Department of Pesticide Regulation

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M E M O R A N D U M

TO: Brian Leahy
Director
Department of Pesticide Regulation

FROM: John Sanders
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Pesticide Programs Division

DATE: November 13, 2018

SUBJECT: CHLORTHAL-DIMETHYL FINDINGS BY THE SUBCOMMITTEE OF THE PESTICIDE REGISTRATION AND EVALUATION COMMITTEE

Attached are the chlorthal-dimethyl "Findings and Recommendations" prepared by the subcommittee of the Pesticide Registration and Evaluation Committee. The subcommittee members: Dr. John Sanders, Dr. Lori Lim, and Scott Seyfried unanimously agreed upon these findings on August 29, 2018.

If you have any questions, please feel free to contact me.

Attachment

cc: Dr. Lori Lim, Office of Environmental Health Hazard Assessment (w/Attachment)
Scott Seyfried, State Water Resources Control Board (w/Attachment)

Subcommittee of the Pesticide Registration and Evaluation Committee

Implementation of the Pesticide Contamination Prevention Act

Chlorthal-dimethyl (DCPA): Findings and Recommendations

November 8, 2018

The California Department of Pesticide Regulation (DPR) conducted groundwater sampling studies between 1990 and 1997 in different areas of the state where chlorthal-dimethyl (dimethyl tetrachloroterephthalate, DCPA) was legally used, looking specifically for DCPA and two degradation products of DCPA: tetrachloroterephthalate (MTP) and tetrachloroterephthalic acid (TPA). None of the laboratory analyses of the collected samples from those studies yielded a confirmed detection of DCPA or MTP. However, the laboratory analyses did confirm detections of TPA in samples collected in several counties.

Since the 1990's, DPR has sampled many wells for the presence of DCPA, MTP and TPA. While DCPA has not been detected in groundwater by DPR, its degradation products (MTP and TPA), have been detected using an unequivocal analytical method at concentrations ranging from 0.05 to 159 parts per billion (ppb). DPR evaluated these detections and determined the detections to be the result of legal agricultural use of DCPA.

In compliance with Food and Agricultural Code section 13149(c) and pursuant to California Notice 2018-12 "*Notice of Hearing Pertaining to Chlorthal-Dimethyl Degradation Product Residue Detections in Ground Water"* this subcommittee held a hearing on August 29, 2018. The purpose of the hearing was to review information provided by registrants, state scientists and public comments about detections of MTP and TPA, use patterns, label information, toxicology, alternatives, economic impacts, modeled groundwater concentration predictions, and mitigation options in order to determine if agricultural use of DCPA can continue, and if so under what conditions.

FINDINGS

At a public meeting on August 29, 2018, the subcommittee unanimously found that the presence of DCPA degradates in the groundwater of the state has not polluted and does not threaten to pollute based on the definition of "pollute" in the law (Food and Agricultural Code § 13150(c)(1). The law defines pollute as " … to introduce a pesticide product into the groundwaters of the state resulting in an active ingredient, other specified ingredient, or a degradation product of a pesticide above a level that does not cause adverse health effects, accounting for an adequate margin of safety." (Food and Agricultural Code § 13142(j).

The subcommittee based their finding on the following information:

1. All MTP and TPA levels detected in groundwater fall considerably below health-protective drinking water levels of 2500 ppb derived by the Office of Environmental Health Hazard Assessment (OEHHA) from the available toxicological information

using established approaches. As a result, no adverse health effects are expected for individuals consuming measured levels of MTP or TPA in drinking water. The approach, method, and data used for the derivation are described in OEHHA's August 2018 report, "Public Health Concentration: Chlorthal-dimethyl (DCPA) and its Degradates Monomethyl Tetrachloroterephthalic Acid (MTP) and Tetrachloroterephthalic Acid (TPA) in Groundwater." <https://oehha.ca.gov/pesticides/report/public-health-concentrations-phc-chlorthal-dimethyl-dcpa-and-its-degradates>.

Since the highest detected levels of MTP and TPA are far below the health-protective level set forth by OEHHA, the subcommittee concluded that MTP and TPA have not polluted groundwater.

2. Groundwater modeling indicates that although there is minimal use of DCPA in some of the most vulnerable groundwater areas in the state (i.e., Fresno and Tulare counties), TPA concentrations should not exceed approximately 300 ppb. Therefore, DCPA use does not threaten to pollute the groundwater of the state under current labeled use conditions.

RECOMMENDATIONS

1. Based on the above findings, the subcommittee recommends that the Director allow the continued registration, sale, and agricultural use of DCPA products. As required by Food and Agricultural Code section 13152(a)(1), DPR will conduct ongoing groundwater monitoring for DCPA, MTP and TPA , and continuously review new science and data that could impact the validity of the subcommittee's finding. If DPR determines that there is new science or data that could impact the validity of a the finding above, the Director will take action as provided in Food and Agricultural Code section 13152(a)(2) to mitigate or re-review the threat of pollution to groundwater presented by DCPA use based on new data.

2. The subcommittee notes that if the parent compound, DCPA, is detected in California groundwater, and determined to be the result of legal agricultural use, the detected active ingredient would be subject to subcommittee review under Food and Agricultural Code section 13149(c).

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