Department of Pesticide Regulation

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Director

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M E M O R A N D U M

TO: Brian Leahy
Director
California Department of Pesticide Regulation

FROM: Sheryl Gill
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DATE: June 20, 2017

SUBJECT: METOLACHLOR/S-METOLACHLOR FINDINGS BY THE SUBCOMMITTEE OF THE PESTICIDE REGISTRATION AND EVALUATION COMMITTEE

Attached are the metolachlor/S-metolachlor "Findings and Recommendations" prepared by the subcommittee of the Pesticide Registration and Evaluation Committee. These findings were unanimously agreed upon on June 20, 2017 by the subcommittee members; Sheryl Gill, Dr. Lori Lim, and Rich Breuer.

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

Attachment

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

Subcommittee of the Pesticide Registration and Evaluation Committee

Implementation of the Pesticide Contamination Prevention Act

Metolachlor/ S-Metolachlor: Findings and Recommendations

June 20, 2017

Since the 1980's, the California Department of Pesticide Regulation (DPR) has analyzed 433 samples from 282 wells for the presence of metolachlor/S-metolachlor and/or its degradates. While DPR has not detected the metolachlor/S-metolachlor parent in groundwater, the ethanesulfonic and oxanilic acid degradates (MESA and MOXA, respectively) have been detected using an unequivocal analytical method at concentrations ranging from 0.05 to 20.2 parts per billion (ppb) in 62 wells. These detections have been evaluated and determined to be the result of legal agricultural use of metolachlor and S-metolachlor.

In compliance with Food and Agricultural Code section 13149 (C) and pursuant to California Notice 2016-06 "*Notice of Metolachlor/S-Metolachlor Degradation Product Residue Detections in California Ground Water and Registrant Opportunity to Request a Hearing*" this subcommittee held a hearing on March 28th, 2017 to review registrant reports, public comments, and other pertinent information regarding the presence of MESA and MOXA in groundwater in California.

A subsequent public meeting was held May 4th, 2017 to receive additional information from state scientists about metolachlor/S-metolachlor degradate detections, use patterns, label information, toxicology, alternatives, modeled groundwater concentration predictions, and mitigation options in order to determine if agricultural use of metolachlor/S-metolachlor can continue, and if so, under what conditions.

FINDINGS

The subcommittee unanimously found on May 4th, 2017 that the presence of metolachlor/S-metolachlor degradates in the groundwaters of the state has not polluted and does not threaten to pollute groundwater based on the definition of pollution in law (Food and Agricultural Code section 13142(j)). 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."

The subcommittee based their finding on the following information:

1. All MESA and MOXA levels detected in groundwater fall considerably below health-protective drinking water levels of 1300 ppb (MESA) and 2300 ppb (MOXA) derived by the Office of Environmental Health Hazard Assessment (OEHHA) from the available

toxicological information using established approaches. The approach, method, and data used for the derivation are described in a report, "Public Health Concentrations for Metolachlor and Metolachlor Degradates Ethanesulfonic Acid and Oxanilic Acid in Groundwater" (https://oehha.ca.gov/pesticides/pesticides-reports-notices-and-documents).

No adverse health effects are expected for individuals consuming measured levels of MESA or MOXA in drinking water. Since the highest detected levels are far below health-protective levels, the subcommittee concluded that MESA/MOXA have not polluted groundwater.

2. Groundwater monitoring and computer modeling results do not indicate that concentrations of MESA or MOXA in groundwater have increased or are likely to increase, therefore neither MESA nor MOXA threatens to pollute groundwaters 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 metolachlor/S-metolachlor products. As required by Food and Agricultural Code section 13152(a)(1), the Director will continue to monitor for both MESA and MOXA in groundwater The subcommittee recommends that in the event concentrations of either MESA or MOXA is detected in groundwaters of the state at or above 130 ppb(MESA) or 230 ppb(MOXA), using at or more than 10% of the health protective concentrations as the guide, the Director should take action as provided in Food and Agricultural Code section 13150(a)(2) to mitigate or re-review the threat of pollution to groundwater presented by MESA and/or MOXA based on the new data.

2. The subcommittee notes that if the parent compounds, metolachlor/S-metolachlor, are ever 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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