



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

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Chemical Review Committee
Eighteenth meeting
Rome, 19–23 September 2022

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

I. Opening of the meeting

1. The eighteenth meeting of the Chemical Review Committee under the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade was held at the headquarters of the Food and Agriculture Organization of the United Nations (FAO), Viale delle Terme di Caracalla, Rome, from 19 to 23 September 2022.
2. The meeting was opened at 9.35 a.m. on Monday, 19 September 2022, by the Chair of the Committee, Ms. Noluzuko Gwayi (South Africa).
3. Opening remarks were delivered by Ms. Christine Fuell, Senior Technical Officer, Secretariat of the FAO part of the Rotterdam Convention, on behalf of Mr. Rémi Nono Womdim, Executive Secretary of the FAO part of the Rotterdam Convention, and Mr. Carlos Martin-Novella, Deputy Executive Secretary of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, the Rotterdam Convention and the Stockholm Convention on Persistent Organic Pollutants.
4. In his statement, welcoming members and observers to the meeting, and extending a special welcome to new members attending in person for the first time, Mr. Nono Womdim noted that the online format of previous meetings and the associated need to prioritize the review of certain pesticides had caused a backlog of work which, together with a high number of new notifications of final regulatory action, had led to an agenda that included an unprecedented number of pesticides. The situation should be taken as an indication of success, however, both in the enhanced effectiveness of the Convention and as evidence that a growing number of Parties complied with their obligations due to their increased capacities. Furthermore, the Secretariat had adapted its methods to ensure that Parties continued to receive technical support upon request despite the coronavirus disease (COVID-19) pandemic situation.
5. In July 2021, the FAO Conference had adopted a proposal to continue its financial support of the Rotterdam Convention by allocating \$1.5 million from its regular budget for the biennium 2022–2023 to be managed directly by the Secretariat of the FAO part of the Rotterdam Convention. As had been done before the COVID-19 pandemic, a face-to-face orientation workshop could be funded with those resources in 2023. Both the FAO strategic framework for the period 2022–2031 and the work of the Committee addressed key elements of the 2030 Agenda for Sustainable Development, as protecting human and environmental health would support the transformation to more efficient, inclusive, resilient and sustainable agrifood systems for better production, better nutrition, a better environment, and a better life, leaving no one behind. He therefore called on all the participants to renew and strengthen their commitment to keeping the sound management of chemicals, pesticides and wastes high on the international agenda.

6. Mr. Nono Womdim highlighted a recent study which had shown that 64 per cent of agricultural land globally was at risk, and 31 per cent at high risk, of pesticide pollution by more than one active ingredient, posing a serious threat to biodiversity, human health and the environment. The work of the Committee was therefore of the utmost importance to address those threats. During the 2022 face-to-face segments of the meetings of the conferences of the Parties to the Basel, Rotterdam and Stockholm conventions, Mr. Marcos A. Orellana, Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and waste, had noted the importance of the work under the conventions, and called on the Parties to the Rotterdam Convention to pay heed to its scientific subsidiary body, namely the Chemical Review Committee. He expressed his gratitude to all the Committee members for their dedication in tackling a substantial workload during the intersessional period, often in difficult circumstances, and to observers for their valuable contributions to the Committee's work.

7. Welcoming participants, Mr. Martin-Novella recalled that, notwithstanding the challenges caused by the COVID-19 pandemic, the outcomes of the Committee's work continued to be important across the global chemicals and waste management agenda, including through the implications of that work for human health and the environment, sustainable development and food security, and associated socioeconomic considerations. At the current meeting, the Committee faced a high workload in terms of reviewing notifications of final regulatory action and finalizing two draft decision guidance documents. The large number of notifications for review served as evidence of growing concern regarding the potential risks posed by hazardous chemicals and pesticides; the work of the Committee was particularly important for countries with inadequate infrastructure for monitoring and regulating the import of such chemicals.

8. A sound scientific basis was key to meeting the objective of the Convention, with the expectations of different stakeholder groups showing the keen interest in the work of the Committee and the important role it played in driving policy formulation at all levels of governance. This had been underscored by the adoption, in March 2022, of United Nations Environment Assembly resolution 5/8, whereby the Assembly had decided that a science-policy panel should be established to contribute further to the sound management of chemicals and waste and to prevent pollution.

9. The Basel, Rotterdam and Stockholm conventions continued to serve as successful examples of the commitment of the global community, including Governments, industry, academia and civil society, towards a common goal of producing, trading and using chemicals in ways that minimized their adverse effects on human health and the environment for the global environmentally sound management of chemicals and wastes and for the achievement of the Sustainable Development Goals. An example of the benefits of synergies between the conventions was the opportunity for the Committee to benefit from an exchange of information, experience and expertise with the Persistent Organic Pollutants Review Committee of the Stockholm Convention when considering the agenda item on perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds.

II. Organizational matters

A. Attendance

10. The following members of the Committee attended the meeting: Mr. Jonah Ormond (Antigua and Barbuda), Ms. Anahit Aleksandryan (Armenia), Ms. Qinghong Pu (Australia), Mr. Juergen Helbig (Austria), Ms. Mirijam Seng (Belgium), Mr. Christian Bart (Canada), Ms. Cangmin Li (China), Mr. Carles Escriva (Germany), Mr. Joseph Cantamanto Edmund (Ghana), Mr. Carlos Enrique Acevedo González (Guatemala), Mr. Suresh Lochan Amichand (Guyana), Mr. Dinesh Runiwal (India), Ms. Yenny Meliana (Indonesia), Ms. Judite Dipane (Latvia), Mr. Hassan Azhar (Maldives), Ms. Saida Ech-Chayeb (Morocco), Mr. Shankar Prasad Paudel (Nepal), Mr. Charles Bodar (Netherlands), Mr. Zaigham Abbas (Pakistan), Mr. Christian Sekomo Birame (Rwanda), Ms. Aïta Sarr Seck (Senegal), Ms. Suzana Andrejevic Stefanovic (Serbia), Ms. Noluzuko Gwayi (South Africa), Ms. Victorine Augustine Pinas (Suriname), Ms. Sarah Maillefer (Switzerland), Ms. Palarp Sinhaseni (Thailand), Mr. Hasmath Ali (Trinidad and Tobago), Mr. Youssef Zidi (Tunisia), Mr. Daniel William Ndiyo (United Republic of Tanzania), Mr. Clarence Matewe (Zimbabwe).

11. The member of the Committee from Sri Lanka was unable to attend.

12. The following States were represented as observers: Argentina, Australia, Brazil, Canada, Croatia, Gabon, Gambia, Ghana, Guatemala, India, Indonesia, Italy, Japan, Kenya, Libya, Norway, Romania, Russian Federation, Serbia, Slovenia, South Africa, Sudan, United Kingdom of Great Britain and Northern Ireland, United Republic of Tanzania, United States of America, Zimbabwe.

13. Non-governmental organizations were also represented as observers. The names of those organizations are included in the list of participants (UNEP/FAO/RC/CRC.18/INF/34).

B. Adoption of the agenda

14. In considering the sub-item, the Committee had before it the provisional agenda (UNEP/FAO/RC/CRC.18/1) and the annotations to the provisional agenda (UNEP/FAO/RC/CRC.18/1/Add.1).

15. The Committee adopted the following agenda on the basis of the provisional agenda:

1. Opening of the meeting.
2. Organizational matters:
 - (a) Adoption of the agenda;
 - (b) Organization of work.
3. Review of the outcomes of the tenth meeting of the Conference of the Parties to the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade that are relevant to the work of the Committee.
4. Rotation of the membership.
5. Technical work:
 - (a) Consideration of draft decision guidance documents:
 - (i) Iprodione;
 - (ii) Terbufos;
 - (b) Report of the Bureau on the preliminary review of notifications of final regulatory action;
 - (c) Review of notifications of final regulatory action:
 - (i) Amitrole;
 - (ii) Carbaryl;
 - (iii) Carbon tetrachloride;
 - (iv) Chlorfenvinphos;
 - (v) Methidathion;
 - (vi) Methyl bromide;
 - (vii) Methyl parathion;
 - (viii) Mirex;
 - (ix) Paraquat;
 - (x) Thiodicarb.
6. Venue and dates of the nineteenth meeting of the Committee.
7. Other matters.
8. Adoption of the report of the meeting.
9. Closure of the meeting.

16. The Committee decided that, under agenda item 7 (Other matters), it would consider a report on activities to facilitate effective participation in the work of the Committee, and discuss the intersessional work on new notifications of final regulatory action.

C. Organization of work

17. The Committee decided to conduct the meeting in accordance with the scenario note prepared by the Chair (UNEP/FAO/RC/CRC.18/INF/1) and the tentative schedule for the meeting (UNEP/FAO/RC/CRC.18/INF/2), subject to adjustment as necessary. It also decided that contact

groups and drafting groups would be established as needed throughout the meeting. The documents pertaining to each agenda item were identified in the annotations to the provisional agenda (UNEP/FAO/RC/CRC.18/1/Add.1) and in the list of pre-session documents by agenda item (UNEP/FAO/RC/CRC.18/INF/33).

18. It was noted that any participants who were not able to attend the meeting in person owing to COVID-19-related travel restrictions or illness could participate online but that any participants who were unable to attend for other reasons would only have the opportunity to follow the meeting in viewer mode online.

III. Review of the outcomes of the tenth meeting of the Conference of the Parties to the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade that are relevant to the work of the Committee

19. Introducing the item, the representative of the Secretariat summarized the information provided in document UNEP/FAO/RC/CRC.18/INF/31, on the outcomes of the tenth meeting of the Conference of the Parties to the Rotterdam Convention relevant to the Committee's work, and document UNEP/FAO/RC/CRC.18/INF/32 on the indicative list of substances covered by the listing of perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds. She drew attention, in particular, to:

(a) Decisions RC-10/6 and RC-10/7, by which the Conference of the Parties had decided to list decabromodiphenyl ether and PFOA, its salts and PFOA-related compounds in Annex III to the Convention and approved the related decision guidance documents. The amendments to the Convention would enter into force for all Parties on 22 October 2022;

(b) Decision RC-10/9 on the listing of chemicals in Annex III to the Convention, in which the Conference of the Parties had taken note of the discussions on challenges, concerns, views and possible ways forward in relation to the chemicals for which it had not been able to reach consensus at its tenth meeting on listing in Annex III to the Convention;

(c) Decision RC-10/8 on the identification of substances covered by the listing of PFOA, its salts and PFOA-related compounds, by which the Conference of the Parties had requested the Secretariat to prepare, in consultation with the Committee, an indicative list of PFOA, its salts and PFOA-related compounds, to make the list available on the website of the Convention and to update it periodically. In response to the request, the Secretariat had prepared a draft indicative list of substances covered by the listing of PFOA, its salts and PFOA-related compounds, as set out in document UNEP/FAO/RC/CRC.18/INF/32. As the definition of PFOA, its salts and PFOA-related compounds under the Rotterdam Convention was similar to those chemicals listed in Annex A to the Stockholm Convention, the draft indicative list had been prepared on the basis of the updated indicative list available under the Stockholm Convention,¹ which had been prepared by the Secretariat in consultation with the Persistent Organic Pollutants Review Committee. The Chemical Review Committee was invited to provide comments on the draft indicative list to the Secretariat by 14 October 2022, after which time the Secretariat would make the revised list available on the website of the Convention. The indicative list would then be updated periodically, in coordination with any updates to the list available under the Stockholm Convention.

