Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
Chemical Review Committee
Second meeting
Geneva, 13–17 February 2006

Report of the Chemical Review Committee on the work of its second meeting

Annex III

Rationales for those chemicals for which only one notification met the criteria of Annex II

D. Mirex: rationale for the conclusion that the notification for mirex (CAS No. 2385-85-5) from Canada meets the criteria of Annex II of the Rotterdam Convention

1. In reviewing the notification of final regulatory action by Canada, together with the supporting documentary information provided by the Party, the Committee was able to confirm that the action had been taken in order to protect human health and the environment. Mirex is persistent and bioaccumulative (stored mainly in fat tissues) and it is subject to long-range transport. It has been demonstrated to cause cancer in experimental animals and it is possibly carcinogenic to humans. Mirex was never registered for use as an agricultural pesticide in Canada. The notified decision concerns industrial uses. It has mainly been used as a fire-retardant agent in plastics, rubber, paint paper and electrical goods. It has also been used as a pyrotechnic for generating white smoke. Mirex contaminates several ecosystems in Canada. Human dietary exposure to mirex is generally low, with the possible exception of the group dependant on a diet of fish or fish-eating birds from Lake Ontario and the St. Lawrence River and of hunters eating game birds.

2. The Committee established that the final regulatory action had been taken on the basis of 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. It also showed that the final regulatory action had been based on chemical-specific risk evaluations, taking into account the conditions of exposure within Canada. A task force had evaluated the risks in 1997. The main conclusions were:

(a) Mirex contaminates several ecosystems in Canada;

(b) Mirex is not known to occur in the environment as a natural product;

(c) The main sources of mirex in Canada are located in New York State (US) in the Niagara River and the Oswego River where chemical manufacturing and fire retardant plants were located;

(d) The transboundary movement of mirex in the Lake Ontario ecosystem has resulted in the contamination of fish and fish feeding birds in Canada;

(e) Human dietary exposure to mirex is generally very low in Canada with the possible exception of a critical subpopulation partly or wholly dependent on a diet of fish or fish-feeding birds from Lake Ontario and the St. Lawrence River;

(f) Mirex is biologically active, accumulates in food chains, is extremely persistent and dispersed in the environment.

3. The Committee concluded that the final regulatory action provided a sufficiently broad basis to merit including mirex in Annex III of the Rotterdam Convention in the industrial category. It noted that the action had led to a decrease in the quantities of the chemicals used in the notifying Party. The chemical has not been registered or used as an insecticide in Canada and had never been produced. By the notified decision, all other uses had been banned. Over the period 1963–1973, about 146 metric tonnes had been imported to Canada for industrial uses. The Stockholm Convention to which Canada is a Party prohibits both production and use. Accordingly, the risk for human health or environment in the notifying Party had been significantly reduced.

4. The Committee took into account that the considerations underlying the final regulatory action were not of limited applicability since mirex was subject to long-range transport and persistent; therefore found in monitoring also in areas where it had never been used. Two Parties to the Stockholm Convention on Persistent Organic Pollutants (which covers mirex) had requested exemptions from the restrictions of production and use of mirex, which indicated that there were possibilities also for trade. On the basis of information provided to the members at the second meeting of the Chemical Review Committee and other available information, the Committee also concluded that there were indications of potential international trade in mirex.

5. The Committee noted that the final regulatory action had not been based on concerns about intentional misuse of mirex.

6. At its second session, the Committee concluded that the notification of final regulatory action by Canada met the information requirements of Annex I and the criteria set out in Annex II to the Convention. When a second notification for the same chemical from a Party in a region other than North America will be found by the Committee as meeting the criteria of Annex II, the Committee will recommend to the Conference of the Parties that mirex should be included in Annex III to the Rotterdam Convention.