

Pesticides: Bifenthrin – EPA-HQ-OPP-2010-0384, Cyfluthrins – EPA-HQ-OPP-2010-0684, Cypermethrins – EPA-HQ-OPP-2012-0167, Cyphenothrin – EPA-HQ-OPP-2009-0842, d-Phenothrin – EPA-HQ-OPP-2011-0539, Deltamethrin – EPA-HQ-OPP-2009-0637, Esfenvalerate – EPA-HQ-OPP-2009-0301, Etofenprox – EPA-HQ-OPP-2007-0804, Fenpropathrin – EPA-HQ-OPP-2010-0422, Flumethrin – EPA-HQ-OPP-2016-0031, Gamma-cyhalothrin – EPA-HQ-OPP-2010-0479, Imiprothrin – EPA-HQ-OPP-2011-0692, Lambda-cyhalothrin – EPA-HQ-OPP-2010-0480, Momfluorothrin – EPA-HQ-OPP-2015-0752, Permethrin – EPA-HQ-OPP-2011-0039, Prallethrin – EPA-HQ-OPP-2011-1009, Tau-fluvalinate – EPA-HQ-OPP-2010-0915, Tefluthrin – EPA-HQ-OPP-2012-0501, Tetramethrin – EPA-HQ-OPP-2011-0907

Use: Insecticides

Why we care: Priority pesticide due to toxicity, use, and monitoring data. 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 Proposal (February 2020), the Bifenthrin Proposed Interim Decision (July 2020) and the Permethrin Proposed Interim Decision (July 2020).

Status: EPA released the Final Interim Registration Review Decision (ID).



Next steps: ESA Consultation is required but unlikely to begin before 2022.

Recommendation: No action is needed at this time as there is no opportunity for public comment.

BACWA Comments to EPA (02/12/2020, 07/06/2020 (Permethrin), 07/06/2020 (Bifenthrin))	EPA Response	Did EPA incorporate BACWA's comment?
<p>BACWA appreciates that EPA's ecological risk mitigation proposal reaffirms EPA's finding that pyrethroids discharges to municipal wastewater systems pose ecological risks that should be mitigated. Because 100% of POTWs must comply with the Federal Clean Water Act 100% of the time, based on both EPA modeling and available monitoring, risk mitigation for pyrethroids is imperative...</p> <p>We request EPA correct inaccuracies in its summary that understate the nationwide costs to POTWs, specifically:</p>	<p>"EPA acknowledges that POTWs in all states, including California, may face challenges in removing certain pesticides from incoming wastewater using conventional techniques, and that these pesticides may occur in treated effluent at detectable levels. EPA further acknowledges that, although California has not adopted state-specific aquatic life criteria for pyrethroids, several jurisdictions within the state have exercised the Clean Water Act option to adopt numeric water quality standards for pyrethroids in treated effluent rather than narrative standards, and thus face a challenge in meeting specific quantitative benchmarks using current wastewater treatment</p>	<p>No.</p> <p>EPA still does not seem to understand that California is no different than other states with regard to CWA implementation.</p>

