



United Nations
Environment Programme



UNEP



Food and Agriculture Organization
of the United Nations

Distr.
GENERAL
UNEP/FAO/PIC/ICRC.4/9
9 January 2003

ENGLISH ONLY

Interim Chemical Review Committee

Fourth session

Rome, 3 – 7 March 2003

Item 4 (b) iv) of the provisional agenda*

OPERATIONAL PROCEDURES FOR THE INTERIM CHEMICAL REVIEW COMMITTEE

**REPORT ON INCONSISTENCIES IN THE LISTING OF CHEMICALS WITHIN ANNEX III
AND BETWEEN ANNEX III AND DECISION GUIDANCE DOCUMENTS**

Note from the Secretariat

Background

1. The format for listing chemicals in Annex III was adopted by the Intergovernmental Negotiating Committee at its fifth session on the basis of a Chairs draft text. In adopting the format, the Intergovernmental Negotiating Committee recorded that “A number of representatives requested that a complete listing of CAS numbers and chemical names should be maintained and made available by the Secretariat for all of the chemicals listed in Annex III.” (Appendix I paragraph 84 UNEP/FAO/PIC/INC.5/3).

2. At its second session the Interim Chemical Review Committee considered the possible inconsistent use of Chemical Abstract Service (CAS) numbers and chemical descriptions in Annex III of the Convention on the basis of document UNEP/FAO/PIC/ICRC.2/10. The Committee discussed the issues raised and “concluded that, in submitting notifications of final regulatory action, countries must describe a chemical accurately by name and CAS number, and that governments should be encouraged to require that chemical importers provide them with such information. A short discussion took place on four scenarios for reviewing notifications of regulatory action by the Committee, as described in paragraph 4 of document UNEP/FAO/PIC/ICRC.2/10, and the Committee agreed to apply those scenarios when considering future inclusion of chemicals in the interim PIC procedure”(paragraph 44, UNEP/FAO/PIC/ICRC.2/11).

* UNEP/FAO/PIC/ICRC.4/1

3. At its eighth session the Intergovernmental Negotiating Committee “requested Governments, when submitting notifications of final regulatory action, to describe all chemicals accurately by chemical name and CAS number” (paragraph 55, UNEP/FAO/PIC/INC.8/19).
4. In considering this issue at the third session of the Interim Chemical Review Committee “the chair stressed that in its recommendations for PIC listing the Committee was obliged to specify the CAS numbers of the chemical involved: the CAS numbers, except in rare cases, had the virtue of unambiguity. However, the possible conflict between unambiguous CAS numbers and the phrasing of bans or severe restrictions by legislators, remained as an issue for the Committee in its handling of notifications because not only was it required to pass on specific CAS numbers in its recommendations for listing, it must first be sure that notifications from a minimum of two regions did in fact cover the same substances. He stressed that notifying authorities must be encouraged to be comprehensive and specific by stating all the CAS numbers of the chemicals which their notifications were intended to cover (paragraph 87, UNEP/FAO/PIC/ICRC.3/19).
5. The Intergovernmental Negotiating Committee at its ninth session reviewed document UNEP/FAO/PIC/INC.9/9 that set out issues to consider in ensuring consistency between the scope of reported national regulatory actions and the inclusion of the chemical in the interim PIC procedure. The Intergovernmental Negotiating Committee “encouraged Parties to be both specific and comprehensive in both their regulatory actions and in their notifications thereof, and in that connection the Committee agreed that the secretariat had the authority to seek further information and clarification of notifications when required” (paragraph 83, UNEP/FAO/PIC/INC.9/21).
6. In summarising its deliberations on this issue the ninth session of the Intergovernmental Negotiating Committee stated that “In the light of the discussions, and the concern noted by the Chair of the Interim Chemical Review Committee in his introduction regarding the inconsistent use of chemical abstract numbers and chemical descriptions in Annex III of the Convention, the secretariat was requested to prepare a housekeeping” paper, identifying inconsistencies within Annex III of the Convention and inconsistencies between Annex III and decision guidance documents, for consideration and review by the Interim Chemical Review Committee. The report of the Interim Chemical Review Committee would be submitted to the Intergovernmental Negotiating Committee at its tenth session as a basis for preparation of a recommendation to the first Conference of the Parties and further guidance to the operation of the Interim Chemical Review Committee”(paragraph 84, UNEP/FAO/PIC/INC.9/21).
7. Annexed to this note is a draft paper for consideration by the third session of the Interim Chemical Review Committee.

