Catherine Dodd PhD RN

January 24, 2025

Ann Schaffner, Environmental Program Manager I
Worker Health and Safety Branch
Department of Pesticide Regulation
1001 I Street, P.O. Box 4015
Sacramento, California 95812-4015

Re: Public Comment on 1,3-Dichloropropene (1,3-D) Proposed Regulation of DOW chemical's TELONE

Dear Program Manager Schaffner,

I am a public health nurse and environmental health expert. My first comment is that this regulation is confusing and not very understandable even for a PhD prepared health professional!
How do you explain different safety levels of exposure for agricultural workers and community members? Exposure is exposure and given the drift capability of this fumigant it is illogical to have different safety levels. The Office of Environmental Health Hazard Assessment has SCIENTIFICALLY established life-time safety exposure levels. Yet DPR is proposing two different levels – one for direct workers and one for people who are in close proximity to the fields. [It's exposure. If you work as a radiology technician, in several hospitals, you wear a monitor and it doesn't matter which hospital you are being exposed in. Exposure limits do not depend on location.]

You say DPR will conduct evaluations and develop interim mitigation measures when conditions contributing to exceedances of the target level are likely to continue to ensure air concentrations remain at or below 0.21 ppb. First of all, DPR does not establish criteria for this and second of all the only places where measurements are taken are in the six existing air monitoring stations and exposure by drift goes well beyond those. Second of all, the exposures have far exceeded the limits on several occasions. Pesticide air monitors have recorded 1,3-D levels double the limits to more than 25 times the OEHHA risk standard at monitored sites for years. How can you possibly accomplish this?

As a public health nurse, I want to highlight the critical and disproportionate risks 1,3-Dichloropropene (1,3-D) poses to children's health. Children living, playing and attending school near fumigated fields will start their lime exposure earlier (and there is no guarantee it will be measured).
Children's Unique Vulnerabilities:
- Developing bodies absorb chemicals more readily than adults
- Higher respiratory rates (they breathe faster) mean increased pesticide intake per body weight
- Immature detoxification systems are less capable of processing toxic chemicals
- Potential for lifelong health impacts from early-life chemical exposures

Exposure can result in:
Immediate:
Respiratory Vulnerability: Higher risk of asthma and respiratory complications

Results of exposure can appear later and seen in:
1. Neurological Development: Pesticide exposure can disrupt critical brain development
2. Endocrine Disruption: Potential interference with hormonal systems
3. Increased Cancer Susceptibility: Childhood exposures can trigger long-term genetic mutations

The proposed regulation's failure to protect children is unconscionable. At 0.56 ppb exposure—14 times OEHHA's recommended 0.04 ppb safety standard—children face significantly elevated cancer risks during their most vulnerable developmental stages.
The current regulatory approach effectively treats children as acceptable collateral damage in agricultural practices. This is scientifically indefensible and ethically unacceptable.

The facts listed here make strengthening these regulations very important:
• 1,3-D is the third most heavily used pesticide in California, with over 10 million pounds applied annually – twice the amount used in 2001.
• It is a cancer-causing fumigant and toxic air contaminant that drifts for miles and persists for days after application.
• 1,3-D is banned in 34 countries due to its dangers, but it remains legal in the United States and California.
• Current regulation (2024) allows exposure up to 0.56 ppb—14 times higher than Office of Environmental Health Hazard Assessment's standard. This level was set by DPR despite OEHHA's (our state's cancer toxicologists) objections.
• 100 foot buffer zones are inadequate given that this toxic fumigant can drift for miles as documented by DPR's air monitors.
• The regulations assume that agricultural/farm workers are in the fields for 8 hours during the day for forty years which ignores the facts that they often work longer hours into the night (when fumigant emissions are highest) especially in hot weather AND they are also exposed when they are in their community – to your proposed DOW chemical higher level.
• Unlimited use will be allowed in 6mile-by-6mile townships. If the cap is eliminated. This will disproportionately harm Latino and Indigenous farmworker families. This regulation would end the current caps on the amount of 1,3-D that can be used in 6 x 6-mile townships, allowing for unlimited use. * This policy disproportionately harms Latino and Indigenous farmworker communities, who reside in townships.
• Exposures during transport are not currently monitored, reported and regulated.

Recommended changes must be made to address the disparate risks.
1) If DPR is not willing to ban 1,3,D (as have 34 other countries-there are safe alternatives available), adopt regulations that are congruent with OEHHA's standards based on science (not manufacturer advertising) and apply them to everyone uniformly. The OEHHA CANCER risk level in the Prop 65 regulations is 0.04ppb in the air per day.
2) Monitor exposures during transport and application and after application.
• Regulation must protect residents as well as workers equally and must take into account that Emissions are highest at night and early morning when most farm workers are in the fields.
• Establish and post realistic buffer zones of miles that will account for drift measured at night and in the morning! recorded miles from application sites and is worst at night and in early mornings.
• Establish one uniform standard of 0.04ppb

DPR's mission includes protecting the public. DPR;s regulations must be grounded in science and must apply the highest health protective standards regardless of location of exposure. .

It is unscientific and unethical to assume children and families can safely be exposed to 14 times more 1,3-D than farm workers. Do not permit corporate industry chemical companies to kill off generations of Latino and Indigenous populations – starting in childhood.

Sincerely,

Catherine Dodd PhD RN
Environmental Health Consultant