<ol style="list-style-type: none"> 1. Clarify that California POTWs do not face unique challenges; POTWs in all states face the same challenges 2. Clarify that the water quality standard driving the POTW challenges is a national standard that comes directly from the Federal Clean Water Act 3. Clarify that California has not adopted aquatic life criteria for pyrethroids <p>EPA must recognize that the challenges posed by the presence of pyrethroids in wastewater are not California-specific. Pyrethroids are used nationwide...”</p>	<p>technology.” (Pyrethroids and Pyrethrins Revised Ecological Risk Mitigation and Response to Comments on the Ecological Risk Mitigation Proposal For 23 Chemicals, p. 32)</p>	
<p>EPA’s Sweeping Risk/Benefit Finding Should Be Revised to Differentiate Among the 23 Pyrethroids and Pyrethrins and Among the Various Indoor Uses of the 23 Chemicals.</p> <p>A more nuanced approach to completing EPA’s statutory obligation to weigh the societal costs and benefits of the 23 pyrethroids and pyrethrins would better serve our nation. Ideally, EPA would evaluate the balance between costs and benefits for each of the 23 chemicals and each use of each chemical, considering the full range of available pest control alternatives for each use. We realize that such a complex evaluation would be impractical. But a focused evaluation of some individual uses – uses that are most closely linked to the external costs of pyrethroids use – are practical, and are necessary to support EPA’s decision.</p> <p>We request an individual evaluation for only one major source of pyrethroids discharges to POTWs, pet shampoos. Our evaluation (below) demonstrates that the benefit of maintaining market availability of just 3 bifenthrin pet shampoo products and only 9 permethrin pet shampoo products is vastly outweighed by the costs to POTWs.</p>	<p>“The pyrethroids have many uses across agricultural, residential, commercial, indoor and outdoor sites, and were grouped into broad categories to compare the potential exposure for those active ingredients that were not quantitatively assessed in the 2016 Ecological Risk Assessment. The ecological risk assessment grouped uses into four major categories: indoor uses, outdoor non-agricultural uses, outdoor agricultural uses and wide-area mosquito adulticide uses. For the purposes of risk-benefit analysis, and EPA considers this approach to provide adequate differentiation among uses assessed for the group of 23 chemicals. Among outdoor uses, EPA is aware of the potential for applications to impervious surfaces to contribute to waterway pollution. The Agency’s mitigation for outdoor non-agricultural use as a category is reflective of those risk contributions. The Agency disagrees that a separate analysis of each pyrethroid or each specific use is needed to support EPA’s risk assessment and risk management conclusions, and disagrees that a representative analysis featuring bifenthrin is necessary, as bifenthrin is not outstanding among pyrethroids in terms of RQ exceedances, aquatic invertebrate toxicity, or environmental persistence.</p>	<p>No.</p>

EPA's risk assessment supports the conclusions that there are risks of concern for aquatic organisms from exposure to pyrethroids, which is supported by water monitoring data that indicate that pyrethroids are present in the environment that result in adverse effects to aquatic invertebrates. The benefits from the use of these chemicals for these uses is also very high. For further discussion on ecological risk assessment, see EPA's Joint Response from OPP's Environmental Fate and Effects Division and Pesticide Re-evaluation Division to Comments on the Preliminary Risk Assessments for Pyrethroids and Pyrethrins Insecticides. For more discussion on usage, alternatives, benefits and impacts conducted for the outdoor and indoor uses of the pyrethroids group, see the Usage Characterization and Alternatives Summary for Synthetic Pyrethroids Used in Residential Lawns and Outdoor Vegetative Spot Treatments and the Qualitative Overview of Alternatives for Selected Use Patterns of Pyrethroids Being Assessed for a Down-the-Drain Risk Assessment, available in the pyrethroids special docket (EPA-HQOPP-2008-0331). (Pyrethroids and Pyrethrins Revised Ecological Risk Mitigation and Response to Comments on the Ecological Risk Mitigation Proposal For 23 Chemicals, p. 33)

"The Agency appreciates the comments from NACWA, CASQA, SFBWRQCB, and BACWA. EPA has considered these comments and has decided not to develop unique chemical-specific risk mitigation for bifenthrin at this time beyond what is already required as part of this ID. EPA concludes that bifenthrin provides high benefits for controlling pests in indoor residential areas, outdoor urban areas, in agricultural crop production, and as an adult mosquitocide to control vectors for human disease. The Agency is requiring risk mitigation primarily to address risk to non-target invertebrates and fish; however, risks