Suggested Action

8. The Interim Chemical Review Committee may wish to review the possible measures contained in the Annex to this note for each of the groups of chemicals listed and consider making recommendations to the next session of the Intergovernmental Negotiating Committee to address possible inconsistencies within Annex III of the Convention and inconsistencies between Annex III and decision guidance documents.

Annex

Report on inconsistencies in the listing of chemicals within Annex III and between Annex III and decision guidance documents

A. Points to consider

9. Article 7 of the Rotterdam Convention (paragraph 2) states that “The Conference of the Parties shall decide whether a chemical should be made subject to the PIC procedure and, accordingly, list the chemical in Annex III and approve the decision guidance document”. The decision guidance document is thus an integral part of the decision to list a chemical in Annex III and serves to further define the scope of the chemical subject to the final regulatory actions and hence subject to the PIC procedure.

10. In reviewing the problems frequently encountered by Parties in preparing notifications of final regulatory actions to ban or severely restrict a chemical one of the issues identified by the Interim Chemical Review Committee was the fact that many older regulatory actions are poorly documented. Further evidence of this was found in the consideration of DNOC at the third session of the Interim Chemical Review Committee and the ninth session of the Intergovernmental Negotiating Committee which demonstrated that regulatory actions to ban or severely restrict a pesticide may or may not include reference to specific derivatives (salts/esters) or isomeric forms.

11. The ninth session of the Intergovernmental Negotiating Committee considered the request of the Interim Review Committees for guidance on ensuring the consistency between the scope of reported national regulatory actions and the listing of chemicals in the interim PIC procedure, as set forth in document UNEP/FAO/PIC/INC.9/9. As a result of these deliberations the Committee provided the following specific comments that should be of assistance to the third session of the Interim Chemical Review Committee in considering the possible measures proposed in this paper (paragraphs 77 – 79, UNEP/FAO/PIC/INC.9/21).

12. “The Committee noted that the scope of the regulatory actions as stated in the notifications submitted in accordance with Article 5 was the basis for listing a given chemical. The Committee agreed that, in the case of a chemical such as DNOC, it would be listed as “DNOC and its salts, such as ammonium salt, potassium salt and sodium salt”, along with the relevant CAS numbers, if included in the interim PIC procedure.

13. The Committee noted that the specific formulation identified in a proposal submitted in accordance with Article 6 was the basis for listing a severely hazardous pesticide formulation. The Committee agreed that formulations containing the active ingredient or ingredients at or above the specified concentrations and in the same formulation type would also be subject to the interim PIC procedure, if supported by the technical documentation supporting the proposal. It was agreed that a footnote to that effect could be added, or some other type of explanatory guidance could be provided.

14. The Committee agreed that in the particular case of Granox TBC and Spinox T, if those formulations were included in the interim PIC procedure, all powdered formulations containing the active ingredients would be covered. The Committee also agreed that the listing could be such that the constituent active ingredients (Benomyl, Carbofuran and Thiram) would be explicitly identified, along with the concentration levels, the appropriate CAS numbers and the formulation type (dustable powder), with an appropriate footnote or other explanatory guidance”.

B. Review and comparison of listings of chemicals in the interim PIC procedure and their associated decision guidance documents

15. To facilitate discussion and in line with the approach adopted by the Interim Chemical Review Committee at its second session, the chemicals have been organised into four distinct groups. In the

interest of completeness all chemicals currently subject to the interim PIC procedure have been included. This includes those listed in Annex III as well as those added since September 1998 and proposed for inclusion in Annex III at the first meeting of the Conference of the Parties.

16. For each group there is a brief introduction to the set of chemicals. For each chemical or subgroup of chemicals there are two subsections entitled current status and possible measures. The current status section compares the present listing including the chemical description and associated CAS number(s) and the information in the decision guidance document with a view to identifying inconsistencies and potential ambiguity in the way in which chemicals subject to the interim PIC procedure are identified. As the title suggests the second section proposes possible measures that the Committee may wish to consider in developing recommendations to the Intergovernmental Negotiating Committee/Conference of the Parties regarding these inconsistencies.