20. The Conference of the Parties had also welcomed the activities conducted by the Secretariat for new members, and requested the Secretariat to continue implementing training activities for new and existing members within the framework of the technical assistance plan, subject to the availability of resources, considering different delivery techniques and information channels, such as workshops and online training, and to report on the results to the Conference of the Parties at its eleventh meeting.

21. Responding to the concern expressed by a member that several chemicals that had previously been recommended for listing by the Committee, in its role as the technical subsidiary body of the Convention, had failed to be listed at several consecutive meetings of the Conference of the Parties, the Chair recalled that the role of the Committee was to base all its decisions solely on the science available, whereas the Conference of the Parties had to take other considerations into account. She

¹ UNEP/POPS/POPRC.17/INF/14/Rev.1

noted that members had a role to play in ensuring that Parties were fully informed of the work of the Committee.

22. The Committee took note of the information provided.

IV. Rotation of the membership

23. Introducing the item, the representative of the Secretariat drew attention to the information provided in document UNEP/FAO/RC/CRC.18/INF/3, on the rotation of the membership of the Chemical Review Committee.

24. At the face-to-face segment of its tenth meeting, the Conference of the Parties had appointed 17 designated experts to serve as members of the Committee, with terms of office from the closure of the tenth meeting to 30 April 2026, and had confirmed the appointment of Mr. Carlos Enrique Acevedo González (Guatemala) to replace Ms. Eliana Rosa Munarriz (Argentina) as a member of the Committee, to serve for the remainder of Ms. Munarriz's term, until 30 April 2024.

25. Following the tenth meeting of the Conference of the Parties, Belgium had designated Ms. Mirijam Seng as the replacement for Ms. Mara Curaba for the remainder of her term, until 30 April 2024, with the appointment being subject to confirmation by the Conference of the Parties at its eleventh meeting. At the eleventh meeting, the Conference of the Parties would need to appoint 14 new members to replace the members whose term of office would expire on 30 April 2024.

26. At its seventeenth meeting, the Committee had elected two new Bureau members, namely, for the Latin American and Caribbean States, Mr. Jonah Ormond (Antigua and Barbuda), and for the Western European and other States, Mr. Juergen Helbig (Austria). The members from the Asia-Pacific States and the Eastern European States had agreed to the election of new Bureau members from those regions by electronic means following the tenth meeting of the Conference of the Parties and in advance of the current meeting. Subsequently, Mr. Zaigham Abbas (Pakistan) was elected for the Asia-Pacific States and Ms. Judite Dipane (Latvia) was elected for the Eastern European States. Ms. Noluzuko Gwayi had been appointed for a second term of office as a member of the Committee by the Conference of the Parties at its tenth meeting and continued to serve as Chair of the Committee.

27. The Committee took note of the information provided.

V. Technical work

A. Consideration of draft decision guidance documents

1. Iprodione

28. Introducing the sub-item, the representative of the Secretariat recalled that, at its seventeenth meeting, the Committee had reviewed notifications of final regulatory action for iprodione submitted by the European Union and Mozambique, along with the supporting documentation referenced therein, and, taking into account each of the specific criteria set out in Annex II to the Convention, had concluded that both notifications met the criteria set out in Annex II to the Convention. Accordingly, by its decision CRC-17/1, the Committee had recommended to the Conference of the Parties that it list iprodione in Annex III to the Convention as a pesticide. In addition, the Committee had adopted a rationale for its conclusion and had agreed that an intersessional drafting group would prepare a draft decision guidance document for iprodione.

29. At the current meeting, the Committee had before it the draft decision guidance document prepared by the intersessional drafting group (UNEP/FAO/RC/CRC.18/3) and a compilation of comments and responses relating thereto (UNEP/FAO/RC/CRC.18/INF/4).

30. Mr. Daniel Ndiyo, the chair of the intersessional drafting group, reported on the outcome of the group's work, and Mr. Charles Bodar presented the draft decision guidance document on behalf of Mr. Timo Seppälä, the drafter of the group, who had completed his term of office as a Committee member in June 2022.

31. Following the presentation, the Committee requested Mr. Ndiyo and Mr. Bodar to prepare a revised draft decision guidance document with the support of the Secretariat, taking into account the need to update certain data in the draft as indicated during the discussion by an observer Government and reflecting its key comments provided during the meeting in the compilation of comments in document UNEP/FAO/RC/CRC.18/INF/4. The Committee also requested the Secretariat to prepare a draft decision by which the Committee would adopt the draft decision guidance document, as

amended, and forward it, along with the related compilation of comments, to the Conference of the Parties for consideration at its eleventh meeting.

32. Subsequently, Mr. Bodar presented the amendments made to the draft decision guidance document. Concerning the comment made during the discussion by the observer Government to replace references to data from the PubChem database with those from internationally recognized sources, one member said that, although it was generally preferable to avoid revising a draft decision guidance document at such a late stage in the process, the revisions both improved the document and were in line with the Committee's approach, as they mainly referred to data from the European Union, on whose final regulatory action the draft guidance document was based.

33. The Committee adopted decision CRC-18/1, by which it adopted the revised draft decision guidance document for iprodione (UNEP/FAO/RC/CRC.18/3/Rev.1) and decided to forward it, together with the related compilation of comments (UNEP/FAO/RC/CRC.18/INF/4/Rev.1), to the Conference of the Parties for its consideration. The decision is set out in annex I to the present report.

2. Terbufos

34. Introducing the sub-item, the representative of the Secretariat recalled that, at its seventeenth meeting, the Committee had reviewed notifications of final regulatory action for terbufos submitted by Canada and Mozambique, along with the supporting documentation referenced therein, and, taking into account each of the specific criteria set out in Annex II to the Convention, had concluded that both notifications met the criteria set out in Annex II to the Convention. Accordingly, by its decision CRC-17/2, the Committee had recommended to the Conference of the Parties that it list terbufos in Annex III to the Convention as a pesticide. In addition, the Committee had adopted a rationale for its conclusion and had agreed that an intersessional drafting group to prepare a draft decision guidance document for terbufos.

35. At the current meeting, the Committee had before it the draft decision guidance document prepared by the intersessional drafting group (UNEP/FAO/RC/CRC.18/4) and a compilation of comments and responses relating thereto (UNEP/FAO/RC/CRC.18/INF/5).

36. Mr. Ormond, the chair of the intersessional drafting group, reported on the group's work, and Mr. Christian Bart presented the draft decision guidance document on behalf of Mr. Martin Lacroix, the drafter of the group, who had completed his term of office as a Committee member in June 2022.

37. Following the presentation, one member asked how the Committee should deal with comments indicating that the Handbook of Working Procedures and Policy Guidance for the Chemical Review Committee should probably be amended. The Chair responded that rather than being prescriptive, the Handbook was intended to provide guidance for members by recording notifications that could serve as examples to assist members in dealing with various scenarios and new situations.

38. The Committee requested Mr. Ormond and Mr. Bart to prepare a revised draft decision guidance document with the support of the Secretariat, taking into account the need to update certain data in the draft as indicated during the discussion and reflecting the key comments provided during the meeting in the compilation of comments set out in document UNEP/FAO/RC/CRC.18/INF/5. The Committee also requested the Secretariat to prepare a draft decision by which the Committee would adopt the draft decision guidance document, as amended, and forward it, along with the related compilation of comments, to the Conference of the Parties for consideration at its eleventh meeting.

39. Subsequently, the Committee adopted decision CRC-18/2, by which it adopted the draft decision guidance document for terbufos (UNEP/FAO/RC/CRC.18/4/Rev.1) and decided to forward it, together with the related compilation of comments (UNEP/FAO/RC/CRC.18/INF/5/Rev.1), to the Conference of the Parties for its consideration. The decision is set out in annex I to the present report.

B. Report of the Bureau on the preliminary review of notifications of final regulatory action

40. In considering the sub-item, the Committee had before it the report of the Bureau on the preliminary review of notifications of final regulatory action (UNEP/FAO/RC/CRC.18/2), information on trade in chemicals under consideration by the Committee (UNEP/FAO/RC/CRC.18/INF/6/Rev.1) and a summary record of notifications of final regulatory action for chemicals reviewed by the Interim Committee or the Committee and of notifications scheduled for review by the Committee (UNEP/FAO/RC/CRC.18/INF/7/Rev.1).

41. Presenting the outcome of the preliminary review, Mr. Helbig, a member of the Bureau, said that, on the basis of the information available at the time, the Bureau had undertaken a preliminary review of the new notifications of final regulatory action and relevant supporting documentation. The main purpose of the preliminary review had been to assign each candidate chemical to an intersessional task group. The preliminary review had also provided an opportunity for the Bureau and the Secretariat to seek further clarification or information about those chemicals where needed.

42. Four intersessional task groups for candidate chemicals had been established, with Committee members designated as chairs, drafters or members of the groups, based on their expertise. All Committee members had been encouraged to join any of the task groups. Owing to the particular timeline for the rotation of the membership in 2022, several of the task group chairs, drafters and members who had participated in the intersessional work had completed their terms in June 2022 and been replaced by new members.

43. Between January and May 2022, the intersessional task groups had reviewed new notifications and prepared draft reports for seven chemicals: carbaryl, chlorfenvinphos, methidathion, methyl bromide, methyl parathion, mirex and thiodicarb. Those draft reports were in addition to the draft reports prepared by intersessional task groups between April and November 2021 for three chemicals: amitrole, carbon tetrachloride and paraquat. The draft reports had been posted on the Convention website for comments by members and observers, and the intersessional task groups had met face to face, with the participation of observers, immediately before the meeting to finalize their reports. A representative of each task group would present the findings of that task group.

