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Director

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July 16, 2009

WHS 09-03

TO: COUNTY AGRICULTURAL COMMISSIONERS

SUBJECT: REQUEST FOR COMMENTS ON PROPOSED MITIGATION MEASURES
OF METAM SODIUM, METAM POTASSIUM AND DAZOMET

The Department of Pesticide Regulation (DPR) is requesting comments on the most recent draft proposal for mitigation of acute human health risks following use of metam sodium, metam potassium, and dazomet. The document outlines DPR's proposed strategy to mitigate acute (short-term) off-site exposure to metam products that generate methyl isothiocyanate (MITC). Public comments are requested by August 21, 2009.

Background:

MITC is a breakdown product of metam-sodium, metam-potassium, and dazomet, three pesticides used to fumigate soil before planting crops (such as carrots, peppers, potatoes, tomatoes, and other vegetable crops). Metam-sodium and metam-potassium are applied through sprinkler, drip, or flood irrigation systems, injected into the soil, or sprayed on the soil surface and mixed in with a rotary tiller. Dazomet is a granular formulation that is applied to the soil surface and incorporated in mechanically or with water. When they contact warm, moist soil, they break down quickly to MITC and other volatile gases.

In 2007 and 2008, DPR was developing both this mitigation strategy and the volatile organic compound (VOC) regulation package. DPR management decided to delay development of the MITC mitigation strategy because of the court-mandated deadline for the completion of the VOC regulations, and the complexity of each package of restrictions. DPR management also wanted to ensure that the two sets of rules were consistent with each other. While this delayed the metam rules, it allowed DPR to receive more data on application methods and to research and evaluate restrictions on additional metam application methods, including those for dazomet. As a result, DPR recently developed measures for these application methods and incorporated them into the mitigation strategy.

The earlier proposals included only sprinkler and shank applications of metam sodium and metam potassium; DPR expanded the scope to cover all agricultural uses of MITC-generating pesticides. DPR revised this mitigation strategy based on comments received in meetings with county agricultural commissioners (CAC), pesticide industry groups, grower groups, worker advocates, comments received during a workshop in Tulare County in 2007, and written comments. DPR also observed several metam applications to help develop the current draft mitigation measures.

In developing these mitigation measures, DPR focused on several critical and interdependent factors that affect the magnitude and duration of off-site air concentrations of MITC. These



factors include restrictions on distance from sensitive sites, weather conditions, amount applied, acres treated, soil moisture and post-application watering, as well as, existing product labels and permit conditions.

Scope of Mitigation Strategy:

The revised mitigation strategy is intended to prevent acute off-site overexposure to MITC from applications of all MITC-generating pesticides in the agricultural setting. DPR believes this revised document now includes mitigation measures for all agricultural application methods. The MITC mitigation measures are also consistent with the volatile organic compound regulations.

This mitigation proposal does not address the minor, non-agricultural uses such as sewer pipe and utility pole treatments.

What Has Changed Since the 2007 Tulare Workshop?

General Changes

- Scope expanded to include all MITC-generating pesticides and all agricultural application methods.
- Expanded the application prohibition near schools in session to one-half mile. Increased post-application water treatments to one-half to one mile from schools.

Pre-Application Changes

- Expanded the buffer zone tables to cover the additional application methods.
- Eliminated the requirement for a work site plan. Much of the information required in the work site plan is already required as part of the permit process and was duplicative. Information not duplicative is required as part of the notice of intent (NOI).
- Revised the requirements for buffers extending into an adjoining agricultural property. An agreement must be obtained, but it need not be written and signed by both parties. However, for record keeping purposes, the property operator must document the agreement.
- Eliminated most soil preparation requirements. Growers and applicators are aware of good agricultural practices needed for an efficacious fumigant application.

Application Changes

- To be consistent with the VOC regulations, DPR allows limited applications to occur at night: flood applications (application runs long periods of time); a sprinkler application method that begins no earlier than 1 a.m.; a different sprinkler application method that begins no earlier than 4 a.m.; and shank application method that begins no earlier than 1 a.m. All these methods have extra requirements specific to the application method and timing.

Post-Application Changes

- DPR modified the post-application watering requirements to allow for a range of water application rates instead of specifying an exact rate. This is to address conditions where the soil moisture content does not decrease rapidly over time. The amount of water used would be based on the evapotranspiration rate, soil type and moisture content, and air and soil temperature at the time of application.

Currently, the buffer zone tables include four application rates; DPR plans to expand the tables to include more application rates.

The U.S. Environmental Protection Agency (U.S. EPA) recently finalized its fumigant mitigation measures. DPR is evaluating the affect of these measures on this proposed mitigation strategy. U.S. EPA plans to implement its measures in 2010 and 2011. Once U.S. EPA finalizes required label language, DPR will adjust these mitigation measures as needed.

The draft MITC mitigation proposal can be found at http://www.cdpr.ca.gov/docs/emon/pubs/mitc/mitc_proposal09.pdf. DPR is requesting your review of this draft strategy. Please send your comments to Linda O'Connell at loconnell@cdpr.ca.gov by August 21, 2009. DPR is willing meet with any commissioner who has any questions. DPR anticipates the final permit conditions to be in place in the Fall 2009.

Sincerely,

[Original signed by Joseph P. Frank for Susan Edmiston]

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