Group 1 **aldrin, chlordimeform, chlorbenzilate, dieldrin, DDT, ethylene dibromide, fluoroacetamide, heptachlor, crocidolite, Tris (2,3-dibromopropyl) phosphate binapacryl*, toxaphene*, ethylene oxide*, ethylene dichloride*, monocrotophos***

17. The chemicals in this group are generally marketed or used as a single entity and are the compounds subject to regulatory actions.

Current Status

18. For these chemicals listed or proposed for listing in Annex III the chemical description and corresponding CAS numbers provide a unique identifier. There is a direct correspondence between the chemical subject to the regulatory action reported in the decision guidance document and the chemical listed or proposed for listing* in Annex III. (* chemicals included in the interim PIC procedure but not yet listed in Annex III).

19. Possible Measures

a) The chemical description and CAS numbers for these chemicals listed or proposed for listing in Annex III are clear and correspond to the chemicals identified in the regulatory actions reported in the decision guidance documents.

b) The current listing or proposed listing of these chemicals in Annex III (description and associated CAS number) does not need to be amended.

Group 2 **2,4,5-T, dinoseb and dinoseb salts, pentachlorophenol, mercury compounds, (including inorganic mercury compounds, alkyl mercury compounds and alkoxyalkyl and aryl mercury compounds)**

20. The chemicals in this group exist as a distinct parent compound e.g. a free acid, but are in fact marketed or used in the form of a wide range of derivatives (salts/esters). Specific CAS numbers have been assigned to the parent compound as well as most of the individual salts/esters. It is likely that only a subset of these derivatives have been registered/permitted for use in a given country.

21. There are inconsistencies with how these chemicals are described in Annex III and in the associated decision guidance documents. For example the chemical description of dinoseb is dinoseb and dinoseb salts with the CAS number for dinoseb (parent compound) listed, while for 2,4,5-T and pentachlorophenol the chemical description refers to the parent compound only with the corresponding CAS number listed.

22. In line with the guidance provided by the ninth session of the Intergovernmental Negotiating Committee the listing of a chemical in Annex III (chemical description and associated CAS number(s)) should be made as explicit as possible (see paragraph 12). Consideration might also be

given to the proposed use of use footnotes or some other type of explanatory guidance to provide further information on the scope of the chemicals listed in Annex III (see paragraphs 13 and 14)

2,4,5-T

Current Status

23. The listing in Annex III includes the chemical description of parent compound (free acid) along with the corresponding CAS number (93-76-5). There are in the order of 58 different derivatives (primarily salts and esters) available for this compound each with a separate CAS number.

24. The decision guidance document identifies the chemical as 2,4,5-T (with dioxin (TCDD) contaminant). It is stated that most countries have controlled 2,4,5-T based on unacceptable risks associated with the presence of the 2,3,7,8 TCDD contaminant. The thirteen regulatory actions cited were taken from 1971 to 1992 and are non-specific as to the range of derivatives they cover, although Section 1.8 (Formulation Types) references isoctyl esters and amine salts.

25. The cited regulatory actions appear to apply to all forms of 2,4,5-T even though, the particular derivatives (salts/esters) where the dioxin contamination is a concern are not specified or an allowable level of dioxin contamination defined.

Pentachlorophenol

Current Status

26. The listing in Annex III includes the chemical description of parent compound (free acid) along with the corresponding CAS number (87-86-5). There are a range of different derivatives (esters and salts) available for this compound each with a separate CAS number.

27. The decision guidance document identifies the chemical as pentachlorophenol. It is stated that pentachlorophenol has been subject to regulatory action because of high toxicity to human and animals and that it contains several highly toxic dioxins that have shown carcinogenic effect in experimental animals. The nine regulatory actions cited (six bans and three severe restrictions) were taken from 1978 to 1992 and are non-specific as to the range of derivatives they cover, although Section 1.8 (Formulation Types) references a sodium salt.

28. The cited regulatory actions appear to apply to all forms of pentachlorophenol even though, the particular derivatives (salts/esters) where the dioxin contamination is a concern are not specified or an allowable level of dioxin contamination defined.