44. The Committee took note of the information presented.

C. Review of notifications of final regulatory action

1. Amitrole

45. The Committee had before it a notification of final regulatory action on amitrole in the pesticide category from the Latin America and the Caribbean prior informed consent region (Ecuador) (UNEP/FAO/RC/CRC.18/5), along with the related supporting information (UNEP/FAO/RC/CRC.18/INF/8). At its fifteenth meeting, the Chemical Review Committee had decided that a notification related to amitrole in the pesticide category from the Europe prior informed consent region (European Union) met all the criteria set out in Annex II to the Convention. The notification from the European Union and the rationale for the conclusion by the Committee were set out in document UNEP/FAO/RC/CRC.18/INF/9. The Committee also had before it a conference room paper containing the report of the intersessional task group that had been established to undertake a preliminary assessment of the notification and supporting documentation to determine whether they met the criteria set out in Annex II to the Convention.

46. Mr. Hassan Azhar, chair of the intersessional task group, and Mr. Carles Escriva, on behalf Mr. Seppälä, the drafter of the group, who had completed his term of office as a Committee member in June 2022, reported on the outcome of the group's work.

(a) Notification from Ecuador

47. The notification of final regulatory action from Ecuador on amitrole was submitted in the pesticide category. The registration, manufacture, marketing and use of amitrole had been prohibited in Ecuador since 1992.

48. The notification stated that the ban on all uses of amitrole as a pesticide in Ecuador was based on its harmful effects on human health, including reproductive toxicity and possible harmful effects on the fetus. The task group confirmed that the regulatory action had been taken to protect human health, therefore the criterion in paragraph (a) of Annex II had been met.

49. Regarding compatibility with the criteria set out in paragraph (b) of Annex II, according to the notification the final regulatory action had not been based on a risk or hazard evaluation but identified the health hazards of amitrole based on chemical classification. The task group had concluded that the criteria in paragraph (b) (i), (ii) and (iii) had not been met, and therefore that the requirements of paragraph (b) as a whole had not been met.

50. With regard to the criteria in paragraph (c), before the final regulatory action amitrole had been used as a herbicide in Ecuador and the final regulatory action was expected to prevent the use of amitrole in Ecuador. The regulation had been put in place to eliminate exposure to amitrole and the consequent health risks; with the complete prohibition, the risks from exposure to amitrole had been significantly reduced. The hazards resulting from exposure to amitrole were also applicable to other

countries and the notification also noted that the manufacture, marketing or use of amitrole had been banned in several countries because of the health hazards it posed. Imported products containing amitrole were approved and registered for use in New Zealand, and information on trade had been received from the European Union, thus demonstrating the existence of international trade. The task group had therefore concluded that the criteria in paragraph (c) (i), (ii), (iii) and (iv) had been met.

51. There was no indication in the notification that concerns over the intentional misuse of the chemical had prompted the regulatory action; the task group had therefore concluded that the criterion in paragraph (d) had been met.

(b) Discussion of the notification

52. In the ensuing discussion, all the members who spoke expressed support for the conclusions of the task group.

(c) Next steps

53. There was consensus that the notification on amitrole from Ecuador did not meet all the criteria set out in Annex II to the Convention. As only a notification of final regulatory action from one prior informed consent region in respect of amitrole, which had been reviewed at the fifteenth meeting of the Committee, had met the criteria set out in Annex II to the Convention, the Committee decided that no further action would be taken on the chemical at present.

2. Carbaryl

54. Introducing the sub-item, the representative of the Secretariat recalled that, at its fourth meeting, the Committee had concluded that a notification of final regulatory action on carbaryl in the pesticide category from the European Union met the criteria set out in Annex II to the Convention. That notification from the European Union and the rationale for the conclusion by the Committee were set out in document UNEP/FAO/RC/CRC.17/INF/8.

55. The Committee had before it three further notifications of final regulatory action on carbaryl in the pesticide category from two prior informed consent regions, namely Europe (Bosnia and Herzegovina and Türkiye) and Africa (Mozambique) (UNEP/FAO/RC/CRC.18/6), and supporting documentation relating thereto from Bosnia and Herzegovina, Türkiye and Mozambique (UNEP/FAO/RC/CRC.18/INF/10, UNEP/FAO/RC/CRC.18/INF/11 and UNEP/FAO/RC/CRC.18/INF/12, respectively). The Committee also had before it a conference room paper containing the report of the intersessional task group that had been established to undertake a preliminary assessment of the notifications and supporting documentation to determine whether they met the criteria set out in Annex II to the Convention.

56. Mr. Azhar, the chair of the intersessional task group, and Mr. Escriva, on behalf of Mr. Seppälä, the drafter of the group, who had completed his term of office as a Committee member in June 2022, reported on the outcome of the group's work.

(a) Notifications

(i) Notification from Bosnia and Herzegovina

57. The final regulatory action taken by Bosnia and Herzegovina banned the registration, import, trade and use of carbaryl and was intended to protect human health and the environment; the task group had therefore concluded that the criterion in paragraph (a) of Annex II had been met.

58. With regard to the criteria in paragraph (b) of Annex II, the task group noted that the final regulatory action was not based on a risk or hazard evaluation, but had been taken for the purpose of harmonization with European Union legislation. The task group had reviewed the supporting documentation, which included European Union environmental and health reviews of carbaryl and the peer-reviewed assessment by the European Food Safety Authority that had been performed and documented according to generally recognized scientific principles and procedures. Consequently, the criteria in paragraph (b) (i) and (ii) had been met. With respect to the criterion in paragraph (b) (iii), the final regulatory action was not based on a hazard or risk evaluation involving the conditions within Bosnia and Herzegovina, nor had any bridging information been provided as to how the European Union risk assessment was relevant for the country, and thus the task group had concluded that the criterion in paragraph (b) (iii) had not been met.

59. In terms of the criteria in paragraph (c) of Annex II, the task group noted that carbaryl had been used in the country as an insecticide before the final regulatory action had prohibited it, therefore,

although no information on import or use had been made available, it was expected that the ban would eliminate exposure to the chemical in Bosnia and Herzegovina, thus fulfilling the criterion in paragraph (c) (i). The notification noted several risks from exposure to carbaryl that were considered in the final regulatory action and, as the ban on carbaryl in Bosnia and Herzegovina would reduce those risks to the extent possible, the criterion in paragraph (c) (ii) had been met. The task group considered that the human health and environmental risks identified were applicable to other countries and regions, despite the information not being explicitly stated in the notification, meaning that criterion (c) (iii) had been met. Recent communication from the European Union submitted to the Secretariat confirmed the existence of international trade in carbaryl in 2018 (UNEP/FAO/RC/CRC.18/INF/6), therefore the criterion in paragraph (c) (iv) had also been met.

60. Regarding the criterion in paragraph (d) of Annex II, there was no indication in the notification or supporting documentation that the regulatory action had been prompted by concerns over the intentional misuse of the chemical. The task group had therefore concluded that the criterion had been met.

61. The task group had therefore concluded that the notification of final regulatory action from Bosnia and Herzegovina had not met all the criteria set out in Annex II to the Convention.

(ii) Notification from Mozambique

62. The final regulatory action taken by Mozambique banned the import and use of carbaryl, considering it and products containing it as harmful for human health, taking into consideration the local conditions of use in Mozambique requiring risk mitigation measures, therefore the task group had concluded that the criterion in paragraph (a) of Annex II had been met.

63. With regard to the criteria in paragraph (b) of Annex II, the notification referred to a study based on international assessments and chemical property data in which carbaryl was classified as “coming close to” the criteria for highly hazardous pesticides of the Joint Meeting on Pesticide Management of FAO and the World Health Organization (FAO/WHO JMPM), and classified as likely to be carcinogenic by the United States Environmental Protection Agency and “suspected of causing cancer” in the European Union. In addition, carbaryl and the products containing it were considered as harmful for human health when taking into consideration the local conditions of use in Mozambique requiring risk mitigation measures. The data reviews provided by Mozambique contained detailed methodology that specified both the internationally recognized criteria established by FAO/WHO JMPM and the additional criterion used by Mozambique for the classification of “coming close to” the criteria for highly hazardous pesticides, thus the criteria in paragraph (b) (i) and (ii) had been met. With respect to the criterion in paragraph (b) (iii), the final regulatory action was based on a hazard evaluation of carbaryl and the general pesticide use conditions in Mozambique, taking into account risk evaluations carried out in other countries. Since the survey on pesticide use conditions in Mozambique showed that farmers did not, in general, use the necessary personal protective equipment and did not follow instructions on the product label, the risk arising from the use of carbaryl was considered not acceptable. Nevertheless, specific information related to actual or measured carbaryl exposure of agricultural workers in Mozambique was not included as part of the risk evaluation. No decision had been reached as to whether the criterion in paragraph (b) (iii) had been met, and consequently no decision could be reached as to whether the criteria in paragraph (b) as a whole had been met.

64. In terms of the criteria in paragraph (c), the task group noted that carbaryl had been used in the country as an insecticide before the final regulatory action had prohibited it and that supporting documentation showed import for one registered pesticide formulation. It was therefore expected that the ban would remove exposure to the chemical in Mozambique, thus fulfilling the criterion in paragraph (c) (i). The ban on all carbaryl formulations in Mozambique would reduce the risk from exposure to carbaryl to the extent possible, thus fulfilling the criterion in paragraph (c) (ii). The final regulatory action was based on information on use and exposure to pesticides during application and on international information regarding hazards which was not geographically limited and was relevant to all countries with similar conditions of use, meaning that criterion (c) (iii) had been met. Carbaryl had been imported into Mozambique during the period 2010–2013 and recent communication from the European Union submitted to the Secretariat confirmed international trade in carbaryl in 2018 (UNEP/FAO/RC/CRC.18/INF/6), therefore the criterion in paragraph (c) (iv) had also been met.

65. Regarding the criterion in paragraph (d) of Annex II, there was no indication in the notification or supporting documentation that the regulatory action had been prompted by concerns over the intentional misuse of the chemical. The task group had therefore concluded that the criterion had been met.

66. The task group had therefore not been able to reach a conclusion as to whether or not the notification of final regulatory action from Mozambique met all the criteria set out in Annex II to the Convention.

