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Sent: Friday, July 09, 2004 5:33 PM
Subject: OP Methyl Parathion Revised Risk, Interim Tolerances, and IRED Open for Comment

Action: EPA has released for comment the revised human health and ecological risk assessments; its progress toward tolerance reassessment; and the interim decision on the reregistration eligibility of methyl parathion. This Interim Risk Management and Reregistration Decision (IRED) documents the revocation of 30 tolerances for methyl parathion; use of methyl parathion on the following crops **are not eligible for reregistration: cabbage, dried beans, dried peas, hops, lentils, pecans, and sugar beets**. EPA provides that certain uses of methyl parathion are eligible for reregistration provided that: (a) current data gaps are addressed; (b) prescribed risk mitigation measures are adopted, and label amendments are made to reflect these measures; and (c) the cumulative risk assessment for the organophosphates support a final reregistration eligibility decision. This is intended to be only the first phase in the reregistration process for methyl parathion. Public comments are due to EPA on or before August 2, 2004. EPA will eventually proceed with its assessment of the cumulative risk of the organophosphate pesticides and issue a final reregistration eligibility decision for methyl parathion.

Background: There are currently four methyl parathion insecticide products registered for use in New Jersey: DECLARE INSECTICIDE, PENNCAP-M MICROENCAPSULATED INSECTICIDE, CHEMINOVA ETHYL METHYL PARATHION 6-3 EC, and CHEMINOVA METHYL 4 EC. Previously-registered use sites include a variety of field and forage crops and vegetables including beans, cabbage, onions, peas, and potatoes. There are no residential uses registered for methyl parathion. The emulsifiable concentrate products contain a stenching agent to deter indoor misuse as this has been a significant problem in the United States. EPA provides that even diluted methyl parathion used indoors can lead to serious poisoning, especially in children and household pets. Methyl parathion is formulated with other active ingredients including malathion.

EPA provides that **methyl parathion is one of the most toxic organophosphate pesticides**. Through cholinesterase inhibition, the organophosphates can overstimulate the nervous system causing nausea, dizziness, confusion, and at high exposures, respiratory paralysis and death. EPA's original risk assessment showed that methyl parathion could not meet the FQPA safety standard as the pesticide was currently registered. The acute dietary risk to children age one to six exceeded the reference dose (or amount that can be consumed safely over a 70-year lifetime) by 880%. To mitigate the high dietary risk to children, EPA accepted **voluntary cancellation of those crops that contribute most to the children's' diet [outlined in a 1999 Memorandum of Agreement (MOA) as follows]:**

1. **Cancelled food uses: All fruit** (apples, peaches, pears, grapes, nectarines, cherries, and plums), carrots, succulent peas, succulent beans, and tomatoes. Artichokes, broccoli, Brussels sprouts, cauliflower, celery, collards, kale, kohlrabi, lettuce, mustard greens, rutabagas, spinach, and turnips.
2. **Cancelled non-food uses:** birdsfoot trefoil, **Christmas trees**, chrysanthemums, daisies, field grown ornamentals, flowering plants, forest, grasses grown for seed, guayule, jojoba, marigolds, **any mosquito larvicide** use, nursery stock, non-agricultural land, roadside areas, and wasteland.

Uses Remaining per the MOA: Alfalfa, almonds, barley, **cabbage***, corn, cotton, **dried beans***, **dried peas***, grass, **hops***, **lentils***, oats, onions, **pecans***, rape seed (canal), rice, rye, soybeans, **sugar**

beets, sunflower, sweet potato, walnuts, wheat, and white potatoes. * these use sites are not eligible for reregistration per the 2004 IRED for methyl parathion (see above).

IRED versus RED: Following the risk assessment and the voluntary cancellations, EPA has drafted an IRED document for methyl parathion. EPA issues an IRED in cases such as methyl parathion where a pesticide requires a reregistration eligibility decision, BUT is part of a group of pesticides (in this case, the organophosphates) that share a common mechanism of toxicity. The information in the IRED may or may not contribute to changes in the cumulative risk assessment. The IRED is a standalone document and will prescribe risk mitigation measures that can be enacted before/after the cumulative group RED is issued. EPA first completed a full cumulative risk assessment of the organophosphates as a group in December 2001. EPA subsequently released a Revised OP Cumulative Risk Assessment on June 10, 2002. EPA states in this IRED that the final tolerance reassessment decision for this chemical will be issued once the cumulative assessment for all of the organophosphates is complete.

Sources: [Federal Register: June 2, 2004 (Volume 69, Number 106)][Notices][Page 31101-31104] <http://epa.gov/EPA-PEST/2004/June/Day-02/p12307.htm> . NSPIRS data query for methyl parathion for New Jersey.

- See 'Methyl Parathion' @ http://www.epa.gov/oppsrrd1/op/methyl_parathion.htm .
- See 'Illegal Indoor Use of Methyl Parathion' @ <http://www.epa.gov/pesticides/factsheets/chemicals/methyl.htm> .
- Methyl Parathion Risk Management Decision @ <http://www.epa.gov/pesticides/factsheets/chemicals/mpfactsheet.htm>
- Methyl 4 EC, EPA Reg No. 67760-00043- -00000 specimen label @ <http://www.cdms.net/ldat/ld51L000.pdf>.
- 'Organophosphates' @ <http://www.epa.gov/pesticides/op/>. Organophosphate Pesticides: Revised OP Cumulative Risk Assessment @ <http://www.epa.gov/pesticides/cumulative/rra-op/>.
- See previous NJinPAS posting 'Revised cumulative risk assessment for the organophosphorous (OP) pesticides' @ <http://www.pestmanagement.rutgers.edu/NJinPAS/postings/RevisedRiskOPs.PDF>
- Organophosphate Review - Chemical Status @ <http://cfpub.epa.gov/oppref/rereg/status.cfm?show=op>

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