29. Possible Measures

a) Based on the understanding that the listing in Annex III should be as explicit as possible and the assumption that all derivatives (salts/esters) of 2,4,5-T and pentachlorophenol are included, (in line with the scope of the regulatory actions referenced in the decision guidance document), there are at least three options that might be considered regarding the description of these chemicals

Option 1: retain the present description of parent compound e.g. 2,4,5-T and pentachlorophenol and the CAS number for the parent compound (free acid) with the understanding that all derivatives (salts/esters) are included.

Option 2: retain the present description of parent compound e.g. 2,4,5-T and pentachlorophenol and the CAS number for the parent compound (free acid) with the addition of a footnote explaining that all derivatives (salts/esters) are included.

Option 3: amend the description to more clearly reflect the fact that all derivatives are included e.g. 2,4,5-T and salts and esters of 2,4,5-T; pentachlorophenol and salts and esters of pentachlorophenol. The CAS number for the parent compound (free acid) would be retained unchanged.

Dinoseb and dinoseb salts

Current Status

30. The listing in Annex III includes a chemical description as dinoseb and dinoseb salts with the CAS number for parent compound dinoseb (free acid) (88-85-7).

31. There are a range of salts available for dinoseb. The decision guidance document (Sections 1 and 2) references both dinoseb and dinoseb acetate though only the CAS number for dinoseb is listed. Dinoseb acetate appears to have been marketed as a pesticide in its own right (CAS number 2813-95-8).

32. The ten regulatory actions cited in the decision guidance document (all bans, taken between 1971 and 1990) refer only to dinoseb and are non-specific as to the range of derivatives they cover. Of the trade names identified in the decision guidance document (Section 1.6) three were found to correspond to specific salts (amine salt, ammonium salt and triethanolamine salt) while none correspond to dinoseb acetate.

33. The cited regulatory actions would appear to apply to all forms of dinoseb. Based on the reference to dinoseb acetate in the decision guidance document (Section 2.2 Reason for Control Action) the present listing in Annex III (chemical description and CAS number) would not appear to cover all of the forms of dinoseb identified in the decision guidance document.

34. Possible measures

a) Based on the understanding that the listing in Annex III should be as explicit as possible and the assumption that all derivatives (salts/esters) of this active ingredient are included (in line with the scope of the regulatory actions referenced in the decision guidance document), there are at least three options to be considered regarding the description of these chemicals

Option 1: amend the description to refer to dinoseb (parent compound) only and retain the CAS number for the parent compound (free acid) with the understanding that all derivatives (salts/esters) are included.

Option 2: amend the description to refer to dinoseb (parent compound) only and retain the CAS number for the parent compound (free acid) with the addition of a footnote that all derivatives (salts/esters) are included.

Option 3: amend the description to more clearly reflect the fact that all derivatives are included e.g. dinoseb and salts and esters of dinoseb. The CAS number for the parent compound (free acid) would be retained unchanged.

Mercury and related compounds:

Current Status

35. The listing in Annex III includes a chemical description referring to four groups of mercury compounds (inorganic mercury, alkyl mercury, alkyloxyalkyl mercury and aryl mercury compounds) with no CAS numbers specified. There are more than 76 mercury compounds that might be considered to fall into this chemical description.

36. The 22 regulatory actions reported in the decision guidance document (bans and severe restrictions) were taken between 1966 and 1988. These regulatory actions vary in their specificity, some identify individual compounds while others reflect the four general groups listed in Annex III. The decision guidance document lists 45 different compounds with their associated CAS numbers organised in the same four groups identified in Annex III.

37. Possible Measures

a) In line with the other chemicals listed in Annex III consideration should be given to incorporating CAS numbers for the four groups of compounds listed in Annex III (if they exist) with the understanding that the range of derivatives subject to the Convention are those specifically listed in the decision guidance document.

b) A complete listing of all of the different compounds in Annex III itself may not be feasible. In line with the guidance provided by the ninth session of the Intergovernmental Negotiating Committee possible options include a footnote that lists the individual chemicals or indicates where the such a list might be found (see paragraphs 13 and 14). In this case this could simply reference the decision guidance document where a list of the individual chemicals and their associated CAS numbers can be found.

Group 3 capatafol, chlordane, phosphamidon, HCH (mixed isomers), lindane, polybrominated biphenyls, polychlorinated biphenyls

38. The chemicals in this group exist in more than one isomeric form and may be marketed or used either as individual isomers or as a mixture of isomers. CAS numbers have been assigned for the mixtures as well as the specific isomers.