(iii) Notification from Türkiye

67. The final regulatory action taken by Türkiye banned the production, import and use and placing on the market of carbaryl in the country. The notification did not specify whether the final regulatory action related to human health or environmental considerations, but rather stated that the ban of carbaryl was to protect public and animal health and the environment and to harmonize national legislation with that of the European Union, in view of the status of Türkiye as a candidate country for membership of the European Union. The task group had therefore concluded that the criterion in paragraph (a) of Annex II had not been met.

68. With regard to the criteria in paragraph (b) of Annex II, the notification stated that the final regulatory action was not based on any risk or hazard evaluations. Although the task group did acknowledge that the chemical safety information contained in the supporting documentation was scientifically sound, based on peer-reviewed information and included references from the Internationally Peer-reviewed Chemical Safety Information (INCHEM) database of the World Health Organization and the information system on hazardous substances of the German Social Accident Insurance (GESTIS Substance Database), it had concluded that the criteria in paragraph (b) (i) and (ii) had not been met. As the final regulatory action was not based on a hazard or risk evaluation that considered the conditions in Türkiye, the criterion in paragraph (b) (iii) had also not been met.

69. In terms of the criteria in paragraph (c), the task group noted that data were not available on the production, import, export or uses of the chemical prior to the final regulatory action in Türkiye or on possible preparations on the market, nor did the notification specify the expected effects of the final regulatory action. The final regulatory action did, however, prohibit all uses of carbaryl in the country and it was therefore expected that the ban would lead to a decrease in the quantity of the chemical used. There was no information regarding the presence of plant protection products containing carbaryl on the market in Türkiye so it was not known whether there had been risk from carbaryl use in the country but, if there had been use, the risks would have been reduced significantly by the final regulatory action. The task group had therefore concluded that the criteria of paragraph (c) (i) and (ii) had been met. The final regulatory action had not included any considerations that might be relevant to other countries or regions, apart from the reference to European Union regulations, so the task group had concluded that the criterion in paragraph (c) (iii) had not been met. Recent communication from the European Union submitted to the Secretariat confirmed international trade in carbaryl in 2018 (UNEP/FAO/RC/CRC.18/INF/6), thus the criterion in paragraph (c) (iv) had been met.

70. Regarding the criterion in paragraph (d) of Annex II, there was no indication in the notification or supporting documentation that the regulatory action had been prompted by concerns over the intentional misuse of the chemical. The task group had therefore concluded that the criterion had been met.

71. The task group had therefore concluded that the notification of final regulatory action from Türkiye had not met all the criteria set out in Annex II to the Convention.

(b) Discussion of the notifications

72. In the ensuing discussion, all those who spoke concurred with the conclusion of the task group that the notification from Bosnia and Herzegovina had not met all the criteria set out in Annex II of the Convention.

73. With regard to the notification from Türkiye, many members concurred with the conclusion of the task group that the notification from Türkiye had not met the criterion set out in paragraph (b) of Annex II. A number of members, while underlining their support for the work of the task group, highlighted that similar evidence presented by Türkiye in relation to other chemicals on criterion (c) (iii) had been deemed sufficient by other task groups to meet the criterion of applying to a wider geographical region and noted that the Committee should strive to ensure consistency in its approach.

74. With regard to the notification from Mozambique, most members who spoke considered that the notification from Mozambique had met the criterion set out in paragraph (b) (iii) of Annex II and that the information from the United States Environmental Protection Agency provided by Mozambique in the notification, namely that personal protective equipment must be used when handling the chemical in the United States of America, could potentially be considered as bridging information if the substances concerned were deemed comparable, as Mozambique had already stated

that the use of personal protective equipment could not be achieved in the country. Another member highlighted that, in general, information tended to be missing from the notifications received from Mozambique that explicitly linked survey results with the impacts of those results in relation to specific chemicals, suggesting that the Committee should seize the opportunity to share lessons learned from the situation. A number of members, however, did not consider the criterion set out in paragraph (b) (iii) to have been met, including because the risk evaluation did not provide information on actual or anticipated exposure in Mozambique, nor did it compare the risk with that identified in other countries.

(c) Next steps

75. On the basis of the discussion, the Committee agreed to establish a contact group to further discuss the notification from Mozambique, with Mr. Azhar serving as chair and Mr. Escriva as drafter, and, in the event that the contact group considered that the notification met the criteria of Annex II, the contact group was mandated to develop a draft rationale for that conclusion. If necessary, the chair of the contact group could convert the group into a drafting group, limited to members of the Committee, for the purpose of finalizing the wording of the rationale. Furthermore, while agreeing that neither the notification from Bosnia and Herzegovina or that from Türkiye met all the criteria of Annex II to the Convention, the Committee mandated the contact group to further discuss the discrepancies in the approach of the Committee to reaching conclusions on the criteria in paragraphs (a) and (c) (iii) for notifications received from Türkiye on different chemicals but with similar information.

76. Subsequently, the Committee further discussed the notification of final regulatory action from Mozambique. While several members were of the opinion that all the criteria set out in Annex II had been met, others stated that uncertainty remained as to whether certain criteria of Annex II had been met, in particular the criterion in paragraph (b) (iii), suggested that benefit could be gained by seeking further specific information on the matter from Mozambique to assist the Committee in its deliberations.

77. While a number of members favoured dealing with each notification on its own merits, others saw benefit in ensuring consistency on the cross-cutting issues related to the notifications submitted by Mozambique. Consequently, the Chair conducted informal consultations with the members of the Committee to further discuss generic issues related to the Mozambique notifications.

78. Subsequently, the Chair informed the Committee that the informal consultations had increased members' understanding of the project undertaken in Mozambique that had led to the transmission of notifications of final regulatory action on several chemicals being considered at the present meeting, as well as of how the information in notifications was reviewed.

79. The Committee further discussed the notification of final regulatory action for carbaryl from Mozambique, with much of the discussion focusing on whether the criterion in paragraph (b) (iii) was satisfied; namely, whether the final regulatory action was based on a risk evaluation involving prevailing conditions within the Party taking the action. Several members said that such a linkage between the final regulatory action for carbaryl and the risk evaluation undertaken by Mozambique was clearly established in the documentation provided, and the case of Mozambique was consistent with examples provided in the Handbook. Some other members stated that that linkage was insufficiently explicit, and efforts should be made in consultation with the relevant authorities in Mozambique to seek further clarification before making a final decision. Some members drew comparison with the risk evaluation for the paraquat notification from Mozambique, in which alignment with the criteria set out in Annex II was clearly established, while others noted that the different capacities of Parties should be taken into account. One member suggested that the Secretariat be requested to seek from Mozambique any further information or clarification that would facilitate further discussion of the matter.

80. The Committee agreed to defer further discussion of the matter to its nineteenth meeting.

3. Carbon tetrachloride

81. The Committee had before it a notification of final regulatory action on carbon tetrachloride in the pesticide category from one prior informed consent region, namely Latin America and the Caribbean (Ecuador) (UNEP/FAO/RC/CRC.18/7), along with the related supporting information (UNEP/FAO/RC/CRC.18/INF/13). In addition, at its first meeting, the Chemical Review Committee had decided that a notification related to carbon tetrachloride in the pesticide category from the North America prior informed consent region (Canada) met all the criteria of Annex II to the Convention. The notification from Canada and the rationale for the conclusion by the Committee were set out in document UNEP/FAO/RC/CRC.18/INF/14. The Committee also had before it a conference room

paper containing the report of the intersessional task group that had been established to undertake a preliminary assessment of the notifications and supporting documentation to determine whether they met the criteria set out in Annex II to the Convention.

82. Mr. Ndiyo, the chair of the intersessional task group, and Mr. Bart, on behalf of Mr. Lacroix, the drafter of the group, who had completed his term of office as a Committee member in June 2022, reported on the outcome of the group's work.

(a) Notification from Ecuador

83. The notification of final regulatory action from Ecuador on carbon tetrachloride was submitted in the pesticide category. The registration of carbon tetrachloride had been prohibited by the National Programme of Plant Health by Ministerial Agreement No. 01 12 of 1992. That prohibition effectively banned the import, manufacture and use of carbon tetrachloride in Ecuador. The regulatory action had entered into force on 12 November 1992.

84. The notification stated that the ban on all uses of carbon tetrachloride as a pesticide in Ecuador was based on its toxic nature and hazardous properties, taking into consideration that the manufacture, marketing or use of carbon tetrachloride was prohibited in several countries. The task group had therefore concluded that the final regulatory action had been taken in order to protect human health and thus that the criterion in paragraph (a) of Annex II had been met.

85. Regarding compatibility with the criteria set out in paragraph (b) of Annex II, the notification indicated that the final regulatory action had not been based on a risk or hazard evaluation. The notification provided physical and chemical properties and hazardous properties of carbon tetrachloride, but did not provide scientific data generated from the notifying Party or bridging information, or a data review. In addition, the final regulatory action had been developed in 1992, while the supporting documentation from the international database for pesticide risk assessments and management and the *Manual de plaguicidas de centroamérica* from Costa Rica were dated 2016 and 2019, respectively, and thus could not be used to support the final regulatory action. The task group had therefore concluded that the criteria in paragraph (b) (i), (ii) and (iii) of Annex II had not been met.

86. With regard to paragraph (c) of Annex II, the notification indicated that, before the regulatory action, carbon tetrachloride had been registered for use as an insecticide in Ecuador. While the notification did not provide quantities of the pesticide formulations imported for the years before notification, or quantities of the pesticides produced, imported, exported or used in the country, it was expected that the final regulatory action to ban the importation and use of carbon tetrachloride would prevent the use of carbon tetrachloride in Ecuador, and the task group concluded that the criterion in paragraph (c) (i) had been met. The final regulatory action to ban the import and any use of the pesticide led to quantity reduction or elimination, which consequently reduced or eliminated exposure and risks to human health and the environment, and the task group had accordingly concluded that the criterion in paragraph (c) (ii) had been met. As the considerations that led to the final regulatory action were generally applicable to other countries and were related to the intended use of carbon tetrachloride as a pesticide, the task group had concluded that the criterion in paragraph (c) (iii) had been met. Finally, on the basis of information provided by CropLife International and the Pesticide Action Network, the task group considered that the criterion in paragraph (c) (iv) had been satisfied.

87. With regard to paragraph (d) of Annex II, there was no indication in the notification or supporting documentation that concerns over the intentional misuse of the chemical had prompted the regulatory action; the task group had therefore concluded that the criterion in paragraph (d) had been met.

88. In summary, the task group had concluded that not all the criteria set out in Annex II to the Convention had been met in the notification of final regulatory action on carbon tetrachloride from Ecuador.

