Azinphos-methyl

Note by the Secretariat

Addendum

Rationale for the Committee’s conclusion that Canada’s notification met the requirements of the Convention

1. The documentation provided by Canada in support of its final regulatory action for azinphos-methyl was circulated for consideration at the Chemical Review Committee’s fifth meeting in document UNEP/FAO/RC/CRC.5/4/Add.1.

2. The annex to the present note contains the rationale for the Committee’s conclusion that the notification met the criteria set forth in Annexes I and II to the Rotterdam Convention.
Annex

Excerpt from the report of the fifth meeting of the Chemical Review Committee (UNEP/FAO/RC/CRC.5/16)

A. Azinphos-methyl: rationale for the conclusion that the notification for azinphos-methyl (CAS No. 86-50-0) from Canada meets the information requirements of Annex I and the criteria of Annex II to the Rotterdam Convention

1. In reviewing the notification of final regulatory action by Canada to severely restrict the use of azinphos-methyl as a pesticide, together with the supporting documentation, the Chemical Review Committee concluded at its fifth session that the regulatory action had been taken to protect human health.

2. Azinphos-methyl was used in Canada as a broad spectrum organophosphate insecticide on a wide variety of feed, food and ornamental crops. It was used on the feed crops alfalfa, clover and rye. Registered food crop use included fruit such as apples, crab apples, pears, quinces, cherries, peaches, apricots and berries, and vegetables such as Brussels sprouts, cabbages, cauliflowers, tomatoes and potatoes. Use on ornamental crops included nursery plants, forest trees and shade trees.

3. The regulatory action of Canada was to phase out by the end of 2005 all uses of azinphos-methyl for which alternatives exist: alfalfa, clover, rye, quince, potatoes, tomatoes, rutabagas, turnips, cabbage, broccoli, Brussels sprouts, cauliflowers, cucumbers, strawberries, boysenberries, longan berries, walnuts, melons, pumpkins, blueberries, outdoor ornamentals, nursery plants, forest trees and shade trees. Other uses that are part of an established integrated pest management programme or for which there are no alternatives continue to be registered until the end of 2012: apples, crab apples, apricots, blackberries, cherries, cranberries, grapes, pears, peaches, plums, prunes and raspberries.

4. The risks of azinphos-methyl were assessed considering two key factors: dose levels with no effect on human health and the dose to which people may be exposed. Only uses where exposure is well below levels that cause no effects in animal testing were considered acceptable for continued registration. Azinphos-methyl was found to be extremely acutely toxic via the oral and dermal routes and moderately toxic by inhalation and a dermal sensitizer. Symptoms are consistent with that of a cholinesterase inhibitor. Occupational risk estimates associated with application, mixing and loading for registered label uses exceeded the level of concern for most exposure scenarios, even after consideration of maximum feasible engineering controls and personal protective equipment and clothing. The personal protective equipment, engineering controls and use pattern changes required to mitigate worker exposure during the phase-out period were described. These included among others: coveralls, chemical-resistant gloves, chemical-resistant footwear, and protective eyewear and headgear and, for exposure in enclosed areas, a respirator. In addition, mixers and loaders must have a fully closed mixing and loading system.

5. The risk evaluation performed by Canada included an assessment of the hazards to human health (high acute toxicity and dermal sensitization) and human exposure (primarily occupational exposure associated with mixing, loading and application), and therefore meets the criteria for a risk evaluation.

6. The Committee established that the final regulatory action had been taken on the basis of a risk evaluation and that the evaluation had been based on a review of scientific data. The available documentation demonstrated that the data had been generated in accordance with scientifically recognized methods and that the data reviews had been performed and documented in accordance with generally recognized scientific principles and procedures. Data were either generated from internationally recognized sources – such as the Pesticide Manual – or from the United States Environmental Protection Agency review for azinphos-methyl. The review process took into account existing use patterns in Canada and the United States of America and was documented in a series of reevaluation notes, which were available to the Committee. Overall, the available documents showed that the final regulatory action had been based on a chemical-specific risk evaluation, involving prevailing conditions of exposure within Canada.
7. The Committee noted that, as the regulatory action in Canada was a severe restriction of the use of azinphos-methyl, there would be a reduced risk of occupational exposure to the toxic effects of azinphos-methyl for uses that are no longer authorized. There would be further elimination of other uses by the end of 2012, with additional risk mitigation measures being introduced in the interim period.

8. There was no indication of industrial uses of azinphos-methyl in Canada. The Committee also noted that the considerations underlying the final regulatory action (namely occupational risks) were not of limited applicability since concerns similar to those identified in Canada could occur in other countries, in particular developing countries. Based on information provided to the Committee, there was evidence of ongoing trade in azinphos-methyl.

9. The Committee noted that the final regulatory action in Canada was not based on concerns over intentional misuse of azinphos-methyl, but on concerns from registered label uses.

10. The Committee concluded that the notification of final regulatory action by Canada had met the information requirements of Annex I and the criteria set out in Annex II to the Convention.