Pesticides: Etofenprox, EPA–HQ–OPP–2007–0804

Use: Insecticide. Indoor and pet uses.

Why we care: Priority pesticide due to toxicity, use, and monitoring data. Pyrethroids have multiple 303(d) listings and TMDLs.

Actions taken: BACWA submitted a comment letter on the Preliminary Ecological Risk Assessment (July 2017), the Ecological Risk

Mitigation (February 2020), the Proposed Risk Mitigation (January 2021), and the Proposed Interim Decision (March 2023).

Status: EPA released the Interim Decision on March 7, 2024.

Comment period on Preliminary Ecological Risk Assessment (2016-2017) Pyrethroids Ecological RA and Risk Mitigation Proposal (2019-2021) Comment period on Etofenprox Proposed Interim Decision (March 2023) EPA analyzed comments, issued nterim Decision on March 7, 2024

Endangered Species Act (ESA) Consultation

EPA issues Final Decision

Next step: ESA consultation

Recommendation: No opportunity for comment at this time.

BACWA Comments to EPA (3/23/23) on Etofenprox Proposed Interim Registration Review Decision

"BACWA Appreciates EPA's Linkage of Indoor Uses with Aquatic Toxicity BACWA appreciates EPA's acknowledgement that indoor uses of pyrethroids result in potential risks to aquatic

pyrethroids result in potential risks to aquati invertebrates and fish. The PID includes the following statement (emphasis added):

"The residential indoor products containing pyrethroids are expected to result in ecological risks of concern from the use of pet shampoos; pyrethroid-impregnated or treated textiles being laundered; and indoor household treatments (e.g., carpet, furniture, or bedding) to control bed bugs, fleas, and other pests with public health significance.

Under these use patterns, the wastewater that

EPA Response

"Water treatment facilities expressed concern regarding the likelihood of residues in water treatment facilities due to down-the-drain discharges. As discussed in the document Pyrethroids and Pyrethrins Ecological Risk Mitigation Proposal for 23 Chemicals (EPA-HO-OPP-2008-0331-0096), down-the-drainuses of etofenprox have been modeled. The primary focus was on uses considered to have a higher potential to lead to downthe-drain exposure (e.g., pet shampoos, pet bedding, and impregnated fibers that may be regularly washed); however, EFED considered indoor foggers, baits, crack/crevice treatments, bed/mattress treatments, and pet spot-on treatments to have lower potential for substantive

Yes. EPA continues to acknowledge potential risks to aquatic life due to indoor uses of etofenprox, focused on pet shampoos, pet bedding and impregnated fibers.

Did USEPA consider BACWA's comments?

goes down-the-drain contains pyrethroid residues and is treated in wastewater treatment plants (WWTPs) or publicly-owned treatment works (POTWs) and then discharged to waterbodies. A portion of the pyrethroid residues remains in the water discharged to the outdoor waterbodies and results in potential risks to aquatic invertebrates and fish..."

releases into publicly owned treatment works (POTWs and wastewater treatment plants (WWTPs)..." (Etofenprox: Response to Public Comments on the Preliminary Interim Decision, May 10, 2023, p.6)

BACWA appreciates that this reaffirms EPA's finding that pyrethroids discharges to municipal wastewater systems pose ecological risks that should be mitigated."

"BACWA Seeks Additional Mitigations That

Address Indoor Uses To mitigate for the impacts of indoor use (including foggers, sprays, and on-pet products), the PID suggests that sufficient mitigation will be label language to reduce rinsing of container residue down the drain:

"Mitigation to address risks from the indoor use of products containing these chemicals focuses on reducing the amount of residues being poured down-the-drain."