	<p>may remain to non-target organisms even after mitigation. Any remaining risks are outweighed by the benefits of bifenthrin use. In addition, EPA notes that all states, including California, are authorized to restrict pesticide use according to state requirements/needs. For a more detailed response to these comments, please see the Pyrethroids and Pyrethrins Revised Ecological Risk Mitigation and Response to Comments on the Ecological Risk Mitigation Proposal For 23 Chemicals.” (Bifenthrin Interim Registration Review Decision Case Number 7402 September 2020, p.14)</p>	
<p>BACWA Requests that EPA End Use of Bifenthrin and Permethrin in Pet Shampoos</p>	<p>“The Agency’s ecological mitigation for pet products containing pyrethroids includes “do not pour or dispose” statements and labeling requirements specifying that the pet product application is to be made indoors. EPA is not proposing ecological mitigation for bifenthrin or permethrin beyond what is outlined for all pyrethroids in the Pyrethroids and Pyrethrins: Ecological Risk Mitigation Proposal For 23 Chemicals due to the benefits of its use and the comparative risk of their alternatives.⁶ Bifenthrin and permethrin pet shampoos have high benefits; while spot-ons and collars are useful for regular protection of pets, there is also a need for permethrin-and bifenthrin-based shampoos, dusts and sprays when an infestation occurs. Furthermore, the Agency would expect greater detection frequencies and concentrations of potential alternative insecticides (including other pyrethroids and fipronil) to occur if bifenthrin or permethrin were removed from the market, because these insecticides would likely take their place.” (Pyrethroids and Pyrethrins Revised Ecological Risk Mitigation and Response to Comments on the Ecological Risk Mitigation Proposal For 23 Chemicals, p. 31)</p>	<p>No.</p> <p>EPA did not provide evidence for its argument that bifenthrin and permethrin shampoos are necessary. This part of the decision seems legally questionable in light of the recent court decision clarifying EPA’s responsibilities with regard to evaluating costs/benefits of pesticides.</p>

<p>BACWA Requests That EPA Provide a Schedule and a Specific Plan to address POTW Discharge Ecological Risks from Pet Spot-Ons and Other Topical Pet Treatments</p>	<p>“The Proposed Guidelines for Efficacy Testing of Topically Applied Pesticides Used Against Certain Ectoparasitic Pests on Pets, scheduled to be finalized in March 2021, are not intended to serve as mitigation for pyrethroid pet products. Furthermore, the link between the Proposed Guidelines and ecological exposure is an error in EPA’s Ecological Risk Mitigation Proposal, as the Proposed Guidelines will not measure how much pesticide may be washed off of the pet and down the drain. The Proposed Guidelines are only intended to provide acceptable test methods to assure that pet products are effective against target pests of public health importance based on the use directions and marketing claims for the specific product.” (Pyrethroids and Pyrethrins Revised Ecological Risk Mitigation and Response to Comments on the Ecological Risk Mitigation Proposal For 23 Chemicals, p. 32)</p>	<p>No.</p>
<p>EPA Proposed Label Clarifications – Pictograms, Stewardship Statement, and Spanish Language – Support with Modifications- BACWA supports the concept of a graphic showing an image of an “X” – or better the “do not” symbol– over a drain on product packages. We have extensive experience with regard to graphically communicating “do not discharge” to various audiences and have found this approach to be very effective, if the graphic is properly designed. We appreciate EPA’s example (shown to the right), but cannot support the use of the EPA graphic due to lack of clarity, particularly when the image is reduced in size to fit on smaller packaging.</p> <p>We request that EPA please select a clear, schematic graphic that is very obvious as to what is prohibited. We would be pleased to work with EPA, our national association</p>	<p>“The Agency thanks the commenters for their comments on the indoor use statements. Based on the comments, the Agency has updated the label language to include an image of the required pictogram, and additional clarification that certain products (i.e., pet shampoos) may enter an indoor drain if labeled for that purpose.” (Pyrethroids and Pyrethrins Revised Ecological Risk Mitigation and Response to Comments on the Ecological Risk Mitigation Proposal For 23 Chemicals, p. 6)</p> <p>“Regarding the suggestion from BACWA to add the down-the-drain advisory statements to all pyrethroids/pyrethrins labels (both agricultural and non-agricultural), outdoor and agricultural product labels already have label statements to prevent these chemicals from reaching drainage systems. In contrast, products with indoor uses do not currently have this language. Therefore, EPA has determined that these down-the-drain advisory statements are only</p>	<p>Partially.</p> <p>EPA is using the “no dumping down the drain” graphic that BACWA provided.</p>

