Pesticide: Amitraz (EPA-HQ-OPP-2009-1015)

Use: Pet flea collars

Why we care: Toxic to aquatic invertebrates.

Actions taken: BACWA sent a comment letter to EPA on the Draft Environmental Risk Assessment on January 29, 2019.

Status: EPA released the Proposed Interim Decision in March 2021.

Comment period on Workplan (2010)

Comment period on Draft Environmental Risk Assessment (2018/19)

Comment period on Proposed Interim Decision (2021)

EPA analyzes comments, issues Interim Decision

EPA issues Final Decision

Next steps: EPA will issue the Interim Decision.

Recommendation: The use of amitraz is limited to pet collars (for indoor uses). BACWA-Pesticides Workgroup decided to not comment on the

Amitraz PID and instead focus on other indoor pesticides since collars are less likely to transfer down-the-drain than treatments

like pet spot-ons.

BACWA 1/29/2019 Comments to EPA

BACWA requests that OPP conduct a Preliminary Ecological Risk Assessment that includes an evaluation of sewer discharges from amitraz pet tick control treatments: BACWA is concerned that risks associated with indoor amitraz use were not examined and respectfully asks the EPA to include this analysis (a "down-the-drain" risk assessment) in the revised assessment. EPA has POTW predictive modeling tools which are suitable for conducting this assessment and has conducted similar assessments for many other pesticides. We request that EPA specifically analyze sewer discharge for pet flea/tick collars.

EPA Response

"Down-the-drain exposure scenarios have been explored quantitatively and qualitatively for other chemicals. However, in the recent pyrethroid and pyrethrin risk assessment (USEPA, 2016) which assessed pyrethroid releases to publicly owned treatment works (POTW), the concentrations derived from the down-the-drain model (USEPA 2007) were demonstrated to be highly uncertain. The E-FAST model requires multiple assumptions for input parameters that are difficult to derive or are system-specific and assumes no degradation and no sorption of the chemical to organic matter or to the sediments in the body of water.

EFED acknowledges "pet washing is likely a major discharge pathway for pet products" and

Did EPA consider BACWA's comment?

No. But they did respond to it by explaining the science behind why they do not expect this pesticide to be in treated effluent.

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	appreciates the suggested fipronil and other references for additional down-the-drain risk assessment. However, amitraz environmental fate properties indicate that amitraz is not a persistent compound in water. The hydrolysis half-life of amitraz is less than one day ($t\frac{1}{2} = 22$ hours) at pH 7, and the available study suggests that this half-life is inversely related to the pH of the tested substrate. Specifically, amitraz hydrolysis was faster in acidic environments (pH 5, $t\frac{1}{2} = 2$ hours) than in alkaline environments (pH 9, $t\frac{1}{2} = 25.5$ hours). Furthermore, the half-lives for aerobic aquatic metabolism ($t\frac{1}{2} < 6$ hours) and aerobic soil metabolism ($t\frac{1}{2} < 1$ day) are less than one day. Therefore, amitraz residues are not expected to be found after the water treatment process." (EPA Amitraz Response to Public Comments on the Draft Ecological Risk Assessment, July 16, 2019, p.2)	
BACWA requests that EPA consider risk mitigation for amitraz BACWA suggests that EPA consider the following additional risk mitigation strategies for indoor amitraz products: 1) Determine the minimum application rate (i.e., collar material concentration) necessary to achieve tick control. This would eliminate unnecessary overuse and minimize POTW discharge quantities. 2) Consider adding wastewater-protective use restrictions to product labels—such as dissuading pet owners from washing their pets with the collar on.	No response.	No.

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