



July 3, 2023

EWG Comments to the Environmental Protection Agency on the Draft Occupational and Residential Exposure Assessment for Registration Review of pesticide DCPA; Docket ID: EPA-HQ-OPP-2011-0374

The Environmental Working Group, a nonprofit research and policy organization with offices in Washington, D.C., Minneapolis, San Francisco and Sacramento, Calif., urges the Environmental Protection Agency to cancel all uses of dimethyl tetrachloroterephthalate, or DCPA, a pesticide highly toxic to human health, and to revoke DCPA food tolerances.

DCPA, also known by its trade name, Dacthal, is an herbicide that has been banned in the European Union since 2009. Yet DCPA has remained in agricultural use in the United States, endangering human health. EPA classifies DCPA as a possible human carcinogen, and it also harms the thyroid.

According to data from the Department of Agriculture Pesticide Data Program, DCPA has been the most detected pesticide on kale, collard and mustard greens, found on about 60 percent of samples, and is also found on green onion, broccoli and radishes.¹ DCPA degradation products, mostly tetrachloroterephthalic acid, or TPA, have been known to contaminate drinking water sources in California and elsewhere. DCPA has been detected frequently in samples of dust taken from homes in agricultural communities and even been found to travel extremely long distances.^{2,3}

EWG commends the EPA for finally acknowledging the health dangers of this herbicide and alerting the public about these dangers by releasing the findings of this risk assessment ahead of schedule. EWG recommends that, to protect public health, the EPA:

- 1) Protect children's and workers health by canceling all uses of DCPA.
- 2) Revoke food tolerances for DCPA.
- 3) Apply the 10X FQPA safety factor for children's health.

¹ United States Department of Agriculture. Pesticide Data Program.

<https://www.ams.usda.gov/datasets/pdp>

² Harley KG, Parra KL, Camacho J, Bradman A, Nolan JES, Lessard C, et al. Determinants of pesticide concentrations in silicone wristbands worn by Latina adolescent girls in a California farmworker community: The COSECHA youth participatory action study. *Sci Total Environ.* 2019 Feb 20;652:1022-1029. doi: 10.1016/j.scitotenv.2018.10.276. Epub 2018 Oct 23. PMID: 30380470; PMCID: PMC6309742.

³ Yao Y, Harner T, Ma J, Tuduri L, Blanchard P. Sources and occurrence of dacthal in the Canadian atmosphere. *Environ Sci Technol.* 2007 Feb 1;41(3):688-94. doi: 10.1021/es061725r. PMID: 17328171.



EWG recommendations are based on the following information.

EPA should protect children's and workers health by canceling all uses of DCPA.

Since 2002, the EPA has expressed concerns about DCPA's thyroid toxicity, though the agency did not ask for more data from AMVAC, the DCPA manufacturer, until 2013. The EPA did not receive these additional data until nearly 10 years later, in August 2022. The results of this study showed that DCPA could alter thyroid hormone levels in the developing fetus at very low doses, which can result in irreversible developmental harm. EPA's subsequent occupational and residential risk assessment showed that the pesticide could not be used without risk to public health. In some cases, nearly every scenario EPA investigated for people who apply DCPA was of concern, with estimated exposure levels up to 1,500 times what is considered safe.

EPA also noted that the current DCPA label restricts entry to DCPA-treated areas for just 12 hours. But the EPA estimated that health risks relating to exposure to DCPA after treatment persist for 20 to 31 days afterward. In some scenarios, such as harvesting of broccoli, brussels sprouts, cabbage and many other crops, there were no health-protective restricted entry intervals.

EPA also identified serious risks to adults and children from the use of DCPA on athletic fields, as well as from DCPA drift to bystanders who live, work or play near areas where it is used. Furthermore, EPA identified labels that do not comply with prohibitions on DCPA use that were issued in 2005.

Given these labeling issues, and the extensive range of risks identified by EPA, these risks cannot be mitigated by label amendments or restrictions on specific uses. The most prudent course of action is to cancel all uses.

EPA should revoke food tolerances for DCPA.

In addition to urging the agency to cancel the registration of DCPA, EWG also recommends the EPA revoke food tolerances for DCPA, thereby protecting public health through dietary exposure, as well as occupational exposure from food crops.

EPA has not released the findings of the dietary risk assessment. But based on the findings from the new comparative thyroid study, dietary exposure to DCPA would likely pose health risks to the general population, especially for pregnant people. For example, in data from the USDA's most recent tests of pesticides on kale, for samples collected in 2017 and 2018, the maximum concentration found was 85 parts per billion. For people who eat kale, the average and 95th percentile consumption amounts are 106 and 260



grams per day⁴. Using this information, estimated exposure during pregnancy could exceed the level of concern for harm to the thyroid (1 µg/kg body weight per day).

EPA should use the 10X FQPA safety factor for children's health.

In EWG's assessment, the findings of the DCPA registration review process have underscored the need for the EPA to apply consistently the full 10X FQPA children's health safety factor. The 2011 human health risk scoping document for DCPA registration review refers to the previous assessment, conducted in 2002, in which EPA identified a data need for the comparative thyroid assay but reduced the FQPA safety factor to 1X nonetheless⁵. Ultimately, the data from the comparative thyroid assay showed a lower safe dose was needed to protect human health effectively from harms associated with DCPA exposure. Had EPA used the 10X safety factor, the reference dose would likely have covered the dose range in which DCPA causes harm to the developing fetus, though there might have been some risks even in that instance. But mitigations and restrictions on DCPA use might have been put into place earlier.

EPA has delayed acting on DCPA for far too long and should take immediate steps to protect public health by revoking food tolerances for DCPA and canceling all uses.

We appreciate the opportunity to comment.

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⁴ US EPA. Office of Pesticides Program. What We Eat In America - Food Commodity Intake Database 2005-10. <https://fcid.foodrisk.org/#>

⁵ Environmental Protection Agency. DCPA. (Chlorthal Dimethyl). Human Health Assessment Scoping Document in Support of Registration Review. May 27, 2011.