

# Minor Crop Farmer Alliance

Via *Electronic Docket Submission* <http://www.regulations.gov>

July 1, 2021

Dr. Katrina White  
Senior Scientist, Environmental Fate and Effects Division (7507P)  
Office of Pesticide Programs  
Environmental Protection Agency  
1200 Pennsylvania Ave., NW  
Washington, DC 20460-0001

Re: Comments Concerning *Analysis of Subsurface Metabolism in Groundwater Modeling*  
Docket No. EPA-HQ-OPP-2021-0241)

Dear Dr. White:

The following comments are submitted on behalf of the Minor Crop Farmer Alliance (“MCFA”) and its members in response to the request for comments regarding the *Analysis of Subsurface Metabolism in Groundwater Modeling* (“Modeling Refinement Analysis”) developed by the Environmental Fate and Effects Division (“EFED”).

MCFA is an alliance of national and regional organizations and individuals representing growers, shippers, packers, handlers, and processors of various agricultural commodities, including food, fiber, turf grass, nursery and landscape crops, and organizations involved with public health pesticides. MCFA’s members are extremely interested in the development and safe use of pest management tools including crop protection chemicals that are environmentally sound, safe for applicators, workers, and the public, and do not represent an unreasonable adverse risk to the environment, including humans. While our commodities are often called “minor crops” or “specialty crops,” they contribute to the diverse and highly nutritious diets available for the global population, and to safe and aesthetic surroundings for our homes, schools, and places of business. These U.S. farmers grow more than 500 types of fruit, vegetable, tree nut, flower, ornamental nursery, and turf grass crops in addition to the major bulk (row) commodity crops. Specialty crop production accounts for more than \$60 billion annually, or approximately 40% of total U.S. crop receipts.

Historically, MCFA has been very interested in supporting refinements in assessing the potential risks of pesticides with respect to ground and surface waters. MCFA recognizes that as part of the tolerance and ecological risk assessment process, the Agency must assess the risks from potential pesticide residues in water, including drinking water. Despite the availability of substantial water monitoring data developed by various federal, state, and water agencies for several chemicals, historically, the Agency has relied almost exclusively on water modeling data to assess the potential risks to human health. The outputs from these models often substantially overstate potential exposures and thereby the potential risks. That is understandable because the models typically are based on a cascade of worst-case or very restrictive assumptions. MCFA believes the parameters the Agency uses in its water models should be more reflective of the

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potential exposure that is likely to occur. Certainly, the output of the model should be compared with the results of actual water sampling programs. If the model output varies significantly from the actual water sampling results, a further detailed examination should be made to confirm the reliability of the model before regulatory decisions predicated on it are made.

Based on the foregoing, MCFA was very pleased to see reflected in the Modeling Refinement Analysis the effort by EFED to acknowledge that the current groundwater modeling approach is overly conservative (providing drinking water “exposure estimates that exceed what is considered ‘reasonably conservative’”) and that some initial modest steps can be taken to improve its representativeness. These include potential changes to the model, or adjustments to data inputs, that can make its output results “more reasonable” while at the same time, not sacrificing any meaningful protection to human health. Changing the standard subsurface modeling assumptions to reflect the potential for aerobic soil metabolism and degradation at depths below 1 meter to at least 2 meters is certainly supported by the available data. It is also recognized that the rates of decline may need to be adjusted. MCFA encourages the Agency to continue to develop data with the registrant community or the U.S. Department of Agriculture to determine whether the depth of degradation could be extended to 3 or 4 meters. These changes would appear to be consistent with protecting public health.

MCFA appreciates that the Agency needs to conduct robust and reliable pesticide water assessments. It needs to be fully transparent in how its models work, including identifying all assumptions that may influence a model’s output. Where appropriate, such as the situations reflected in the Modeling Refinement Analysis, changes can be made to make the output of the modeling more robust and representative of the potential risk from a pesticide’s use. The Agency should use every opportunity to make such refinements.

MCFA appreciates the opportunity to provide these comments on the Modeling Refinement Analysis.

Sincerely,



James R. Cranney, Jr.  
Chairman

cc: Jan Matuszko