39. In most instances it is the isomeric mixture that is marketed or used as a pesticide. The individual isomers may also be marketed/registered as pesticides in their own right and subject to separate regulatory actions e.g. lindane and HCH (mixed isomers).

40. There are inconsistencies with how these chemicals are described in Annex III and in the associated decision guidance documents.

41. It is not clear that a decision guidance document based on control actions for isomeric mixtures of active ingredient can be unilaterally extrapolated to include the separate isomeric forms where they have not been specifically referenced as being subject to the final regulatory action.

capatafol, chlordane

Current Status

42. The listing in Annex III includes a chemical description of the commonly recognized parent compound and the relevant CAS number. Both captafol and chlordane exist in one or more isomeric forms for which one or more CAS numbers have been assigned.

43. The CAS numbers listed in Annex III reflect the chemicals in the reported regulatory actions and are the same as those included in the decision guidance documents. The information on the regulatory actions for captafol and chlordane, reported in the relevant decision guidance documents, does not reference the other isomeric forms. There is no evidence that the additional individual isomers of these chemicals have been used as pesticides

44. CAS numbers have been assigned to four forms of chlordane, as technical chlordane, chlordane as well as cis and trans isomers, only the CAS number for chlordane is included in Annex III. The

regulatory actions cited in the decision guidance document refer to chlordane alone as does the listed CAS number (57-47-9).

45. CAS numbers have been assigned for captafol and for its cis-isomer. The regulatory actions cited in the decision guidance document refer to captafol alone as does the listed CAS number (2425-06-1).

46. Possible Measures

a) For capatafol and chlordane the listing in Annex III (chemical description and CAS number), is clear and corresponds to the chemicals identified in the regulatory actions reported in the decision guidance documents.

b) The current listing of these chemicals in Annex III (description and associated CAS number) does not need to be amended.

HCH (mixed isomers), Lindane (gamma isomer of HCH),

Current Status

47. The listing in Annex III includes the commonly recognized chemical description for HCH (mixed isomers) and lindane along with the corresponding CAS number. Both these chemicals may be used as pesticides and have been subject to separate regulatory actions.

48. For HCH (mixed isomers) the CAS number listed in Annex III (608-73-1) applies to the isomeric mixture of HCH. The composition is described in the decision guidance document (53 – 70 % alpha; 3-14% beta; 11-18% gamma; 6-10% delta and 3-10% other isomers).

49. For lindane the CAS number listed in Annex III (58-89-9) applies to a single isomeric form of HCH. The composition is described in the decision guidance document to be > 99% gamma isomer of HCH.

50. The separate listing of HCH (mixed isomers) and lindane reflects the fact that they may be subject to separate regulatory actions and sets a precedent for considering mixed isomers and isolated isomeric forms as distinct active ingredients when they are listed in Annex III

51. Possible Measures

a) For HCH (mixed isomers) and lindane the listing in Annex III, chemical description and CAS number, are clear and correspond to the chemicals identified in the regulatory actions reported in the decision guidance documents.

b) The current listing of these chemicals in Annex III (description and associated CAS number) does not need to be amended.

Phosphamidon

Current Status

52. Phosphamidon has been included in Annex III as a severely hazardous pesticide formulation and will also be considered under group 4 (see paragraphs 83 – 88). The chemical description includes the isomeric mixture (E and Z isomers) as well as the individual isomers. The corresponding CAS numbers for the three forms of phosphamidon are individually listed.

53. The CAS numbers for the three isomeric forms are listed in the decision guidance document, though the list of trade names correspond to preparations of the mixed isomers only. The regulatory

actions cited in the decision guidance document make no reference to the different isomeric forms of phosphamidon. There is no evidence that formulations of the individual isomers were the basis for concerns regarding unacceptable risks under conditions of use or that soluble liquid formulations of the individual isomers have ever been registered for use as pesticides (see paragraphs 83 – 88).