While we greatly appreciate that EPA has proposed product label improvements toward preventing incidents like dumping unused products, we are disappointed that EPA continues a pattern of ignoring the main problem of indoor use – continuous

"...Although the assessment indicated that based on this modeling, treatment facilities should be able to achieve greater than 90% removal of residues (based on monitoring data), there were still risks of concern for aquatic invertebrates as a result of downthe-drain modeling. The agency acknowledged though that omission of some uses may underestimate actual exposure; however, EPA did not believe that further refinement of the down-thedrain model would likely change the risk conclusions and proposed mitigation measures." (Etofenprox: Response to Public Comments on the Preliminary Interim Decision, May 10, 2023, p.6-7)

Partially. EPA acknowledged that, "the omission of some (indoor) uses may underestimate actual exposure". However, EPA—without evidence or modeling—concluded that it "did not believe" that this underestimate would change risk conclusions.

discharges associated with ordinary use of foggers, sprays, pet topicals and pet shampoos. The PID states (without evidence or modeling) that the mitigation focused on container residue will be sufficient."		
 BACWA recommended five additional mitigation measures (summarized below): Add additional label clarifications for pet shampoos. Add label language for on-pet topicals that reduces unintended wash-off. Conduct modeling to better understand fogger and spray mitigation. Add limits to indoor spot treatments. 	See response above.	EPA largely ignored 4 of the 5 recommendations. Despite statements that pet shampoos were of higher potential for down-the-drain exposure, EPA did not incorporate label language for pet shampoo and stated that mitigations were not warranted. EPA also ignored the wash-off evidence and did not incorporate label language to reduce wash-off of topics. Similarly, EPA did not seek to model foggers or sprays or limit indoor spot treatments.
"5) Incorporate integrated pest management and advancement in oral medications in pet-related pest control when evaluating mitigation alternatives. EPA stated that etofenprox is one of only two pyrethroids for cats, suggesting that the tool box for cat owners is limited. Meanwhile, there are numerous additional non-pyrethroid products for cats, including spinosad, lufenuron, selamectin, and sarolaner, some of which also protect for other pests including heartworm and roundworm. In addition, there are mechanical mitigations, such as vacuuming and flea combs that would protect the cat and household. Further, while the PID extensively describes the public health importance of controlling fleas and ticks, there is little acknowledgement of the advances in oral flea/tick medications nor any acknowledgment of holistic IPM approaches that	"EPA agrees that there are also effective oral flea and tick medications for dogs, though there is a smaller subset of these medications for cats. EPA also acknowledges that tactics such as vacuuming to remove fleas or ticks that enter inhabited structures, keeping lawns trimmed to reduce harborage of these pests, and avoiding areas likely to have large pest populations can help reduce exposure to these serious public health pests. In describing the benefits of etofenprox as a pet protection option, EPA assumed that non-chemical tactics such as those described above are also already in use but are inadequate to provide comprehensive protection, and took into	Yes, EPA considered BACWA's IPM comment but concluded that the availability of a variety of pet flea products, including etofenprox, was very important.

include prevention and mechanical controls to reduce impacts of fleas and ticks. Some studies indicate that oral medications may be more effective than topical spot treatments possibly because there is less reliance on proper application by the owner. BACWA suggests that EPA--in particular EPA's Biological and Economic Analysis Division (BEAD)—consider these flea/tick alternatives in their analysis."

account that there are pet owners for whom one or more of these tactics is impractical for their living circumstances (for example, renters in apartment buildings often have little control over how often nearby grassy areas are trimmed).

EPA also considered the availability of other oral, topical, and collar-delivered chemical protection options available in the marketplace and noted that these could offer similar protection to etofenprox, particularly for pet dogs, because many products are not registered for use on cats (e.g., oral forms of afoxolaner, topical and collar products containing older pyrethroids such as permethrin). That said, EPA finds the pet protection benefits provided by etofenprox remain significant given the diversity in individual pet and human consumer preferences, variations in ability to tolerate oral vs topical/collardelivered products, and the need to give consumers effective protection from disease-carrying fleas and ticks that can be used by as many people as possible." (Etofenprox Interim Registration Review Decision, Case Number 7407, February 2024, pp. 71-72)