(b) Discussion of the notification

89. During the ensuing discussion, support was expressed for the conclusions of the task group. One member stated that, as an ozone-depleting substance, carbon tetrachloride was subject to control under the Montreal Protocol on Substances that Deplete the Ozone Layer, and the final regulatory action should have included consideration of any risk assessments and analyses of its impacts on human health and the environment undertaken under the aegis of the Montreal Protocol. Another member stated that the task group was mandated to take into consideration the information in the

notification itself, and the inclusion of that information would not have changed the status of the notification or the conclusions of the task group.

(c) Next steps

90. There was consensus that the notification on carbon tetrachloride from Ecuador did not meet all the criteria in Annex II to the Convention. As only a notification of final regulatory action from one prior informed consent region in respect of carbon tetrachloride reviewed by the Committee at a previous meeting met the criteria set out in Annex II to the Convention, the Committee decided that no further action would be taken on the chemical at present.

4. Chlorfenvinphos

91. The Committee had before it notifications of final regulatory action on chlorfenvinphos in the pesticide category from two prior informed consent regions, namely Africa (Mozambique) and Europe (Norway and Türkiye) (UNEP/FAO/RC/CRC.18/8), along with the related supporting information (UNEP/FAO/RC/CRC.18/INF/15, UNEP/FAO/RC/CRC.18/INF/16 and UNEP/FAO/RC/CRC.18/INF/17). The Committee also had before it a conference room paper containing the report of the intersessional task group that had been established prior to the seventeenth meeting of the Committee to undertake a preliminary assessment of the notifications from Norway and Mozambique and another containing the report of the intersessional task group that had been established to undertake a preliminary assessment of the notification from Türkiye and supporting documentation to determine whether they met the criteria set out in Annex II to the Convention, prepared for the current meeting.

92. The notifications from Norway and Mozambique had been received and reviewed prior to the Committee's seventeenth meeting, but their consideration had been deferred owing to a heavy workload at that meeting. The Committee thus had before it a conference room paper containing a task group report on those two notifications, prepared for the seventeenth meeting. Following the seventeenth meeting, the Secretariat had received a notification of final regulatory action from Türkiye on chlorfenvinphos in the pesticide category. An intersessional task group had been established to undertake a preliminary assessment of that notification, along with the supporting documentation, to determine whether it met the criteria of Annex II to the Convention. The task group's report on the notification from Türkiye was set out in a second conference room paper for the Committee's consideration.

93. Mr. Ormond, the chair of the second intersessional task group, and Ms. Sarah Maillefer, the drafter of both intersessional drafting groups, reported on the outcome of the group's work.

(a) Notifications

(i) Notification from Mozambique

94. According to the notification from Mozambique, all formulations and uses of chlorfenvinphos had been banned in the country due to high acute toxicity and documented improper use by farmers in the country, with the aim of safeguarding users from exposure to the chemical. On that basis, the task group had determined that the action been taken to protect human health, in accordance with the criterion in paragraph (a) of Annex II.

95. With respect to the criteria in paragraph (b) of Annex II, the task group had reviewed the supporting data and concluded that it had been generated according to scientifically recognized methods, and that data reviews had been performed and documented according to generally recognized scientific principles and procedures. As a result of those data reviews, chlorfenvinphos had been shortlisted as a pesticide "coming close to" the criteria for highly hazardous pesticides and of particular concern in Mozambique given the local conditions of use. Consequently, the task group had concluded that the criteria in paragraph (b) (i) and (ii) had been met. With respect to the criterion in paragraph (b) (iii), the notification indicated that the final regulatory action was based on a risk evaluation undertaken in implementing a "highly hazardous pesticide risk reduction action plan" and on a national survey indicating a risk of excessive exposure of farmers due to the prevalence of improper use. On that basis, the task group had concluded that the criterion in paragraph (b) (iii) had been met and thus that the notification satisfied all the criteria in paragraph (b) of Annex II.

96. The task group had also concluded that the notification complied with the criteria in paragraph (c) of Annex II. The final regulatory action was expected to greatly reduce the quantities of the chemical remaining in the country, thus fulfilling the criterion in paragraph (c) (i). The cancellation of registration and a ban of all uses in the country could be expected to reduce the risk of human exposure and thus protect human health, meaning that the criterion of paragraph (c) (ii) had also been

met. The action had been taken on the basis of information on use and exposure during application and international hazard information, which was relevant to all countries with similar conditions of use and thus not geographically limited, meaning that the criterion of paragraph (c) (iii) could be considered to have been met. Finally, the criterion in paragraph (c) (iv) had been met as chlorfenvinphos had been imported into Mozambique between 2005 and 2015 and information received by the Secretariat showed evidence of ongoing international trade in the chemical.

97. As there was no indication in the notification or the supporting documentation that the regulatory action had been prompted by concerns over the intentional misuse of the chemical, the task group had considered the criterion in paragraph (d) of Annex II to have been met.

98. Based on its preliminary assessment, the task group had concluded that, overall, the notification from Mozambique satisfied the criteria set out in Annex II to the Convention.

(ii) Notification from Norway

99. In Norway, the use of chlorfenvinphos had been severely restricted due to the chemical's high persistence and high toxicity in terrestrial and aquatic environments, meaning that the regulatory action had been taken to protect the environment, thus meeting the criterion in paragraph (a) of Annex II to the Convention.

100. With respect to the criteria in paragraph (b) of Annex II, the notification referred to an environmental risk evaluation for which key findings, such as measured and predicted environmental concentrations and estimated risks, were provided in the supporting documentation. Furthermore, the notification indicated that rigorous and accepted scientific procedures had been used in the risk evaluation, and the task group had therefore concluded that the notification met the criteria of paragraph (b) (i) and (ii) of Annex II. The group had also agreed that the criterion in paragraph (b) (iii) had been met, as the risk evaluation took into account toxicology, environmental fate and behaviour, ecotoxicology, residues and the availability of alternatives, and indicated high persistence and high toxicity in the environment, with unacceptable acute risk to daphnia and soil-living organisms given the proposed pattern of use, and considerable effects in laboratory animals at concentrations measured in the environment. As a result, the task group had concluded that the notification satisfied the requirements of paragraph (b) overall.

101. The notification indicated that the final regulatory action was expected to greatly reduce the remaining quantities of the chemical in the country and thus the risk of accumulation and effects on organisms in the environment, and therefore met the criteria in paragraph (c) (i) and (ii). The final regulatory action had been taken based on an environmental risk evaluation, with assessed risks not geographically limited but relevant to other States and regions with similar conditions of water contamination and exposure of organisms, in accordance with the criterion in paragraph (c) (iii). The information received by the Secretariat showed evidence of ongoing international trade in the chemical, meaning that the criterion in paragraph (c) (iv) had been met.

102. The task group had also determined that the criterion in paragraph (d) had been met as there was no indication that the regulatory action had been prompted by concerns over the intentional misuse of the chemical.

103. Consequently, the task group had concluded that the notification of final regulatory action from Norway met all the criteria set out in Annex II to the Convention.

(iii) Notification from Türkiye

104. The notification of final regulatory action submitted by the Government of Türkiye stated that the production and import of chlorfenvinphos had been banned in the country to protect human health and the environment by prohibiting hazardous active substances used in plant protection products. Thus, the notification met the criterion in paragraph (a) of Annex II to the Convention.

105. With respect to the criteria in paragraph (b) of Annex II, the notification indicated that Türkiye followed international chemicals management agreements and legislation and the European Union approach to restriction, prohibition and regulatory actions on chemicals, and the supporting documentation included internationally peer reviewed information and data on the hazard properties of chlorfenvinphos. On that basis, the task group had concluded that the criteria in paragraph (b) (i) and (ii) had been met. The notification also stated, however, that the final regulatory action was not based on a risk or hazard evaluation, and no information on actual, expected or anticipated exposure under the prevailing conditions in Türkiye or bridging information relating to risk evaluations performed in other countries had been submitted in connection with the notification, hence the task group had concluded that the criterion in paragraph (b) (iii) had not been met and that the requirements of paragraph (b) of Annex II as a whole could therefore not be considered to have been satisfied.

106. In terms of the criteria in paragraph (c), the notification indicated that the final regulatory action could be expected to significantly reduce the available quantities of chlorfenvinphos in the country, and that banning the manufacture, use and placing on the market of all chlorfenvinphos formulations would reduce the risk to human health and environment. Thus, it met the criteria in paragraph (c) (i) and (ii). The task group concluded that the criteria in paragraph (c) (iii) had also been met, because the final regulatory action was based on the international chemicals management agreements and legislation as well as the European Union approach on restriction, prohibition and regulatory actions on chemicals, considerations that were applicable to other States. Finally, information received by the Secretariat showed evidence of ongoing international trade in the chemical, meaning that the criteria of paragraph (c) (iv) had been met.

107. The task group had also determined that the criterion of paragraph (d) had been met as there was no indication that the regulatory action had been prompted by concerns over the intentional misuse of the chemical.

108. As the criterion in paragraph (b) (iii) had been deemed not to have been met, the task group had concluded that the notification of final regulatory action from Türkiye failed to meet all the criteria set out in Annex II to the Convention.

(b) Discussion of the notifications

109. In the ensuing discussion, one member voiced support for the task group's conclusions on the notifications from Norway and Türkiye.

110. There was substantial discussion on the notification from Mozambique, with many members agreeing with the task group's conclusions, including several who noted in particular the fact that the risk evaluation had taken into account international sources of information and the conditions of use of the chemical in Mozambique.

111. One member said that he did not support the task group's conclusions regarding paragraph (b) of Annex II, however. He observed that that no chlorfenvinphos-specific information on actual or anticipated exposure in Mozambique had been provided to substantiate a risk evaluation, a comment that was subsequently echoed by another member. Furthermore, he said, a chemical "coming close to" a highly hazardous pesticide nevertheless fell outside the purview of Mozambique's national legislative framework, meaning that the criteria under paragraph (b) of Annex II could not be considered to have been met. In addition, the supporting documentation and national survey of farmers used to evaluate the risk associated with the use of pesticides in general referred to the availability of personal protective equipment and other conditions specific to the agricultural use of pesticides in Mozambique, whereas the supporting information indicated that chlorfenvinphos had only been used for veterinary purposes prior to the final regulatory action. As the risk evaluation was not supported by actual or anticipated exposure information related to veterinary use of chlorfenvinphos, it could not be considered to involve the prevailing conditions within Mozambique and the criterion of paragraph (b) (iii) could therefore not be considered to have been met.