<p>NACWA, and registrants toward selecting an appropriate graphic.</p> <p>To ensure that these label elements completely and effectively address products that may be discharged “down-the-drain” into municipal wastewater collection systems, we request that EPA modify the “label table” in Appendix B to:</p> <ol style="list-style-type: none"> 1. Identify a specific graphic and require the same graphic be used on all products. 2. Establish minimum size for the graphic, to ensure that it is legible, i.e., no smaller than 1.5 square centimeters unless this size is greater than 10% of the size of the label. 3. Modify the list of products that must include the graphic, stewardship language, and Spanish translations to specify: a. The graphic, stewardship language, and Spanish are required on all types products - except pet shampoos – that are packaged in a form that could be discharged into a drain (i.e., anything other than an impregnated material like a collar or fly strip). The graphic should not be placed on pet shampoo product labels, to avoid inadvertently implying that the wash water should not be discharged to the sewer. The primary discharge alternative – outdoors, would likely direct wash water to storm drains where it could flow untreated to creeks. b. The graphic, stewardship language, and Spanish are required on all categories of products, not just those labeled for indoor residential use as indicated in the header on the label table in Appendix B. At a minimum, the label table should be revised to indicate the graphic must be placed on all products labeled for outdoor or indoor use in non-agricultural settings (as indicated in the text on page 39). We would prefer that the graphic be required on all products, as 	<p>necessary on products with indoor uses. However, registrants have the option to consider including this language (i.e., “unless for use in pipes and sinks”) to agricultural product labels at their discretion. EPA recognizes that Spanish labeling may increase the size of residential labels, however the Agency determined that providing this advisory information in Spanish would inform more users that products should not be disposed of down the drain, unless they are specifically labelled for that use.” (Pyrethroids and Pyrethrins Revised Ecological Risk Mitigation and Response to Comments on the Ecological Risk Mitigation Proposal For 23 Chemicals, p. 7)</p>	
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<p>even agricultural and mosquito abatement products are often mixed in facilities with sinks and floor drains.</p> <p>c. The graphic, stewardship language, and Spanish are required for all 23 pyrethroids and pyrethrins (not just the subset listed in the left column of the label table in Appendix B), recognizing that all pyrethroids have potential to enter sewer drains. The subset of the 23 chemicals identified for this requirement in Appendix omits pyrethroids (e.g., momfluorothrin) that could also enter sewer drains from indoor residential use.</p> <p>BACWA also supports EPA’s proposal to add drain discharge prohibitions (“stewardship statement”) and the Spanish translation of the stewardship statement to product labels. For those products labeled for use directly inside pipes/sinks, instead of EPA’s proposal (“Do not allow to enter indoor or outdoor drains unless labeled for drain treatments.”), we request that EPA instead require the following language, which is more clear and complete:</p> <p>“Do not pour down-the-drain or sewer except when following treatment instructions for [drains] [sewers]”. Call your local solid waste agency for local disposal options.”</p>		
<p>EPA Proposed Label Clarifications – Indoor/Outdoor Use Specification – Support- BACWA supports EPA’s proposal to require that product labels specifically state whether particular products are allowed to be used indoors only, outdoors only, or both indoors and outdoors. This will assist with identification of products that may be discharged to the sewer system.</p>	<p>Yes, the EPA agreed to this suggestion. The label correction shows up in the appendices of the Revised Ecological Risk Mitigation as well as the bifenthrin and permethrin PIDs. (Pyrethroids and Pyrethrins Revised Ecological Risk Mitigation and Response to Comments on the Ecological Risk Mitigation Proposal For 23 Chemicals, p. 43)</p>	<p>Yes.</p>
<p>BACWA Requests Additional Label Clarifications for Pet Shampoos- To avoid overuse of pet shampoos, BACWA requests that EPA require the labels for all pyrethroids and</p>	<p>“With regard to specifying the quantity used and rate for pet shampoos, some product labels currently include specific guidance on the quantity needed, while others</p>	<p>No.</p>