54. Possible Measures

a) The chemical description and the CAS number listed in Annex III could be limited to the isomeric mixture (E and Z isomers, CAS number 1317-21-6) as this would appear to be the product marketed and associated with the problems in countries under conditions of use as set out in the decision guidance document (see paragraph 89).

polybrominated biphenyls (PBBs), polychlorinated biphenyls (PCBs), polychlorinated terphenyls (PCTs)

55. These chemicals consist of a mixture of isomers reflecting differential substitution with chlorine or bromine. CAS numbers have been assigned for the isomeric mixtures as well as the individual isomers. In some instances the individual isomers may have been subject to separate regulatory actions.

polychlorinated terphenyls (PCTs)

Current Status

56. The listing in Annex III includes a chemical description that reflects the isomeric mixture and a single CAS number. The regulatory actions cited in the decision guidance document reference the fact that all forms of this compound have been banned.

57. Possible Measures

a) The current listing in Annex III (chemical description and associated CAS number) does not need to be amended.

polybrominated biphenyls (PBBs)

Current Status

58. The listing in Annex III includes a chemical description that reflects the isomeric mixture though only the CAS numbers for three specific forms (hexa, octa and deca) are listed. Of the three regulatory actions cited in the decision guidance document two reference the fact that all forms were banned or severely restricted while in the third only the use of hexabromobiphenyls was prohibited. The separate listing of selected isomeric forms reflects this information. It also implies that countries could make import responses in which they would allow import of certain isomers and not others e.g. not consent to import of hexabromobiphenyls but consent to the other isomers. (see mercury below)

59. Possible Measures

a) The current listing in Annex III (chemical description and associated CAS number) does not need to be amended.

polychlorinated biphenyls (PCBs)

Current Status

60. The listing in Annex III includes a chemical description that reflects the isomeric mixture and a single CAS number. The regulatory actions cited in the decision guidance document include two bans and seven severe restrictions. In one case mono- and dichlorinated biphenyls are reported to be exempt from the regulatory action while for others a maximum PCB concentration in certain products has been specified.

61. It is not clear if the listing of the isomeric mixture and associated CAS number would allow countries to selectively import certain types of PCBs that might still be in use (e.g. mono – dichlorinated biphenyls) or products containing PCBs within a specified maximum concentration.

62. Possible measures

a) The distinction between the listing in Annex III of specific isomers of PBBs and of the isomeric mixture for PCBs is not clear given the underlying regulatory actions and the possibility of there being ongoing trade in specific isomers or products containing the isomeric mixture within certain specific concentrations.

b) The chemical description and the associated CAS number(s) in Annex III may need to be revisited to reflect specific isomers subject to the underlying regulatory actions reported in the decision guidance document and to be consistent with the present listing of PCTs. (see also paragraph 50).

Group 4

methamidophos, monocrotophos, phosphamidon, parathion, methyl-parathion

63. The chemicals in this group are severely hazardous pesticide formulations that were identified prior to September 1998. While individual/distinct chemicals such as pesticide active ingredients and their derivatives are assigned specific CAS numbers pesticide formulations are not. The CAS numbers for the individual active ingredients contained in these formulations are listed in Annex III.

64. These chemicals are not described in a consistent way in Annex III. For example methamidophos and monocrotophos formulations are described as those containing above a specific amount of active ingredient, precise concentrations of active ingredient are described for methyl parathion, and for parathion all formulations (with the exception of capsule suspensions) regardless of the concentration of active ingredient, are listed.

65. In its consideration of the listing of severely hazardous pesticide formulations in Annex III the ninth session of the Intergovernmental Negotiating Committee provided specific guidance relevant to a consideration of this group of chemicals (see paragraphs 13 and 14).

methamidophos

Current Status

66. The listing in Annex III includes a chemical description of the parent compound along with the corresponding CAS number and specifies soluble liquid formulations of the substance that exceed 600 g active ingredient /l.

67. The decision guidance document states that formulations of the substance which exceed 600 g ai/l are included because of their acute hazard classification and concern as to their impact on human health under conditions of use in developing countries. It is further stated that “There are several reports that agricultural use of methamidophos causes health problems. In the USA, methamidophos ranked second in percentage of cases displaying signs of life threatening symptoms among occupational Poison Control Center cases”. The Fifth Meeting of the Joint Expert Group is referenced.

68. The reported WHO classification of hazard indicates that liquid formulations greater than 10% active ingredient would be in hazard class 1b.

69. There are four regulatory control actions cited in the decision guidance document, three bans and one severe restriction. The severe restriction applies to methamidophos formulations higher than 600 g/l.