112. In response, the drafter provided additional information in support of the task group's conclusion that the notification satisfied the requirements of paragraph (b). She pointed out that the national survey on how farmers used pesticides in Mozambique had been conducted in 2014, prior to the final regulatory action, and import statistics showed that chlorfenvinphos had been imported during that period, meaning that farmers might have used it. In terms of the use of chlorfenvinphos, while the chemical might be a veterinary product in other countries, in Mozambique it was registered as a pesticide in the insecticide category. Furthermore, such pesticides were used as an emulsion concentrate and thus needed to be diluted to the correct final concentration for application on animals, which was very similar to its application on crops. The crop uses mentioned in the notification did not preclude the use of chlorfenvinphos on animals, and given the survey results, it could be assumed that farmers did not protect themselves regardless of whether they were treating animals or crops. Finally, chlorfenvinphos was highly acutely toxic, with an ingredient classified as 1b and its formulation very close to World Health Organization criterion 1 for pesticide formulations, with a 50 per cent lethal dose value (LD₅₀) of just under 100.

(c) Next steps

113. Based on the discussion, the Committee agreed that the notification from Norway met all the criteria of Annex II to the Convention, that the notification from Türkiye did not, and that the notification from Mozambique required further discussion. It established a contact group, with Mr. Ormond serving as chair and Ms. Maillefer as drafter, to further discuss the notification from Mozambique and, in the event that the contact group considered that it met the criteria of Annex II, to

develop a draft rationale for that conclusion. The group was also to develop a draft rationale for its conclusion on the notification from Norway, based on the notification received and the comments made during the discussion. If necessary, the chair of the contact group could convert the group into a drafting group, limited to members of the Committee, for the purpose of finalizing the wording of the rationale or rationales, as appropriate.

114. The Committee also requested the Secretariat to prepare, in consultation with the chair and the drafter, a draft rationale for the notification from Norway that could serve as the basis for the discussion on the draft rationale in the contact group.

115. Subsequently, the chair of the contact group reported that the group had reached agreement on the conclusion that the notification from Mozambique met the criteria of Annex II.

116. The Committee therefore requested the Secretariat to prepare, in consultation with the chair and the drafter, a draft rationale for the notification from Mozambique that could serve as the basis of the discussions on the draft rationale in the contact group. It also requested the Secretariat to prepare a draft decision including a recommendation to list chlorfenvinphos in Annex III to the Convention in the pesticide category and a decision to prepare a draft decision guidance document. The Secretariat was also requested to prepare a draft workplan for the preparation of the draft decision guidance document.

117. Subsequently, the chair and the drafter of the contact group presented the draft rationales for the notifications from Norway and from Mozambique.

118. In the ensuing discussion, the Committee agreed on the text of the draft rationale for Norway, but no consensus was reached on the draft rationale for Mozambique, as several members of the Committee had expressed reservations as to whether the notification satisfied the criteria set out in Annex II. Consequently, the Committee agreed to defer further discussion of the notification of final regulatory action from Mozambique to its nineteenth meeting. The Committee requested the Secretariat to prepare a draft decision and rationale covering only the notification of final regulatory action submitted by Norway.

119. Subsequently, the Committee, having considered the draft rationale prepared by the Secretariat, adopted decision CRC-18/5, to which the rationale is annexed. The decision is set out in annex I to the present report.

5. Methidathion

120. The Committee had before it notifications of final regulatory action on methidathion in the pesticide category from three prior informed consent regions, namely Europe (Türkiye), Africa (Mozambique) and Latin America and the Caribbean (Uruguay) (UNEP/FAO/RC/CRC.18/9). The supporting documentation provided by Mozambique, Türkiye and Uruguay was set out in documents UNEP/FAO/RC/CRC.17/INF/13, UNEP/FAO/RC/CRC.18/INF/18 and UNEP/FAO/RC/CRC.17/INF/14, respectively. The Committee also had before it a conference room paper containing the report of the intersessional task group that had been established to undertake a preliminary assessment of the notifications and supporting documentation to determine whether they met the criteria set out in Annex II to the Convention. In addition, document UNEP/FAO/RC/CRC.17/INF/33 contained the draft rationale for the conclusion by the Chemical Review Committee at its seventeenth meeting on the notifications of final regulatory action submitted by Mozambique and Uruguay in respect of methidathion in the pesticide category. The Committee, at its seventeenth meeting, had been unable to reach consensus on whether those two notifications met the criteria of Annex II, and had referred the matter for further discussion at the present meeting.

121. Ms. Seng, on behalf of Ms. Lady Jhoana Domínguez Majin, the chair of the intersessional task group, and Ms. Mara Curaba, the drafter of the group, who had completed their terms of office as Committee members in June 2022, reported on the outcome of the group's work.

(a) Notifications

(i) Notification from Türkiye

122. The notified final regulatory action related to methidathion (CAS 950-37-8) in the pesticide category. Türkiye had banned import and production as of 30 June 2010, and all uses in plant protection products as of 30 June 2011.

123. The notification indicated that the final regulatory action had been taken to protect public health, plant and animal health, animal breeding and welfare, and to ensure food and feed safety, consumer interests and the protection of the environment. As the notification demonstrated that the

action had been taken to protect human health and the environment, the task group had concluded that it met the criterion in paragraph (a) of Annex II.

124. With respect to the criteria in paragraph (b) of Annex II, the task group reported that it had not been possible to identify whether the final regulatory action had been generated according to scientifically recognized methods, whether data reviews had been performed and documented according to generally recognized scientific principles and procedures, or whether the final regulatory action had been based on a risk evaluation involving the prevailing conditions within the Party taking the action. The task group had therefore concluded that the criteria in paragraph (b) (i), (ii) and (iii) had not been met.

125. With respect to the criteria in paragraph (c) of Annex II, the final regulatory action was a ban on the production, import and use, and could thus be considered a preventive measure that was expected to lead to a significant decrease in the quantity of the chemical used or the number of its uses. The task group had therefore concluded that the criterion in paragraph (c) (i) had been met. It was also expected that since the regulatory action to ban the production and import of methidathion significantly reduced the quantity of the chemical used, the risks for human health and the environment would also be significantly reduced. Consequently, the criterion in paragraph (c) (ii) was found to have been met. On the matter of whether the considerations that led to the final regulatory action being taken were applicable only in a limited geographical area or in other limited circumstances, there had been insufficient information to reach a conclusion on that matter, and the conclusion on the criterion in paragraph (c) (iii) remained open. Finally, while there was no information regarding the estimated quantity of methidathion imported and exported in the notification, CropLife International had confirmed ongoing international trade in methidathion by companies that were not members of CropLife International. The task group had therefore concluded that the criterion in paragraph (c) (iv) had been met.

126. On the matter of the criterion in paragraph (d) of Annex II, there was no indication in the notification that concerns over the intentional misuse of the chemical had prompted the regulatory action. The criterion in paragraph (d) was therefore found to have been met.

127. Overall, the task group had concluded that the notification of final regulatory action from Türkiye did not meet all the criteria set out in Annex II to the Convention.

(ii) Notification from Uruguay

128. The notification of final regulatory action from Uruguay had previously been considered by the Chemical Review Committee at its seventeenth meeting. While the task group on methidathion had concluded that the notification had satisfied all the criteria set out in Annex II to the Convention, the Committee had not been able to reach consensus on the notification, particularly with regard to the criterion in paragraph (b) (iii), and had referred further discussion of the notification to the current meeting. Ms. Seng accordingly presented its findings to the Committee at its current meeting along with a summary of the discussion on the matter at the seventeenth meeting.

129. The final regulatory action taken by Uruguay banned the import, registration and renewal of plant protection products based on methidathion formulations. The notification specified that the final regulatory action had been taken to protect human health and the environment, and the criterion in paragraph (a) of Annex II had thus been met.

130. With regard to the criteria in paragraph (b) of Annex II, the notification stated that the final regulatory action was based on a risk evaluation that used information on prevailing conditions in the country to evaluate the expected exposure to methidathion in Uruguay compared to alternative chemicals nationally recommended for similar uses. The environmental impact quotient of methidathion had been calculated, based on the active ingredient concentration of formulations containing methidathion, the dose, the application frequency, and good agricultural practices used in Uruguay. The task group had therefore concluded that the criteria set out in paragraph (b) had meet met.

131. However, in its discussions on the matter at its seventeenth meeting, the Chemical Review Committee had expressed reservations about the use of environmental impact quotient methodology for the risk assessment, as that methodology was more suited to an evaluation of comparative risk of a number of chemicals, rather than the actual risk presented by a single chemical. In addition, the methodology had been developed in the United States of America, and the weightings given to certain risk factors were more applicable to the United States context than to circumstances in a developing country. Finally, as noted in the FAO guidance on the use of the environmental impact quotient, the simplicity of the tool might lead to a sacrifice in accuracy and specificity, leading to false negatives or false positives. Consequently, the Committee had been unable to conclude at its seventeenth meeting

that all the criteria of paragraph (b) of Annex II had been met, and had requested that the Committee be provided with further information on the environmental impact quotient methodology used in the Uruguay risk evaluation to assess whether it could be used support the risk evaluation stipulated in paragraph (b) of Annex II.

132. With regard to the criteria in paragraph (c) of Annex II, the task group had concluded that such criteria had been met. Since the notified final regulatory action was a ban, it would be expected to lead to a significant reduction in the quantity of methidathion used in the country, fulfilling the criterion in paragraph (c) (i); the regulatory action to ban the use of methidathion was also expected to significantly reduce the quantity of the chemical used, the health risks for workers and consumers, and contamination of the environment, fulfilling the criterion in paragraph (c) (ii); the notification stated that similar human health and environmental problems were likely to be encountered in other regions where the substance was used, particularly in developing countries, satisfying the criterion in paragraph (c) (iii); and data provided by CropLife International confirmed that international trade in methidathion by companies that were not members of CropLife International was ongoing, fulfilling the criterion in paragraph (c) (iv).

133. Regarding the criterion in paragraph (d) of Annex II, there was no indication in the notification or supporting documentation that the regulatory action had been prompted by concerns over intentional misuse of the chemical. The task group had therefore concluded that the criterion had been met.

(iii) Notification from Mozambique

134. The notification of final regulatory action from Mozambique had previously been considered by the Chemical Review Committee at its seventeenth meeting. While the task group on methidathion had concluded that the notification had satisfied all the criteria set out in Annex II to the Convention, the Committee had not been able to reach consensus on the notification, and had referred further discussion of the notification to the current meeting. The task group accordingly presented its findings to the present meeting along with a summary of the discussion on the matter at the seventeenth meeting.

