Reul-Chen, Department of Resources Recycling and Recovery

Ms. Jodi Pontureri, State Water Resources Control Board

Ms. Valerie Hanley, Department of Toxic Substances Control

Ms. Kevi Mace, Ph.D., Department of Food and Agriculture

Mr. Michael Horak, University of California, Davis, IR-4 Program

Ms. Stella McMillin, Department of Fish and Wildlife

Ms. Amalia Neidhardt, Department of Industrial Relations

Mr. Jeff Fowles, Ph.D., Department of Public Health

Mr. Tom Ineichen, Structural Pest Control Board

Ms. Patti L. TenBrook, Ph.D., U.S. Environmental Protection Agency, Region 9

Mr. Ruben Arroyo, California Agricultural Commissioners and Sealers Association

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Mr. James Seiber, Ph.D., University of California, Davis, Department of Environmental  
Toxicology