



# Department of Pesticide Regulation



Brian R. Leahy  
Director

## MEMORANDUM

Edmund G. Brown Jr.  
Governor

TO: Teresa Marks *TJM*  
Chief Deputy Director  
Brian Leahy *BRL*  
Director

FROM: Marylou Verder-Carlos *MVC*  
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Pesticide Programs Division Assistant Director  
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DATE: August 18, 2016

SUBJECT: PROBLEM FORMULATION SUMMARY FOR THE FIPRONIL RISK  
ASSESSMENT

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The Problem Formulation Summary describes the proposed scope of the fipronil Risk Characterization Document (RCD) and provides guidance to staff as they draft the RCD. We are asking for your concurrence on the final decision regarding which exposure scenarios and mitigation options should be included in the development of the RCD.

Resource constraints require the Department to prioritize workload. It is the Department's intention to mitigate the highest and most critical risks first. The Department is not ignoring lesser risks, but will address them in the future as time and resources allow.

The managers of the Pesticide Program Division considered the potential mitigation options and exposure scenarios developed by staff and determined to exclude some mitigation options and exposure scenarios from consideration in the RCD. The exposure scenarios were primarily excluded because either there was extremely low use (granules on turf and structural application of dust) or because our experience indicates the exposure scenario is typically low-risk.

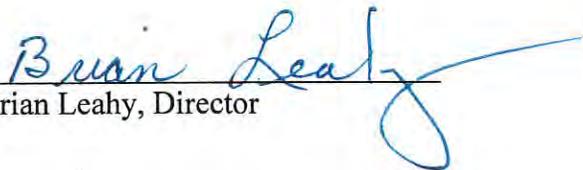
Attached Tables 1a, 1b, and 2 indicate the final consensus from the managers of which exposure scenarios and mitigation options should be included or excluded from the RCD. If in the process of drafting the risk assessment staff discovers new information, we may consider including an exposure scenario or mitigation option that was originally excluded.



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This document and the Problem Formulation Summary for the fipronil risk assessment will be presented to the Pesticide Registration Evaluation Committee for the Committee's comments. These documents will also be posted on the Department's Web site for public review and comment.

Attachments

APPROVED:   
Brian Leahy, Director

**TABLE 1A. HANDLER SCREENING EXPOSURE SCENARIOS**

Exposure Scenario	Human receptor	Exposure based evidence			Use and illness based adjustment						Final priority decision	A Check in this column indicates this scenario will be <b>EXCLUDED</b> from being evaluated in the Risk Characterization Document.	
		Exposure estimate	Amount handled	Preliminary priority decision	Use restricted to licensed applicator?	PUR data (Licensed use)	Sales data (if exempt from PUR)	Illnesses within CA (CalPISP)		Increase from preliminary priority decision?			
						Priority	Priority	% of Cases in 5 yrs	Highest association				
Turf, Granule	Handler	High	Low	Medium	Yes	Low (< 10% of use)					No	Medium	✓
Pet, Spray	Handler, Pet owner	High	Low	Medium	No		Low	7% (1 / 15)	Probable	Yes	High		
	Handler, Groomer	High	Low	Medium						Yes	High		
Pet, Spot-on	Handler, Pet owner	High	Low	Medium	No		Low	27% (4 / 15)	Definite	Yes	High		
	Handler, Groomer	High	Low	Medium						Yes	High		
Structural, Dust	Handler	High	Low	Medium	Yes	Low (< 10% of use)		7% (1 / 15)	Possible	No	Medium	✓	
Structural, Liquid concentrate	Handler	High	Medium	High	Yes	High (> 90% of use)		7% (1 / 15)	Possible	No	High		
Structural, Bait gel	Handler	Low	Low	Low	No		Low			No	Low	✓	
Structural, Bait station	Handler	Low	Low	Low	No		Low			No	Low	✓	