70. The report of the Fifth Meeting of the Expert Group described the formulations of concern as being those containing 600 g active ingredient/l *and* higher.

71. Possible Measures

a)) The reference to the parent compound and associated CAS number should be retained.

b) The chemical description could be assumed to include 600 g/l formulations of active ingredient (e.g. soluble liquid formulations that contain 600 g active ingredient/l or more). If this is agreed then there are two options to consider:

Option 1: retain the present description of the formulations with the understanding that all formulations at 600 g a.i/l and above are included.

Option 2: retain the present description of the formulations with the addition of a footnote explaining that all formulations at 600 g a.i/l and above are included.

monocrotophos

72. The chemical description of this chemical includes the parent compound along with the relevant CAS number and specifies soluble liquid formulations of the substance that exceed 600 g active ingredient /l.

73. The decision guidance document states that formulations of the substance which exceed 500 g ai/l are included because of their acute hazard classification and concern as to their impact on human health under conditions of use in developing countries. The Fifth Meeting of the Joint Expert Group is referenced.

74. The reported WHO classification of hazard indicates that liquid formulations greater than 5 % active ingredient would be in hazard class 1b and greater than 70 % active ingredient in hazard class 1a (oral toxicity) and greater than 25% active ingredient in hazard class 1b (dermal toxicity).

75. There are four regulatory control actions cited in the decision guidance document, three severe restrictions and one ban. The severe restrictions provide no information on the formulations that remain in use.

76. The report of the Fifth Meeting of the Expert Group described the formulations of concern as being those containing 600 g active ingredient/l *and* higher.

77. The decision of the ninth session of the Intergovernmental Negotiating Committee (Decision INC.9/1) to include monocrotophos in the interim PIC procedure effectively applies to all formulations. In taking this decision “The Committee decided that with the circulation of the new decision guidance document on monocrotophos, countries would be invited to submit a single decision regarding future imports that would apply to all forms of monocrotophos, including the severely hazardous formulations listed in Annex III of the Convention” (paragraph 82, FAO/UNEP/PIC/INC.9/21).

78. Possible Measures

- a) The reference to the parent compound and associated CAS number should be retained.
- b) In line with the guidance from the ninth session of the Intergovernmental Negotiating Committee the chemical description could be assumed to include 600 g/l formulations of active ingredient (e.g. soluble liquid formulations that contain 600 g active ingredient/l or more).
- c) It appears that there is a typographical error in the decision guidance document (500 g a.i./l instead of 600 g a.i./l) that will need to be corrected
- d) In the light of the decision of the ninth session of the Intergovernmental Negotiating Committee to include all forms of monocrotophos in the interim PIC procedure, the Interim Chemical Review Committee may wish to consider the need to retain a separate listing of the severely hazardous formulations in Annex III of the Convention (see paragraph 93). Options include deletion of the listing of the specific formulations in Annex III or the addition of a footnote that explains that the formulations are superseded by the decision to include of all forms of monocrotophos.

methyl parathion

Current Status

79. The listing in Annex III includes a chemical description of the parent compound along with the corresponding CAS number and a list of emulsifiable concentrate and dust formulations containing precise concentrations of the active ingredient.
80. The chemical description in Annex III would appear to limit the application of the PIC procedure to those emulsifiable concentrate and dust formulations containing the concentrations of active ingredient specified.
81. The decision guidance document states that the pesticide is included because of its acute hazard classification and concern as to its impact on human health under the conditions of use in developing countries. It is further stated that "After review by the FAO/UNEP Joint Expert Group on PIC, it was decided that certain formulations of parathion methyl emulsifiable concentrates (EC) with 19.55, 40%, 50%, 60% active ingredient (ai) and dusts containing 1.5%, 2% and 3% (ai) should be placed in that category. A typically used formulation is 50% EC which falls in to WHO Class 1b, Highly Hazardous. Dust formulations were included for consideration even though in Class III because of the great variation of concentrations and uncertainty over potential doses by inhalation, especially because formulations of this pesticide are produced by many manufacturers with varying degrees of control over the proportion of respirable particles.

