



**Rotterdam Convention on the Prior
Informed Consent Procedure for
Certain Hazardous Chemicals and
Pesticides in International Trade**

Distr.: General
18 December 2009

English only

Chemical Review Committee

Sixth meeting

Geneva, 15–19 March 2010

Item 5 (b) (iii) of the provisional agenda*

**Listing of chemicals in Annex III to the Rotterdam Convention:
review of notifications of final regulatory actions to ban or severely
restrict a chemical: endosulfan**

**Information on endosulfan available to the Chemical Review
Committee and the Conference of the Parties, including the
notification of final regulatory action from Thailand**

Note by the Secretariat

Addendum

**Rationale for the Committee's conclusion that Thailand's notification met the
requirements of the Convention**

1. The documentation provided by Thailand in support of its final regulatory action for endosulfan was circulated for consideration at the Chemical Review Committee's second meeting in documents UNEP/FAO/RC/CRC.2/15/Add.2, Add.4, Add.5 and Add.6 and has been reproduced in document UNEP/FAO/RC/CRC/CRC.6/15/Add.1.
2. The annex to the present note contains the rationale for the Committee's conclusion at its second meeting that the notification from Thailand met the criteria set forth in Annexes I and II to the Rotterdam Convention.

* UNEP/FAO/RC/CRC.6/1.

Annex

Excerpt from the report of the second meeting of the Chemical Review Committee (UNEP/FAO/RC/CRC.2/20)

A. Endosulfan

1. Rationale for the recommendation that endosulfan (CAS No. 115-29-7) should become subject to the prior informed consent procedure and an intersessional drafting group established to prepare a draft decision-guidance document

1. In reviewing the notifications of final regulatory actions by the Netherlands and Thailand, together with the supporting documentary information provided by those Parties, the Committee was able to confirm that those actions had been taken in order to protect the environment.
2. The Netherlands bans all uses of the chemical on basis of a national risk evaluation. It was found that application of endosulfan according to good agriculture practice would result in surface water concentrations that would significantly affect aquatic organisms (especially fish). Emission of endosulfan to surface water will occur as a result of spraying drift during application. The surface water concentration of endosulfan during application was estimated with a dispersion model. Assuming a drift emission factor of 10 per cent, an endosulfan concentration of 0.014 mg/l was calculated. A comparison of this concentration with the lowest LC50 for fish (0.00017 mg/l) results in a risk quotient of 82, which was considered unacceptable.
3. The Committee confirmed that Thailand had severely restricted endosulfan, as commonly used in Thailand, by banning emulsifiable concentrate and granular formulations, whereas the use of capsule formulation remained registered. This decision was based on a national risk evaluation as follows: a survey in five provinces to assess the use of endosulfan for golden apple snail control in paddy fields showed that approximately 94 per cent of farmers used pesticides and that, of those, 60–76 per cent used endosulfan. Death of fish and other aquatic organisms was reported in every province. Emulsifiable concentrate (EC) and granule (GR) formulations were known to be very toxic to fish and aquatic organisms.
4. The Committee established that the final regulatory actions had been taken on the basis of risk evaluations and that those evaluations 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 actions had been based on chemical-specific risk evaluations taking into account the conditions of exposure within the Netherlands and Thailand.
5. The Committee concluded that the final regulatory actions provided a sufficiently broad basis to merit including endosulfan in Annex III of the Rotterdam Convention in the pesticide category. It noted that those actions had led to a significant decrease in the quantities of the chemicals used in the notifying Parties. The regulatory decisions taken by the Netherlands and Thailand were expected significantly to reduce the impact on the aquatic environment.
6. There was no indication that there were any industrial uses of endosulfan. The Committee also took into account that the considerations underlying the final regulatory actions were not of limited applicability, since the conditions of use were broadly applicable. On the basis of information provided by members at the second meeting of the Chemical Review Committee and other available information, the Committee concluded also that there was ongoing international trade in endosulfan.
7. The Committee noted that the final regulatory action from the Netherlands had not been based on concerns about intentional misuse of endosulfan.
8. The Committee noted that the Thai notification on the severe restriction of endosulfan had been based on the decision of the Thai authority which had been prompted by the fact that farmers “misused” endosulfan through unapproved use in paddy fields against golden apple snails.
9. While the Committee took into account that, under criteria (d) of Annex II, intentional misuse was not in itself an adequate reason to list a chemical in Annex III, the Committee concluded that the Thai regulatory action had been directly linked to the adverse environmental impact on aquatic lifeforms associated with endosulfan use under the prevailing conditions described.

10. The Committee concluded that the notifications of final regulatory actions by the Netherlands and Thailand met the information requirements of Annex I and the criteria set out in Annex II to the Convention. It is recommended that endosulfan be included in Annex III of the Rotterdam Convention as a pesticide.