135. The final regulatory action taken by Mozambique banned the import and use of methidathion in its territory on account of its toxic nature and hazardous properties. The action had been taken to protect human health and the environment, and thus the criterion in paragraph (a) of Annex II had been met.

136. With regard to the criteria in paragraph (b) of Annex II, the task group had concluded that the final regulatory action had been based on a hazard evaluation of methidathion in which a methidathion formulation registered in Mozambique was classified as “coming close to” the FAO/WHO JMPM criteria for highly hazardous pesticides. In addition, the task group had further concluded that the final regulatory action was also based on the prevailing conditions of use of pesticides in Mozambique and the resulting risks, which had indicated that the prevailing conditions of use of methidathion in the country would result in an unacceptable risk to workers. The task group had also considered that a description of the anticipated risk as a consequence of the use of the chemical in the notifying country was sufficient for fulfilling the criterion in paragraph (b) (iii). The task group had therefore concluded that the criteria in paragraph (b) of Annex II had been met.

137. However, in its discussion on the matter at its seventeenth meeting, the Chemical Review Committee had questioned whether sufficient chemical-specific data had been generated by the general pesticide use survey to meet the criterion of paragraph (b) (iii), and had noted the need for further consideration of several cross-cutting issues related to notifications submitted by Mozambique.

138. In terms of the criteria in paragraph (c) of Annex II, the task group had concluded that the criteria had been met. Since the notified final regulatory action was a ban on the use of methidathion in the country it would be expected to lead to zero exposure, fulfilling the criterion in paragraph (c) (i); the ban would also lead to a significant reduction of risk to human health from potential release of methidathion, fulfilling the criterion in paragraph (c) (ii); the human health problems associated with exposure to the chemical were likely to be encountered in other countries with similar conditions, meaning that the regulatory action could be relevant to other regions, satisfying the criterion in paragraph (c) (iii); and data provided by CropLife International confirmed that international trade in methidathion was ongoing, fulfilling the criterion in paragraph (c) (iv).

139. Regarding the criterion in paragraph (d) of Annex II, there was no indication in the notification or supporting documentation that the regulatory action had been prompted by concerns over the intentional misuse of the chemical. The task group had therefore concluded that the criterion had been met.

(c) Discussion of the notifications

140. In the ensuing discussion on the notification from Türkiye, there was agreement with the conclusion of the task group that it did not satisfy all the criteria set out in Annex II to the Convention.

141. In the ensuing discussion on the notification from Uruguay, the Committee was informed that, in response to a request for further information on the methodology used for the risk evaluation, the responsible authority in Uruguay had replied that all the relevant information had been provided to the Committee. Several members reiterated the reservations expressed by the Committee at its seventeenth meeting regarding the use of the environmental impact quotient by Uruguay for the methidathion risk assessment, taking into account its greater suitability for an evaluation of comparative risk of a number of chemicals, and the lack of information on the threshold values applied for the risk assessment. There was general agreement that the notification on final regulatory action from Uruguay did not satisfy all the criteria set out in Annex II to the Convention.

142. In the discussion on the notification from Mozambique, there was general support for the conclusions of the task group. However, one member said that it could be considered that methidathion, as a chemical that was classified as close to a highly hazardous pesticide, fell outside the purview of the Mozambique national legislative framework on highly hazardous pesticides, meaning that the criteria under paragraph (b) of Annex II could not be met. Furthermore, the risk evaluation survey had been carried out during the period 2010–2013, when the formulation had not been imported into the country, so the link between actual anticipated exposure and use in the country was not obvious.

(d) Next steps

143. The Committee agreed that the notifications from Türkiye and Uruguay did not satisfy all the criteria set out in Annex II to the Convention, so no further action would be taken on those notifications at present.

144. Given the lack of consensus regarding the notification of final regulatory action by Mozambique, the Committee established a contact group, with Ms. Suzana Andrejevic Stefanovic serving as chair and Ms. Seng serving as drafter, with the mandate to discuss the notification from Mozambique further and, in the event that the contact group considered that the criteria of Annex II had been met, to develop a draft rationale for that conclusion, based on the notification received from Mozambique and the comments made during the discussion.

145. Subsequently, the chair of the contact group reported that the group had reached agreement on the conclusion that the notification from Mozambique met the criteria of Annex II and developed a draft rationale for that conclusion for consideration by the Committee.

146. Subsequently, the Committee considered the draft rationale that had been developed by the contact group. Several members expressed support for the adoption of the rationale, while others stated that uncertainty remained as to whether certain criteria of Annex II had been met, in particular the criterion in paragraph (b) (iii), suggesting that benefit could be gained by seeking further specific information on the matter from Mozambique to assist the Committee in its deliberations.

147. While a number of members favoured dealing with each notification on its own merits, others saw benefit in ensuring consistency on the cross-cutting issues related to the notifications submitted by Mozambique. Consequently, it was decided that the matter would be further considered as part of the informal consultations being conducted by the Chair referred to in paragraphs 77 and 78 of the present report.

148. Subsequently, the Committee agreed to defer further discussion of the matter to its nineteenth meeting.

6. Methyl bromide

149. Introducing the sub-item, the representative of the Secretariat recalled that, at its first meeting, the Committee had concluded that a notification of final regulatory action on methyl bromide in the pesticide category from the prior informed consent region of Europe (the Netherlands), met the criteria set out in Annex II to the Convention. The notification from the Netherlands and the rationale for the conclusion by the Committee were set out in document UNEP/FAO/RC/CRC.18/INF/21.

150. The Committee had before it two further notifications of final regulatory action on methyl bromide in the pesticide category from two other prior informed consent regions, namely Latin America and the Caribbean (Colombia) and Asia (Indonesia) (UNEP/FAO/RC/CRC.18/10), and supporting documentation relating thereto from Colombia and Indonesia

(UNEP/FAO/RC/CRC.18/INF/19 and UNEP/FAO/RC/CRC.18/INF/20, respectively). The Committee also had before it a conference room paper containing the report of the intersessional task group that had been established to undertake a preliminary assessment of the notifications and supporting documentation to determine whether they met the criteria set out in Annex II to the Convention.

151. Mr. Ormond, chair of the intersessional task group, and Ms. Maillefer, the drafter of the group, reported on the outcome of the group's work.

(a) Notifications

(i) Notification from Colombia

152. The final regulatory action taken by Colombia was a severe restriction, as it only permitted the import, commercialization and use of methyl bromide for quarantine applications on agricultural products and wood packaging in airtight chambers at the level of ports and border crossings, under two resolutions and for the purpose of protecting human health and the environment. The task group had therefore concluded that the criterion in paragraph (a) of Annex II had been met.

153. With regard to the criteria in paragraph (b) of Annex II, resolution 2152 of 1996 of the Ministry of Health and Social Welfare of Colombia on limiting the use of methyl bromide to quarantine applications was based on a hazard assessment of methyl bromide that had considered a range of toxicological effect studies; on information on methyl bromide uses in Colombia and on reports of the Technology and Economic Assessment Panel of the Montreal Protocol on Substances that Deplete the Ozone Layer. Data had therefore been generated according to scientifically recognized methods and data reviews had been performed and documented according to generally recognized scientific principles and procedures. Accordingly, the task group concluded that the criteria in paragraph (b) (i) and (ii) had been met. The risk evaluation under the prevailing conditions was based on the review of documents and information on the use of methyl bromide in Colombia and reports of the Technology and Economic Assessment Panel, thereby satisfying the criterion in paragraph (b) (iii). The task group had therefore concluded that the criteria of paragraph (b) as a whole had been met.

154. The task group had further concluded that all the criteria in paragraph (c) of Annex II had been met. Methyl bromide had previously been used in the country both as a soil and quarantine fumigant, so the severe restrictions under resolutions 2152 and 5049 could be expected to lead to a significant decrease in the quantity and number of uses of the chemical, thereby satisfying the criterion in paragraph (c) (i). The restriction of the use of methyl bromide to quarantine application in hermetic chambers minimized emissions and the exposure of workers, leading to a significant reduction of risk to human health and the environment, thereby meeting the criterion in paragraph (c) (ii). Furthermore, the notification stated that methyl bromide was probably still being used in other countries, mainly developing countries or countries with economies in transition, for fumigation for quarantine and pre-shipment purposes that were carried out in poorly sealed enclosures, an assertion supported by a report of the Methyl Bromide Technical Options Committee of the Montreal Protocol, thereby satisfying the criterion in paragraph (c) (iii). Finally, information collected by the Secretariat showed evidence of ongoing trade in the chemical, thereby meeting the criterion of paragraph (c) (iv).

155. Regarding the criterion in paragraph (d) of Annex II, there was no indication in the notification or supporting documentation that the regulatory action had been prompted by concerns over the intentional misuse of the chemical. The task group had therefore concluded that the criterion had been met.

156. The task group had therefore concluded that the notification of final regulatory action from Colombia had met all the criteria set out in Annex II to the Convention.

(ii) Notification from Indonesia

157. The final regulatory action taken by Indonesia was severely restrictive, as it only allowed for the import of methyl bromide where the chemical was used as a fumigant for quarantine and pre-shipment under an import permit and recommendation regime, with the importer only being allowed to distribute methyl bromide to a licensed fumigator. The objective of the regulation was to prevent and mitigate the risk of harm to the environment, human health and other living beings, thus meeting the criterion set out in paragraph (a) of Annex II to the Convention.

158. With regard to the criteria in paragraph (b) of Annex II, the final regulatory action was based on the toxicological properties of methyl bromide and the ratification of the Copenhagen Amendment to the Montreal Protocol, and the hazard data provided in the notification and the supporting documents originated from the World Health Organization, thereby satisfying the criteria of being data

generated according to scientifically recognized methods and reviewed and documented according to generally recognized scientific principles and procedures, as set out in paragraph (b) (i) and (ii). As the final regulatory action had not been based on a risk or hazard evaluation and no information on actual, expected or anticipated exposure under the prevailing conditions in Indonesia had been provided, nor any bridging information related thereto, the task group concluded that the criterion set out in paragraph (b) (iii) had not been met.