82. Possible Measures

- a) The reference to the parent compound and associated CAS number should be retained.
- b) In line with the guidance from the ninth session of the Intergovernmental Negotiating Committee the chemical description could be assumed to include emulsifiable concentrates (EC) containing 19.5 % or more active ingredient and dusts containing 1.5% or more active ingredient. If this is agreed then there are at least two options to consider:

Option 1: retain the present description of the formulations with the understanding that all emulsifiable concentrates (EC) containing 19.5 % or more active ingredient and dusts containing 1.5% or more active ingredient formulations are included.

Option 2: retain the present description of the formulations with the addition of a footnote explaining that all emulsifiable concentrates (EC) containing 19.5 % or more active ingredient and dusts containing 1.5% or more active ingredient formulations are included.

phosphamidon

Current Status

83. The listing in Annex III includes a chemical description of the parent compound along with the CAS numbers for three forms of the active ingredient, a mixture of two isomers (E & Z) and for the two isomers separately. It specifies soluble liquid formulations of the substance that exceed 1000 g active ingredient/l

84. The listing of the CAS numbers for the individual isomers suggest that formulations of these individual isomers would also be included in the PIC procedure though there is no evidence to suggest that such formulations have ever been marketed or used as pesticides.

85. The decision guidance document states that formulations of the substance which exceed 1000 g ai/l are included because of their acute hazard classification and concern as to their impact on human health under conditions of use in developing countries. It is further stated that “There are some reports of the agricultural use of phosphamidon causing health problems. A few confirmed cases of human poisonings are also currently on record”. The Fifth Meeting of the Joint Expert Group is referenced.

86. The reported WHO classification of hazard indicates that liquid formulations (mixed isomers) greater than 3 % active ingredient would be in hazard class 1b and greater than 80 % active ingredient in hazard class 1a (dermal toxicity).

87. There are three regulatory control actions cited in the decision guidance document. Two bans and one severe restriction, though there is no information on any permitted formulations. The regulatory actions make no reference to the individual isomers. The trade names of the formulations included in the decision guidance document correspond to phosphamidon (mixed isomers).

88. The report of the Fifth Meeting of the Expert Group described the formulations of concern as being those containing 1000 g active ingredient/l *and* higher.

89. Possible Measures

a) The chemical description and the CAS number listed in Annex III could be limited to the isomeric mixture (E and Z isomers, CAS number 1317-21-6) as this would appear to be the product marketed and associated with the problems in countries under conditions of use as set out in the decision guidance document (see paragraph 54).

b) In line with the guidance provided by the ninth session of the Intergovernmental Negotiating Committee the chemical description could be assumed to include 1000 g/l formulations of active ingredient (e.g. soluble liquid formulations that contain 1000 g active ingredient/l or more). If this is agreed then there are at least two options to consider:

Option 1: retain the present description of the formulations with the understanding that all formulations at 1000 g a.i/L and above are included.

Option 2: retain the present description of the formulations with the addition of a footnote explaining that all formulations at 1000 g a.i/L and above are included.

parathion

Current Status

90. The listing in Annex III includes a chemical description of the parent compound along with the corresponding CAS number and all aerosol, dustable powder, emulsifiable concentrate, granular and wettable powder formulations except capsule suspensions.

91. The decision guidance document states that all formulations of this substance (except capsule suspensions) are included because of their acute hazard classification and concern as to their impact on human health under the conditions of use in developing countries. It is further stated that “the 3rd Joint Expert Group Meeting decided to include all formulations of parathion in the PIC procedure except capsule suspensions (CS). The principal reason for actions regarding parathion and its inclusion in the PIC procedure relate to its high acute toxicity. The active ingredient and its most typical formulations fall into the WHO classification by hazard 1a or 1b. The draft WHO health and safety guide noted “there are more reported cases of poisoning with parathion than with any other pesticide currently in use”.

92. This listing covers all of the referenced formulation types regardless of the concentration of active ingredient.

93. It should be noted that a proposal to include all formulations of parathion in the interim PIC procedure will be considered by the third session of the Interim Chemical Review Committee. In the event the Committee decides to recommend inclusion of all formulations of parathion in the interim PIC procedure consideration as to the continued listing of the specified formulations in Annex III may be needed. This situation is the same as that for monocrotophos (see paragraph 78d)).

94. Possible Measures

a) The reference to the parent compound and associated CAS number should be retained.

b) The chemical description includes all formulations (e.g. containing any level of active ingredient) except capsule formulations and should be unchanged.