**TABLE 2B. REENTRY SCREENING EXPOSURE SCENARIOS**

Category	Human receptor	Exposure based evidence				Use and illness based adjustment						Final priority decision	A check in this column indicates this scenario will be <b>EXCLUDED</b> from being evaluated in the Risk Characterization Document.
		Transfer coefficient	Exposure duration	Child involved?	Preliminary priority decision	Use restricted to licensed applicator?	PUR data (Licensed Use)	Sales data (if exempt from PUR)	Illnesses within CA (CalPISP)		Increase from preliminary decision?		
							Priority	Priority	% of Cases in 5 yrs	Highest association			
Turf, Granule	Reentry, Adult	High	Medium	No	High	Yes	Low (< 10% of use)				No	High	✓
	Reentry, Child	High	Medium	Yes	High						No	High	✓
Pet, Spray	Reentry, Adult	High	Low	No	Medium	No		Low			No	Medium	
	Reentry, Child	Medium	Medium	Yes	High				13% (2 / 15)	Probable	Yes	High	
Pet, Spot-on	Reentry, Adult	High	Low	No	Medium	No		Low			No	Medium	
	Reentry, Child	Medium	Medium	Yes	High				20% (3 / 15)	Probable	Yes	High	
Structural, Dust	Reentry, Adult	Low	Low	No	Low	Yes	Low (< 10% of use)		13% (2 / 15)	Probable	Yes	Medium	✓
	Reentry, Child	Low	Low	Yes	Medium						No	Medium	✓
Structural, Liquid concentrate	Reentry, Adult	High	Low	No	Medium	Yes	High (> 90% of use)		40% (6 / 15)	Probable	Yes	High	
	Reentry, Child	Medium	Low	Yes	High						No	High	
Structural, Bait gel	Reentry, Adult	High	Medium	No	High	No		Low			No	High	✓

	Reentry, Child	Medium	Medium	Yes	High						No	High	✓
Structural, Bait station	Reentry, Adult	Low	Low	No	Low	No		Low	7% (1 / 15)	Possible	No	Low	✓
	Reentry, Child	Low	Low	Yes	Low						No	Low	✓
Public	Swimmer, Adult	N/A	N/A	No	Low						No	Low	✓
	Swimmer, Child	N/A	N/A	Yes	Low						No	Low	✓

**Table 2. Fipronil mitigation options: Which should be evaluated and which options should not be evaluated in the Risk Characterization Document (RCD)?**

A check in this column indicates the option will not be evaluated in the RCD.



<b>Mitigation option</b>  PCOC = included in letter to DPR from Pest Control Operators of California	<b>Exposure scenarios that might be mitigated by this option:</b>					
	Turf granules Reentry after application	Structural liquids, dusts, and crack-and-crevice Applicators / handlers	Reentry after application	Pet spot-on liquids and sprays Applicators / handlers	Reentry after application	
Turf granules: Increase restricted entry interval	x					✓
Turf granules: Require posting signs after treatment	x					✓
Structural products: Require additional PPE [PCOC]		x				
Structural products: Require stewardship training from registrants about importance of using PPE [PCOC]		x				
Structural products: Require engineering controls for mixing / loading. Could include cancelling registration of 2.5 gallon jugs that lack tip-n-pour spouts [PCOC]		x				
Structural products: prohibit overhead application [PCOC]		x				
Structural products: reduce amount applied per structure (by reducing concentration, or reducing size of area treated per structure, or both)		x	x			
Structural products: reduce frequency of application per structure. Labels already limit to 2 applications per property per year. However, availability of multiple fipronil products may contribute to this limit sometimes being exceeded [PCOC].		chronic only	chronic only			
Structural products: increase reentry interval for residents			x			
Structural products: require posting signs after treatment			x			

<b>Mitigation option</b> PCOC = included in letter to DPR from Pest Control Operators of California	<b>Exposure scenarios that might be mitigated by this option:</b>					
	Turf granules Reentry after application	Structural liquids, dusts, and crack-and-crevice		Pet spot-on liquids and sprays		
		Applicators / handlers	Reentry after application	Applicators / handlers	Reentry after application	
Pet products: restrict use to certified applicators				x	x	
Pet products: require PPE (labels of <u>spray</u> products already require “rubber” gloves, but not spot-on)				x		
Pet products: reduce amount applied per animal (by reducing concentration, or reducing size of area treated per animal, or both)				x	x	
Pet products: reduce frequency of application per animal				chronic only	chronic only	
Pet products: require a minimum time between treatment and owner’s contact with pet. Could include a longer time for children’s contact.					x	
Pet products: require a minimum time during which children must be excluded from treatment room (to reduce potential transfer from contaminated surfaces)					x	
Pet products: cancel CA registrations for all fipronil pet products that are labeled for home use				x	x	