



August 22, 2023

Dear Agricultural Commissioner Hidalgo:

*We urge you to immediately restrict applications of chlorthal-dimethyl (aka DCPA, brand name Dacthal) by implementing the following, until the State suspends the pesticide's use:*

- a) 48-hour Notice of Intent requirements on growers/applicators;*
- b) 1-mile buffer zones around schools, residences, field crews, and other sensitive sites; and*
- c) 30-day field reentry intervals.*

Chlorthal-dimethyl is far too dangerous to use near human beings. Yet, half of all applications in California are made in Monterey County, where the CHAMACOS studies have found large proportions of our Salinas Valley children have been exposed to this harmful pesticide.

**The US EPA finds that current chlorthal-dimethyl labels and use levels allow for exposure “10 to 1,500 times greater than what is considered safe.”**

Chlorthal-dimethyl, already banned or not approved for use in 32 countries,<sup>1</sup> is a significant risk to human health, according to the US EPA's recent risk characterization. “Current allowed uses” of chlorthal-dimethyl can expose fetuses to doses that can lead to “low birth weight, impaired brain development, decreased IQ, and impaired motor skills observed later in life.” The US EPA report<sup>2</sup> is worth quoting at length:

DCPA is an herbicide registered to control weeds in both agricultural and non-agricultural settings. Agricultural crops include cole crops (e.g., broccoli, Brussels sprouts, cabbage), onions, and other vegetables ...

The data EPA examined showed that the dose that caused adverse effects in the fetuses of pregnant rats exposed to DCPA was very low, and these effects were observed at a dose lower than the dose that affected the pregnant rats themselves. Significant thyroid hormone changes were observed in the fetuses in a 2022 study that EPA had ordered the registrant for DCPA to conduct in 2013. In general, *changes in fetal thyroid hormones are linked to low birth weight, impaired brain development, decreased IQ, and impaired motor skills observed later in life.* These thyroid hormone effects are harmful to the fetuses of individuals of child-bearing age that could be exposed to DCPA. The differences in the doses affecting the pregnant rats and their fetuses, extrapolated to humans, mean that a pregnant individual could be exposed to DCPA without experiencing adverse health effects to their own body, while *the fetus being carried could experience permanent and significant lifelong adverse effects* [emphasis added] ...

*The Agency [EPA] found that based on the currently allowed uses of DCPA, there is potential for some people to be exposed to DCPA at levels approaching those that, based on the rat thyroid toxicity test, are expected to result in adverse effects in humans.* For the most common uses of DCPA, there are risks of concern for workers applying and supporting applications of DCPA, using typical equipment at the maximum application rate, even when personal protective equipment and engineering controls are used. There are specific concerns for the fetuses of pregnant individuals who apply DCPA. *Based on current*

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<sup>1</sup> See Pesticide Action Network's consolidated list of banned pesticides, May 2022. <https://pan-international.org/pan-international-consolidated-list-of-banned-pesticides>

<sup>2</sup> <https://www.epa.gov/pesticides/epa-releases-risk-assessment-showing-significant-risks-human-health-herbicide-dcpa>

*labels, some pregnant individuals could be subjected to exposures from 10 to 1,500 times greater than what is considered safe [emphasis added].*

Since chlorthal-dimethyl is not a California restricted material and thus does not require a notice of intent (NOI) for approval of applications by the County Agricultural Commissioner, we call on you to demand NOIs so that you can take measures to protect the community. The Food & Agricultural Code 14006.6(a) does not require advanced notice of unrestricted material “unless the commissioner determines that its use will present an undue hazard when used under local conditions.” As an example, before chlorpyrifos was restricted in 2015, the Ventura County Agricultural Commissioner required 48-hour NOIs and 300-foot buffers around schools for chlorpyrifos use.<sup>3</sup> You can take similar actions regarding chlorthal-dimethyl.

The US EPA says the current 12-hour reentry interval for chlorthal-dimethyl is also unsafe:

*Furthermore, risks to fetuses of individuals entering areas where DCPA has already been applied (post-application workers involved in tasks such as transplanting, weeding, and harvesting) are of concern. In addition, living near areas treated with DCPA could also put the fetuses of pregnant individuals at risk ... The labels currently specify that entry into treated fields must be restricted for 12 hours after application. However, for many crops and tasks, levels of DCPA in the previously treated fields remain of concern for 30 days or more. [emphasis added].*

Following the US EPA’s concerns, we call on you to institute new reentry intervals of at least 30 days for fields and other areas applied with chlorthal-dimethyl.

### **Half of all chlorthal-dimethyl use in the State is applied in Monterey County.**

Of all the counties in California, chlorthal-dimethyl use is highest in Monterey County. Half of all the chlorthal-dimethyl use in the state is in our very county. The Department of Pesticide Regulation (DPR) measures pesticide use in three ways: by number of applications, by pounds applied, and by acres applied. DPR’s pesticide use report for 2021 found in Monterey County 2,978 applications of chlorthal-dimethyl, totaling 84,152 pounds on 25,394 acres. As a proportion of these three measures of chlorthal-dimethyl use in the entire state, Monterey County’s were 48%, 44%, and 54% respectively. The comparison is summarized in Table 1 below.