<p>pyrethrins pet shampoos provide specific application quantities and allowable frequencies of use. Most current shampoo labels do not specify application quantities, even though overuse could potentially harm a pet. Some product labels already contain this information in a handy table (for example see EPA Reg. No.: 2596-177). We suggest that EPA require all shampoos have a table indicating the correct shampoo volume for the pet body weight. Labels provide little or no application frequency information – and sometimes that information is inconsistent. For example, one product label indicates "maximum effectiveness" is achieved by washing a dog every 30 days with the product, but across the front of the label it says, "kills ticks and fleas every 7 days" (EPA Reg. No.: 2517-138).</p>	<p>allow for more flexibility. This is appropriate because the application quantity and rate will inherently vary based on the size of the pet and its hair length, making precise restrictions impractical.” (Pyrethroids and Pyrethrins Revised Ecological Risk Mitigation and Response to Comments on the Ecological Risk Mitigation Proposal For 23 Chemicals, p. 7)</p>	
<p>BACWA Requests Modification of Pet Washing Label Language on Spot-On Pet Products- BACWA requests that EPA require removal of all label language on pet spot-on products that encourages washing and water exposure of treated pets. Label statements such as “water proof” should be removed. All labels should dissuade owners from washing their pets for at least 2 weeks after treatment. Please see our prior letter (attached) which provides the scientific basis for this request.</p>	<p>“With regard to other pet product label recommendations, prohibiting washing of pets for two weeks after spot-on applications is often not practical for pet owners because of the varied environments pets may traverse. Waterproof claims are allowed due to the human health and pet health benefits afforded by products that are efficacious against target pests after a pet is bathed or exposed to rain. Registrants are required to support waterproof claims by submitting data showing that the product is effective against target pests after the pet has been washed.” (Pyrethroids and Pyrethrins Revised Ecological Risk Mitigation and Response to Comments on the Ecological Risk Mitigation Proposal For 23 Chemicals, p. 7)</p>	<p>No.</p>
<p>BACWA Requests POTW Notification Requirement for Wastewater Collection System Applications- Wastewater collection systems are commonly managed separately from wastewater treatment plants, and it is not uncommon for multiple municipal and private wastewater collection</p>	<p>“EPA is aware that, occasionally, municipalities may use pyrethroid insecticides, such as deltamethrin (EPA Reg # 53883-276), mixed with an immobilizing latex paint product to treat gaps or exit points around manhole cover and drain premises to control insect infestations emanating</p>	<p>No.</p>

