January 30, 2024

Julie Henderson, Director
Karen Morrison, Chief Deputy Director
JT Teerlink, Assistant Director of Registration, Evaluation, and Human Health
California Department of Pesticide Regulation
1001 I St.
Sacramento, CA 95812-4015

RE: Urgent need to end use of DCPA (via email)

Dear Director Henderson, Deputy Director Morrison, and Assistant Director Teerlink:

As you know, last May the USEPA issued a risk assessment for the herbicide DCPA (also known as chlorthal-dimethyl with product name Dacthal). This assessment revealed an extremely high risk of developmental effects from exposure at very low levels. These effects include low birth weight, impaired brain development, decreased IQ, and impaired motor skills that may not become apparent until later in life. These thyroid hormone effects are harmful to the fetuses of pregnant people who live or work inside fields that have been treated or in the vicinity of DCPA applications.[1] This herbicide is mainly used in broccoli and cauliflower, which are both major labor-intensive crops in California. It is also used in onions and some other vegetable crops.

Last July we asked DPR to take emergency action to suspend this pesticide, but were told that this wasn't needed because USEPA was moving quickly to address the problem. USEPA did suspend the technical product in September, which will cut off supply in the long-term, but does not prevent the sale and use of existing stocks. Since last September, USEPA has been in negotiations with the registrant on further mitigations but to date no further action has been taken. We are concerned that longer delays may be looming because the USEPA staff person leading these negotiations has moved to another position within the agency.

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[1] EPA Pesticide Update: EPA Releases Risk Assessment Showing Significant Risks to Human Health from the Herbicide DCPA. May 31,2023, DCPA Occupational and Residential Exposure Assessment for Registration Review of DCPA. USEPA Memorandum. May 18 2023.

Once again, we are urging DPR to take emergency suspension action and also recall existing stocks, which have labels with a Restricted Entry Interval of only 12 hours and no required buffer zone, and extremely inadequate protections for pesticide handlers.

Cancelling registration of this pesticide seems to be the only viable solution given that handlers cannot be fully protected and that the extremely long restricted entry intervals and large buffer zones that are needed to prevent risk of developmental effects would not be feasible, let alone practical.

The risk assessment concluded that most post application exposure scenarios for both occupational and residential by-standers are still of concern greater than 30 days after pesticide application. For broccoli weeding and harvest in a treated field, there is no margin of safety if workers are sent in after 12 hours, as the label allows, and the estimated margin of safety fully 30 days after application is only 17% of the level EPA deems acceptable. In light of these high risks, the Restricted Entry Interval of 12 hours on the label is alarmingly inadequate.

The risk assessment also concluded that the distance required to prevent harmful levels of exposure to spray drift is greater than 300 feet from the field edge for most uses. The pesticide label does not require any buffer between applications and residence or workers in fields or other locations.
Risks to handlers of this pesticide will remain of concern for a vast majority of uses even with use of engineering controls (closed mixing systems and closed tractor cabs) and maximum protective equipment.

We want to emphasize that pregnant farmworkers working in vegetable crops in California and pregnant people living in the vicinity of treated fields, especially in Monterey County, are especially vulnerable. An analysis of 2021 use of DCPA conducted by Safe Ag/ Safe Schools (SASS) found that over 50% of use was in Monterey County. Use on broccoli is extensive from January through August.[2] There is also considerable use in Fresno, Imperial, Kern, Riverside, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz and Ventura Counties.

The UC Berkeley Center for the Health Assessment of Mothers and Children of Salinas (CHAMACOS) study has found DCPA in house dust and in biomonitoring. In a study of pesticide residues in house dust, researchers found that higher dust levels of DCPA were correlated with agricultural use of the pesticide within 2.7 km (1.67 mi) of the residence.[3] In 2016, pesticide body burden in then teenage participants in the CHAMACOS study was measured using silicone pesticide-detecting bracelets. DCPA was detected in 52.6% of samples, and the odds of detecting DCPA were 3.1 times greater if a study participant lived within 100 meters of an agricultural field.[4]

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[2] https://www.pesticidereform.org/wp-content/uploads/2023/11/SASS-MontereyCAC_Dacthal_8-23.pdf , CDPR Pesticide Use Reporting database

[3] https://pubmed.ncbi.nlm.nih.gov/19943644/

[4] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6309742/

In 2021 at DPR Air Monitoring Network stations, DCPA was detected at trace levels in 63.3% of weekly samples at the Santa Maria station, 31.2% of Oxnard station samples (with one quantifiable detection) and 5.9% of Watsonville station samples.[5] No data on distance between AMN stations and DCPA applications is available. Between 2011 and 2014, DCPA was detected at trace levels in 51% of weekly samples, including 1 quantifiable detection. According to an analysis conducted by DPR there was low reported use of DCPA within 5 miles of this monitoring station but high use in some surrounding areas.[6]

Degradates of DCPA have been found in groundwater sampling conducted by DPR. In 2017 levels of MTP and TPA found in 3 wells ranged from 0.9 to 101 ppb (average 41.6 ppb).[7] Follow-up sampling conducted in 2017-2018 in Monterey, Santa Barbara, Riverside, San Luis Obispo, and Ventura counties found detections of TPA in 19 wells at levels of 0.121 – 159 ppb, and DPR made a determination that these detections resulted from legal agricultural use of DCPA. [8]

California has a proud history of taking the initiative to restrict and end use of specific pesticides quicker than USEPA when high risks of health or environmental impacts come to light, most recently for chlorpyrifos, another developmental neurotoxicant. We urge DPR to take emergency suspension action and also recall existing stocks which have labels with a Restricted Entry Interval of only 12 hours and no required buffer zone, and extremely inadequate protections for pesticide handlers.

Sincerely,

Anne Katten
Pesticide and Work Health and Safety Specialist, CRLA Foundation

Jane Sellen and Angel Garcia
Co-Directors, Californians for Pesticide Reform

Yanely Martinez
Central Coast Organizing Coordinator, Safe Ag Safe Schools

Margaret Reeves
Senior Scientist, Pesticide Action Network of North America

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[5] CDPR. Air Monitoring Network Results for 2021 Volume 11. July 2023 (not online)
[6] https://www.cdpr.ca.gov/docs/whs/pdf/dacthal_mitigation_air.pdf
[7] https://www.cdpr.ca.gov/docs/whs/pdf/dacthal_risk_groundwater.pdf
[8] https://www.cdpr.ca.gov/docs/whs/pdf/dacthal_mitigation_study300.pdf, https://www.cdpr.ca.gov/docs/whs/pdf/dacthal_mitigation_legal.pdf