**Table 1: Half of all chlorthal-dimethyl (DCPA) use in the State is applied in Monterey County, 2021**

<b>Region</b>	<b>Acres of DCPA applied</b>	<b># DCPA applications</b>	<b>Pounds of DCPA</b>
<b>California<sup>4</sup></b>	47,207	6,193	193,533
<b>Monterey County<sup>5</sup></b>	25,394	2,978	84,152
<b>Monterey’s proportion of the State of California</b>	53.8%	48.1%	43.5%

As the US EPA informs us that current labels and use levels for chlorthal-dimethyl endanger farmworker communities, and as applications are overwhelmingly disproportionately high in Monterey County, this

<sup>3</sup> *Agricultural Pesticide Use Near Public Schools in California*, CDPH, 2014, p. 55. <http://www.phi.org/wp-content/uploads/migration/uploads/application/files/m0lvrkqvth6897fl65fyegso0p8qqqudrto9v13d6uiocq0r.pdf>

<sup>4</sup> Statewide figures from [https://www.cdpr.ca.gov/docs/pur/pur21rep/pur\\_data/pur2021\\_subtotals\\_indexed\\_by\\_chemical.pdf](https://www.cdpr.ca.gov/docs/pur/pur21rep/pur_data/pur2021_subtotals_indexed_by_chemical.pdf), [https://www.cdpr.ca.gov/docs/pur/pur21rep/top100lists/top\\_100\\_chemicals\\_by\\_pounds\\_applied.pdf](https://www.cdpr.ca.gov/docs/pur/pur21rep/top100lists/top_100_chemicals_by_pounds_applied.pdf)

<sup>5</sup> Monterey County figures from [https://www.cdpr.ca.gov/docs/pur/pur21rep/2021\\_chemical\\_subtotals\\_by\\_county.pdf](https://www.cdpr.ca.gov/docs/pur/pur21rep/2021_chemical_subtotals_by_county.pdf)

“present[s] an undue hazard when used under local conditions” upon which you must act. No county is under greater threat from chlorthal-dimethyl than Monterey County.

**Salinas Valley mothers and children are exposed to chlorthal-dimethyl, even at great distances from applications.**

We know that Salinas Valley children have been exposed to chlorthal-dimethyl, because it has been found on their bodies and in their homes during multiple studies by the UC Berkeley Center for the Health Assessment of Mothers & Children of Salinas (CHAMACOS) research team.

In the summer of 2016, when chlorthal-dimethyl use by pounds was 28% less than in 2021,<sup>6</sup> the CHAMACOS scientists studied pesticide-detecting silicone bracelets on 97 Salinas Valley Latina teenagers over the course of one week. More than half (52.6%) of the young Latinas’ wristbands registered chlorthal-dimethyl. Referring to the pesticides brand name, Dacthal, the scientists found: "Dacthal was the only pesticide used only in agriculture with statistically significant predictors of detection. The odds of detecting dacthal were 3.1 times greater if a participant lived within 100 m of an agricultural field (95% CI: 1.0-9.5; p <0.05)."<sup>7</sup>

While the UC Berkeley researchers did not test at other intervals beyond 100 meters, in their previous study of house dust CHAMACOS found: "higher levels of dacthal ... were observed if there was agricultural use of these pesticides with ~2.7 km [1.67 mi] of the residence."<sup>8</sup>

Given the CHAMACOS findings of chlorthal-dimethyl on teen Latinas’ wristbands and in dust of homes at higher levels even one-and-two-thirds miles from the pesticide’s applications, we call on you to implement buffer zones around schools, residences, field crews, and other sensitive sites of at least one mile. The Imperial County Agricultural Commissioner has for years required a one-mile buffer around schools for aerial applications,<sup>9</sup> so it is clear you can indeed expand school buffers beyond the current state-required quarter-mile for a pesticide as threatening as chlorthal-dimethyl.

It is time to act. The US EPA warns that cancellation of chlorthal-dimethyl at the federal level will likely take years: “Given the potential that cancellation of this pesticide could take several years to complete, EPA is releasing this assessment in order to provide the public with timely information about its risks.” We know that at least 29 farms plan to apply chlorthal-dimethyl within ¼-mile of 65 schools during the 2023-2024 school calendar (List of farms and schools attached).

Sincerely,



Yanely Martinez  
Organizer, Safe Ag Safe Schools – Monterey Bay region

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<sup>6</sup> 2016: 65,769 pounds in Monterey County, according to the California Department of Public Health’s Pesticide Mapping Tool, <https://trackingcalifornia.org/pesticides/pesticide-mapping-tool>. As noted above, 84,152 pounds were applied in 2021.

<sup>7</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6309742/>

<sup>8</sup> Quoted in <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6309742/>. The house dust study can be found here: <https://pubmed.ncbi.nlm.nih.gov/19943644/>

<sup>9</sup> <https://agcom.imperialcounty.org/wp-content/uploads/2022/06/2022-23-RMP-Conditions-FINAL.pdf>