

February 23, 2016

Office of Pesticide Programs Docket  
Environmental Protection Agency Docket Center (EPA/DC)  
28221T  
1200 Pennsylvania Ave., NW  
Washington, DC 20460-00001

Re: Comments on Pesticide Registration Reviews: Draft Human Health and Ecological Risk Assessments for 7 Organophosphate Pesticides (Chlorpyrifos-methyl (EPA-HQ-OPP-2010-0119), dicofol (EPA-HQ-OPP-2008-0440), dimethoate (EPA-HQ-OPP-2009-0059), ethoprop (EPA-HQ-OPP-2008-0560), profenofos (EPA-HQ-OPP-2008-0345), terbufos (EPA-HQ-OPP-2008-0119), and tribufos (EPA-HQ-OPP-2008-0883))

**The undersigned farmworker, children's health, and environmental advocates urge EPA to ban these seven organophosphate pesticides because of their substantial and demonstrated risks.** These risks cannot be justified and should result in an immediate ban, along with interim protections, such as buffers, to protect the people most vulnerable and likely to be harmed by these dangerous pesticides.

These organophosphates are neurotoxins that disrupt normal brain and muscle function in people and other exposed organisms. Infants, toddlers, developing fetuses, and pregnant women are most at risk from the neurotoxic effects of organophosphates.

- 1) EPA should revoke all tolerances and cancel all uses because each of these organophosphate pesticides has unacceptable food and drinking water risks. Even with the shortcomings of the human health risk analyses, described below, the risks are too high and independently justify a complete ban.
- 2) We applaud EPA for acknowledging that neurodevelopmental harm results from exposure to organophosphates. We also strongly agree with the agency that retaining the 10X Food Quality Protection Act ("FQPA") safety factor is required and supported by extensive data.
  - a. However, the current draft risk assessments do not adequately address the neurodevelopmental harms because EPA still intends to regulate to a 10% cholinesterase inhibition endpoint, which is not sufficient to protect against neurodevelopmental harms that occur at lower exposure levels.
  - b. Even with this shortcoming, exposure to nearly every organophosphate in this docket via food and water results in risks of concern to humans, and were highest for infants and young children. Taken together, this is enough to warrant a ban on these organophosphates on all food uses and near waterways.

- 3) EPA failed to fully address potential endocrine disruption activity from these pesticides.
- 4) Exposure to children and bystanders via spray drift is also underestimated. EPA failed to include direct drift onto people, take-home exposures, dust, and volatilization. Likewise, EPA has failed to conduct an aggregate assessment of all bystander risks. EPA's flawed methodology underestimates risk, most notably for children living in agricultural regions. Based on the risks identified in the draft risk assessments in this docket, we urge EPA to immediately impose no-spray buffers of these organophosphates around schools, day cares, homes, and other places where people gather. This cannot wait until registration review is complete, as these risks are present right now.
- 5) The risks posed to farmworkers are egregious. For some of these pesticides, all occupational handler scenarios result in risks above EPA's level of concern, e.g. terbufos. These risks are unacceptable, even with personal protective equipment and engineering controls and even though EPA ignored direct drift onto farmworkers. The risks were likely further underestimated because exposure scenarios were modeled assuming that labeled personal protective equipment recommendations were strictly followed, an unrealistic assumption.
- 6) EPA failed to protect against and address environmental justice impacts. EPA's brief analysis on environmental justice is very short and fails to acknowledge and address that the harms from these dangerous pesticides fall disproportionately on people of color and low-income individuals.
- 7) EPA is continuing to use the risk quotient approach in ecological risk assessments, failing to incorporate the recommendations made by the National Academy of Sciences in the report titled "*Assessing Risks to Endangered and Threatened Species from Pesticides*," which found that this approach does not truly estimate risk. Despite the deficiencies in how EPA estimates ecological risk, levels of concern ("LOC") for many species were exceeded, in some cases by more than 1000%. Given the sheer number and size of these LOC exceedances, no mitigation measures would be sufficient for the EPA to conclude that no unreasonable adverse effects will occur from the use of these pesticides.
- 8) Following years of EPA non-compliance with the consultation requirements of the Endangered Species Act ("ESA"), the EPA and expert fish and wildlife agencies developed an interim approach on ESA consultations that the agencies told Congress would be "day forward" in ESA implementation for pesticides. Accordingly, the re-registration of these organophosphates must follow the new interim approaches and comply with the requirements of the ESA.

These organophosphate pesticides are highly toxic and should be banned immediately. Risk of harm is exceeded for nearly every single metric in each risk assessment, a sure indication that these pesticides pose unacceptably high risks to children, workers and wildlife and cannot safely be used.

Signed,



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