<p>systems to flow to a single, separately owned and operated wastewater treatment facility. Treatment plant operators may not be aware of chemicals being applied in the upstream collection system. Collection system operators may not be aware of the cost and compliance implications of their selection of insecticides. To bridge this gap, BACWA requests that EPA add label language on the small group of pyrethroids products that may be applied in wastewater collection systems to require downstream POTW notification prior to initiating use of the product. If notification to downstream wastewater treatment facilities is required, wastewater treatment operations staff can work with collection system staff to ensure that applications do not contribute to effluent compliance challenges (e.g., toxicity test failures). Specifically, we request that EPA require the following language be placed on all products labeled for application in wastewater collection systems (including manholes): <i>“Applicators must notify downstream wastewater treatment facilities prior to the first application of this product on manholes or in the wastewater collection system.”</i></p>	<p>from public sewers. While EPA has required notification of downstream wastewater facilities for chemicals like the copper compounds and diquat dibromide, both intended to be applied directly to sewer systems, current pyrethroid label instructions prohibit the application of insecticides directly into sewers. Therefore, EPA does not consider a discharge warning for POTWs practical for this type of use. (Pyrethroids and Pyrethrins Revised Ecological Risk Mitigation and Response to Comments on the Ecological Risk Mitigation Proposal For 23 Chemicals, p. 32)</p>	
<p>BACWA Requests Correction of Appendix D (List of Chemical Use Sites)- In our review of Appendix D, we found multiple errors and omissions. For example, the Appendix omits Bifenthrin pet flea shampoos (which were EPA registered as of 12/12/19). Multiple indoor uses are listed under “Urban, outdoor, non-agricultural.” We request that EPA correct this table so that it accurately reflects the registered uses of pyrethroids. Some of the errors in Appendix D are carried over to Appendix B, which specifies the proposed labeling changes.</p>	<p>“Regarding comments on mistakes in Appendix D of the Ecological Risk Mitigation Proposal, Appendix D was never meant to be a full list of all the use sites for each chemical, but only as summaries for reference. In addition, some new uses for certain chemicals were approved by the Agency after the document was finalized and were therefore not included in the original list. The required statements listed in the label tables will apply to new and future pyrethroid products with those uses.” (Pyrethroids and Pyrethrins Revised Ecological Risk Mitigation and Response to Comments on the Ecological Risk Mitigation Proposal For 23 Chemicals, p. 7)</p>	<p>Yes.</p>

<p>BACWA May Submit Additional Comments Because Pyrethroids Ecological Risk Mitigation is Not Complete Without Individual Decisions- BACWA may have additional ecological risk mitigation comments once we are able to review proposed interim decisions for the individual pyrethroids that pose the greatest risks to POTW effluent quality (e.g., bifenthrin and permethrin). These upcoming decisions that are currently unavailable for public review will contain information that is relevant to down-the-drain discharges. For example:</p> <ul style="list-style-type: none"> • EPA has indicated that it intends to address Endangered Species Act compliance in its individual decisions. • EPA recently released information indicating that it intends to revise its assumptions about household exposures, particularly for children, based partly on a new assumption that “exposures to children below 6 months of age are expected to be negligible.” We anticipate a lively public conversation around this assumption, because we are aware that very young children contact pets that may be treated with pyrethroids. Our own outreach materials include a stock photo of a baby with a pet. <p>Because these updates could provide us relevant information that we lack today and might lead to modifications or additions to EPA’s risk mitigation for pet treatments, we reserve the right to provide additional input on ecological risk mitigation during public comment periods on proposed interim decisions for individual pyrethroids.</p>	<p>“The information cited in the comment is the 12/12/19 document addressing the re-evaluation of the FQPA safety factor. HED notes that OPP’s human health risk assessments for pesticides, including the pyrethroids, consider the potential for exposure to infants < 6 months old. The dietary assessments for pyrethroids considered all registered food uses as well as the potential for residues from drinking water (directly consumed and used in food preparation, such as infant formula). Drinking water residue estimates were either high-end modeled estimates or were the limit of solubility for the individual pesticides. In general, pyrethroids have low solubility in water and, based on the fate properties of this class of pesticides, residues in drinking water are not considered to be a significant exposure source. Nonetheless, drinking water exposures were assessed.</p> <p>For considering children’s aggregate exposure and risk (i.e., from food, water and residential sources) HED used the Index Lifestage Approach, which is described in the 2012 Standard Operating Procedures (SOPs) for Residential Pesticide Exposure Assessment. Based on activity and exposure considerations delineated in the document, HED uses children 1-2 years old as the index lifestage for pyrethroids; risk estimates for children 1-2 years old are protective of infants < 6 months old and other children’s lifestages.” (U.S.EPA- Pyrethroids: Health Effects Division Response to Public Comments Submitted to the Special Docket for Pyrethroids, Pyrethrins, and Synergists, p.4)</p>	<p>N/A.</p>
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