



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,¹ 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 report² 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*

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

² <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.³ 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

<i>Region</i>	<i>Acres of DCPA applied</i>	<i># DCPA applications</i>	<i>Pounds of DCPA</i>
California⁴	47,207	6,193	193,533
Monterey County⁵	25,394	2,978	84,152
Monterey’s proportion of the State of California	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

³ *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>

⁴ 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/top100lists/top_100_chemicals_by_pounds_applied.pdf

⁵ Monterey County figures from 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.

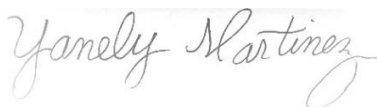
In the summer of 2016, when chlorthal-dimethyl use by pounds was 28% less than in 2021,⁶ the CHAMACOS scientists studied pesticide-detecting silicone bracelets on 97 Salinas Valley Latina teenagers over the course of one week. More than half (52.6%) of the young Latinas’ wristbands registered chlorthal-dimethyl. 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)."⁷

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."⁸

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,⁹ 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

⁶ 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.

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

⁸ 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/>

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

Chlorthal-dimethyl applications planned within ¼-mile of Monterey County schools and daycares July 2023 – June 2024, as reported by growers/farmers under Regulation to Address Pesticides Used Near Schools and Child Day Care Facilities California Code of Regulations, Title 3, Sections 6690-6692

School/Daycare	Place	Operators (Grower/Farmer)
Alisal Campus Early Education Center	Salinas	Merrill Farms; Tom Bengard Ranch
Aromas	Aromas	Taylor Farming
ASJUSD/Mi Escuelita Preschool	Aromas	Taylor Farming
Bardin Elementary	Salinas	Christensen & Giannini; Merrill Farms; Tom Bengard Ranch
Boronda Elementary	Salinas	Boutonnet Farms; Topflavor Farms
Boronda Meadows	Salinas	Topflavor Farms
Boronda Meadows Elementary Preschool	Salinas	Topflavor Farms
Carr Lake Community Day	Salinas	Henry Hibino Farms
Castro Plaza Family Resource Center	Castroville	Merrill Farms; Sea Mist Farms
Castroville Elementary	Castroville	Luis Scattini & Sons; Merrill Farms; Topflavor Farms
Castroville Elementary Preschool	Castroville	Luis Scattini & Sons; Merrill Farms; Topflavor Farms
Cesar Chavez Elementary	Greenfield	Borzini Farms; J.M. Farming
Chalone Peaks Middle	King City	Taylor Farming
Chualar Elementary	Chualar	Taylor Farming; Tanimura & Antle
Crescita Early Education Center	Salinas	Merrill Farms; Moresco Farms
Del Rey Elementary	King City	Taylor Farming
Dr. Oscar F. Loya Preschool	Salinas	Tom Bengard Ranch
El Puente	Salinas	Henry Hibino Farms
Everett Alvarez High	Salinas	Wish Farms of California
Frank Ledesma Elementary	Soledad	Braga Ranch
Gonzales High	Gonzales	Costa Farms; D'Arrigo Bros. Co. of California; Coastal View Farms
Graves Elementary	Salinas	D'Arrigo Bros. Co. of California; Luis Scattini & Sons; Queen Victoria Farms; R.C. Farms; Tanimura & Antle
Greenfield High	Greenfield	Neil Bassetti Farms; Panziera & Thorp
Kids At Play	Salinas	Henry Hibino Farms; Higashi Farms
King City Cooperative Nursery School	King City	Rava Ranches/Fresh FMS So Co
King City High	King City	Taylor Farming
King City Migrant Child Development Center	King City	Rava Ranches/Fresh FMS So Co
Lagunita Elementary	Salinas	Nature Bloom Farms
Laura's Barn Preschool And Child Care Center	Salinas	Monterey Bay Farms; Moresco Farms; Boutonnet Farms; Tanimura & Antle
Little Angels	King City	Rava Ranches/Fresh FMS So Co
Little Angels MSHS	King City	Rava Ranches/Fresh FMS So Co
Little Friends Day Nursery	Salinas	Topflavor Farms
M.A.O.F. Acosta Early Learning Center	Soledad	R.C. Farms
MAOF Tanimura & Antle Early Learning Center	Spreckels	Tanimura & Antle; Moresco Farms
Mary Chapa Academy	Greenfield	Borzini Farms; J.M. Farming
MCOE Chualar Head Start	Chualar	Taylor Farming; Tanimura & Antle
Melodypark Christian Daycare School	Salinas	Monterey Bay Farms
Millennium Charter High	Salinas	Boutonnet Farms; Tanimura & Antle
Mission Elementary	Soledad	Costa Farms
Monte Bella Elementary	Salinas	Tom Bengard Ranch
Monte Bella Preschool	Salinas	Tom Bengard Ranch
Monterey County Home Charter	Salinas	Boutonnet Farms; Tanimura & Antle
Monterey County Special Education	Salinas	Boutonnet Farms; Tanimura & Antle
Monterey Park Elementary	Salinas	Tanimura & Antle
Mount Toro High	Salinas	Henry Hibino Farms
New Republic Elementary	Salinas	Wish Farms of California
North Monterey County Head Start	Castroville	Sea Mist Farms; Topflavor Farms
North Monterey County High	Castroville	Sea Mist Farms
North Monterey County Middle	Castroville	Sea Mist Farms; Topflavor Farms
Oasis Charter Public	Salinas	Boutonnet Farms; Monterey Bay Farms; Queen Victoria Farms
Our Savior's Early Childhood Center	Salinas	Luis Scattini & Sons; Monterey Bay Farms
Phoenix Academy Community Day	King City	Taylor Farming
Portola-Butler Continuation High	King City	Taylor Farming
Primavera Migrant Head Start	Gonzales	Taylor Farming; Tanimura & Antle
Rancho San Juan High	Salinas	Boutonnet Farms; Triangle Farms
Salinas Community	Salinas	Boutonnet Farms; Tanimura & Antle
San Ardo Early Education & Child Care Center	San Ardo	Christensen & Giannini
San Ardo Elementary	San Ardo	Christensen & Giannini
San Jerardo Migrant Head Start	Gonzales	Blanco Farms; Merrill Farms, Nielsen Farms
San Lucas Elementary	San Lucas	Borzini Farms; Taylor Farming
Santa Lucia Migrant Seasonal Head Start	Greenfield	Borzini Farms; J.M. Farming
Soledad Migrant Head Start	Soledad	R.C. Farms
Somavia High	Gonzales	Coastal View Farms
Spreckels Elementary	Spreckels	D'Arrigo Bros. Co. of California; Merrill Farms; Tanimura & Antle
University Park Elementary	Salinas	Henry Hibino Farms; Tom Bengard Ranch