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OPP Docket, Environmental Protection Agency Docket Center
1200 Pennsylvania Ave. NW.
Washington, DC 20460-0001

Attention Docket ID No. EPA-HQ-OPP-2019-0185
EPA Proposed Revised Method for National Level Endangered Species Risk Assessment Process for Biological Evaluations of Pesticides

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The American Mosquito Control Association (AMCA) is submitting these comments in response to EPA's Proposed Revised Method for National Level Endangered Species Risk Assessment Process for Biological Evaluations of Pesticides Revised Docket # OPP-2019-0185. Our frontline methodologies for controlling mosquito-borne diseases are profoundly impacted by legal restrictions resulting from the Endangered Species Act. Thus, AMCA considers it critical to base modeling assumptions on realistic, albeit conservative, scenarios as proposed in the revised assessment process.

The AMCA is a scientific/educational association of over 1600 vector control professionals that provide mosquito control services to protect both public health and the environment. As a public health association with a profound interest in the safe and effective use of control products, the AMCA recognizes the significance of the risk assessment process in identifying, evaluating, and mitigating potential hazards to humans and the environment from federally registered pesticides, while allowing reasonable and appropriate use of these products in an environmentally compatible manner.

The changes being proposed in the Pre-publication Federal Register Notice are summarized below.

Proposed Revision: The pilot Biological Evaluations relied on extremely conservative usage assumptions from pesticide product labels to represent where the pilot chemicals were likely to be applied. The revised method proposes to incorporate usage data (e.g.,

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survey data, including actual application rates) in the determination of where a pesticide is likely to be applied.

AMCA Comment: Heretofore, ESA decisions have, by necessity, been primarily based on hazard rather than risk. Without a knowledgeable grasp on application dynamics, EPA has had to rely on the inherent and known toxicity of a pesticide to declare that the application may affect a listed species. It's not that exposures were not taken into account. But without solid data elucidating potential exposures from mosquito control operations, EPA has had to rely on worst-case scenarios that didn't approach compartment with actual product depositions. Oftentimes this resulted in gross overestimations of risk that would never occur during actual operations. It is thus imperative that a listing of species be made in accordance with the most current data sets. It is also incumbent upon the vector control community charged with protecting public health to come up with novel, environmentally compatible control strategies and products, using them strictly in accordance with label specifications.

Proposed Revision: Based on the accuracy of the spatial data utilized and the conservative assumptions related to the action area and potential drift, EPA is interpreting a <1% overlap of listed species' ranges with potential use sites as unreliable and not representative of real exposure potential.

AMCA Comment: Here again, if the goal is protection of listed species, actual usage rates and parameters are critical components. AMCA stands willing to provide the Agency and Services with usage data that it has at its disposal in order to confirm overlap. It should be noted that mosquito control districts do not often spray entire counties. Mosquito populations requiring control are often localized. These affected localities could change over periods of time due to any number of factors including demographics, land development, and changing rainfall patterns.

Proposed Revision: EPA's revised method proposes the use of probabilistic methods to determine the likelihood of a species to be adversely affected by a pesticide. The goal of the probabilistic analysis is to more fully capture and characterize the variability in the range of potential exposures and toxicological effects to listed species and to better inform the biological opinion.

AMCA Comment: Probabilistic risk assessment methodologies are a significantly more accurate measure of actual exposures requiring mitigation than deterministic methods. For this reason, AMCA fully supports their usage in risk assessment. They will ensure protection of listed species while promoting measures that protect human health.

Proposed Revision: The fourth major area of revision is to apply a weight-of-evidence framework to distinguish those listed species that are likely to be adversely affected (LAA) from those that are not likely to be adversely affected (NLAA), based on criteria (e.g., dietary preferences, migration patterns, extent of range potentially exposed) associated with the likelihood that an individual will be exposed and affected.

AMCA Comment: Weight of evidence is a widely used measure of the "strength" of a grouping for separating good and bad risk. In many cases of risk management, there no absolutes involved. Therefore, weight of evidence offers the most precise predictive

value. This, too, dovetails nicely with probabilistic methods that take into account the bewildering array of variables that govern exposures.

All four changes will assist the Agency in making more informed decisions regarding the risk to listed species posed by mosquito control operations. This is an immensely important and most welcome development and should result in a more scientifically based framework for Endangered Species Act (ESA) enforcement.

This process will become even more important in the coming years as habitat destruction, human encroachment and increasing introduction of exotic mosquito-borne diseases assume a more prominent role in endangered species discussions. Many of these considerations are at odds with each other and will be extremely difficult to reconcile to everyone's satisfaction. Nevertheless, policy decisions will need to reflect an appreciation for both public health and species protections into the foreseeable future.

In conclusion, the AMCA fully supports the proposed revision as part of a thorough, scientifically rigorous risk assessment process. From these revisions, regulators and pesticide users will derive valid and reliable cost/benefit formulae that fully account for environmental impact while allowing appropriate vector-borne disease control. Critical to this process is a full realization of the unique application parameters in mosquito adulticiding operations as a basis for regulatory decisions. The AMCA believes the public's interests are best served when models used to characterize environmental impacts associated with mosquito control product use accurately reflect accepted mosquito control practice. We recognize the efforts made by EPA to appropriately evaluate realistic parameters in their work to date, and we look forward to further collaboration in addressing future risk assessments.

Highest regards,



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