159. Regarding the criteria in paragraph (c) of Annex II, the severe restrictions on the import of methyl bromide were expected to lead to a significant reduction in the quantity of the chemical used and, together with the fact that importers of methyl bromide were only allowed to distribute the chemical to a licensed fumigator, it was expected that a significant reduction of risk to human health and the environment would be achieved. The criteria of paragraph (c) (i) and (ii) had thus been met. As the notification stated that the basis for the final regulatory action had been the toxicological properties of methyl bromide and the ratification of Copenhagen Amendment to the Montreal Protocol, it was clear that the considerations were not limited in terms of geographical spread or other circumstances, thereby satisfying the criterion of paragraph (c) (iii). In addition, the notification stated that 72 metric tons of methyl bromide had been imported into Indonesia in 2020 and the Secretariat had received information on ongoing trade, therefore meeting the criterion set out in paragraph (c) (iv).

160. Regarding the criterion in paragraph (d) of Annex II, there was no indication in the notification or supporting documentation that the regulatory action had been prompted by concerns over the intentional misuse of methyl bromide, thus the task group had concluded that the criterion had been met.

161. The task group had therefore concluded that the notification of final regulatory action from Indonesia had not met all the criteria set out in Annex II to the Convention.

(b) Discussion of the notifications

162. In the ensuing discussion, all the members who spoke regarding the notification submitted by Indonesia expressed support for the conclusions reached by the task group, with one member noting that the submission might have met the criterion set out in paragraph (b) (iii) if Indonesia had provided fuller information.

163. With regard to the notification submitted by Colombia, there was general agreement with the conclusion of the task group that all the criteria had been met. In response to the concerns of one observer who questioned the value of considering a notification that had been submitted 15 years after the date on which the final regulatory action had taken effect, far exceeding the 90 days stated in the Convention and based on a description of international circumstances that might have changed considerably over that period, the Chair recalled that there was precedence for such a situation. She recalled that, at a previous meeting, the Committee had been advised that the Convention contained no provision to invalidate a notification of final regulatory action notified by a Party on the grounds of its late submission. Thus, a notification, even if submitted after the deadline of the required period, once verified by the Secretariat and submitted to the Committee, remained valid. In response to further concerns expressed by the observer that synergies under the various international mechanisms required more careful consideration, as there was limited value, for example, in considering a chemical under the Rotterdam Convention prior informed consent procedure when that same chemical was already subject to a stricter regime under the Montreal Protocol, one member and the Chair both noted that there were advantages to methyl bromide being considered under the Convention. Although under the Montreal Protocol, methyl bromide use was limited to that of quarantine and pre-shipment, the volume of trade in the chemical had raised concerns and there was a need to ensure that methyl bromide was not still being used as a pesticide. The Conference of the Parties could consider the implications further, as such discussions were not appropriate at meetings of the Committee, a purely technical body. A number of members said that it was important for the Chemical Review Committee itself to discuss further how to prioritize work under the Convention and achieve synergies with work carried out under other conventions.

(c) Next steps

164. On the basis of the discussion, the Committee agreed that the notification from Colombia met all the criteria of Annex II, whereas the notification from Indonesia did not. The Committee therefore established a contact group, with Mr. Ormond serving as chair and Ms. Maillefer as drafter, to develop a draft rationale for the Committee's conclusions based on the notifications received and the comments made during the discussion. The Committee also requested the Secretariat to prepare a draft

decision including a recommendation to list methyl bromide Annex III to the Convention in the pesticide category and a decision to prepare a draft decision guidance document.

165. Subsequently the Committee, having considered a draft rationale prepared by the contact group, along with a draft decision and a draft workplan prepared by the Secretariat, adopted decision CRC-18/3. The decision, to which the rationale is annexed, is set out in annex I to the present report; the composition of the intersessional drafting group established to prepare the draft decision guidance document is set out in annex II; and the workplan is set out in annex III.

7. Methyl parathion

166. The Committee had before it notifications of final regulatory action on methyl parathion in the pesticide category from two prior informed consent regions, namely Asia (China and Indonesia) and Latin American and the Caribbean (Uruguay) (UNEP/FAO/RC/CRC.18/11), along with the related supporting information (UNEP/FAO/RC/CRC.18/INF/22, UNEP/FAO/RC/CRC.18/INF/23 and UNEP/FAO/RC/CRC.18/INF/24). The Committee had before it a conference room paper containing a task group report on the notifications from China and Uruguay, prepared prior to the Committee's seventeenth meeting, and another containing the report of the intersessional task group that had been established to undertake a preliminary assessment of the notification from Indonesia and supporting documentation to determine whether they met the criteria set out in Annex II to the Convention, prepared for the current meeting.

167. The Committee had previously considered other notifications on methyl parathion, at its first and fourteenth meetings, and had concluded that a notification from the European Union on methyl parathion in the pesticide category met the criteria set out in Annex II to the Convention. The Committee's rationale for that conclusion was set out in document UNEP/FAO/RC/CRC.17/INF/17.

168. Ms. Seng, on behalf of Ms. Domínguez Majin, the chair of the intersessional task group, and Ms. Curaba, the drafter of the group, who had completed their terms of office as Committee members in June 2022, presented the outcome of the group's work.

(a) Notifications

(i) Notification from China

169. The notification from China indicated that methyl parathion was a broad spectrum, highly toxic insecticide with both contact action and stomach toxicity, and that the final regulatory action was thus relevant to the protection of human health and the environment, in accordance with the criterion in paragraph (a) of Annex II to the Convention.

170. Regarding the criteria in paragraph (b) of Annex II, the notification indicated that the final regulatory action was based on a risk or hazard evaluation, but did not provide any documentation or information on the evaluation. Although the supporting documentation contained an extract of the methyl parathion information in the international database for pesticide risk assessments and management, the task group had considered that it was insufficient to demonstrate how a risk or hazard evaluation had been performed. Furthermore, the database extract had been "last updated in 2019", while the ban dated back to 2008. The task group had therefore concluded that the criteria in paragraph (b) (i), (ii) and (iii) had not been met and thus that the requirements of paragraph (b) as a whole had not been satisfied.

171. Regarding the criteria in paragraph (c) of Annex II, the notification indicated that the final regulatory action was a ban on the production, circulation and use of methyl parathion and four other highly toxic pesticides. The task group had determined that, as a result of the ban, it could be expected that methyl parathion would no longer be available for use in China, resulting in a significant reduction of risk to human health and the environment. Thus, the task group had considered the criteria in paragraph (c) (i) and (ii) to have been met. The notification indicated that the methyl parathion pesticide formulation registered in China was classified by the World Health Organization as extremely hazardous (class Ia); however, the task group had determined that there was not enough information to decide whether the considerations that led to the final regulatory action were applicable to other circumstances or regions and had therefore concluded that the notification did not meet the criterion in paragraph (c) (iii). Lacking information on international trade at the time of its review, the group had agreed to consider the criterion in paragraph (c) (iv) open, pending receipt of such information.

172. As there was no indication in the notification or the supporting documentation that the final regulatory action had been prompted by concerns over the intentional misuse of the chemical, the task group had concluded that the criterion in paragraph (d) of Annex II had been met.

173. Based on its preliminary assessment, the task group had therefore concluded that, overall, the notification from China did not meet the criteria set out in Annex II to the Convention.

(ii) Notification from Indonesia

174. The notification from Indonesia stated that the final regulatory action was a ban aimed at preventing and mitigating the risks of hazardous substances affecting the environment and the health of humans and other living beings. That statement was supported by the fact that, under article 10 of the relevant regulation, the criteria for bans included concerns for human health. The task group had therefore concluded that the notification met the criterion in paragraph (a) of Annex II to the Convention.

175. The task group had determined, however, that the notification did not meet the criteria of paragraph (b) of Annex II. The notification stated that the final regulatory action was not based on a risk or hazard evaluation, but rather on the “toxicological properties of the chemical (DGD, 1997)”. In the supporting documentation, the 1997 draft guidance document referred to indicated that methyl parathion was classified by the World Health Organization as extremely hazardous (class Ia), but in the view of the task group that in itself did not indicate how Indonesia used and analysed the information on methyl parathion in the draft guidance document. The task group had therefore concluded that it was impossible to say whether the final regulatory action was based on data generated according to scientifically recognized methods, data reviews had been performed and documented according to generally recognized scientific principles and procedures, or the final regulatory action was based on a risk evaluation involving the prevailing conditions in Indonesia.

176. In terms of the criteria in paragraph (c) of Annex II, the final regulatory action banned all uses of methyl parathion formulations in Indonesia and could therefore be expected to lead to a significant reduction in the quantity of the chemical used and thus in the risks for human health and the environment, hence the criteria in paragraph (c) (i) and (ii) were considered to have been met. The decision guidance document that served as the basis for the final regulatory action instead of a risk or hazard evaluation stated that the pesticide was included because of its acute hazard classification and concern as to its impact on human health under the conditions of use in developing countries. As those considerations were applicable to countries other than Indonesia, the task group had considered the criterion in paragraph (c) (iii) to have been met as well. Based on the information received by the Secretariat, it was unclear whether trade in the chemical was ongoing; however, according to Handbook of Working Procedures and Policy Guidance for the Chemical Review Committee, even if there was no direct information on ongoing trade of the chemical available to the Committee, it had in the past decided that the criterion had been met as international trade could not be excluded. On that basis, the task group had agreed that the criterion in paragraph (c) (iv) had been met.

177. There was no indication in the notification or the supporting documentation that the final regulatory action had been prompted by concerns over the intentional misuse of the chemical, and the task group had therefore concluded that the criterion in paragraph (d) of Annex II had also been met.

178. As it had determined that the notification did not meet the criteria in paragraph (b) of Annex II, the task group considered that, overall, the notification from Indonesia did not satisfy the criteria set out in Annex II to the Convention.

(iii) Notification from Uruguay

179. The notification from Uruguay indicated that the final regulatory action was a severe restriction on the import, registration and renewal of plant protection products formulated as an encapsulated suspension with 450 g/L of methyl parathion, a World Health Organization class Ib formulation that was highly toxic if inhaled or ingested. The notification also indicated that the environmental impact quotient (EIQ) for workers, consumers and the environment was higher for the banned formulation than for any other insecticide used in Uruguay on pome and stone fruit trees. On that basis, the task group had concluded that the final regulatory action had been taken to protect human health and the environment and that the criteria in paragraph (a) of Annex II to the Convention could be considered to have been met.

180. The task group had concluded that the notification from Uruguay also satisfied the criteria in paragraph (b) (i), (ii) and (iii) of Annex II and thus paragraph (b) as a whole, as the notification indicated that the final regulatory action was based on data generated according to scientifically recognized methods and a risk evaluation involving the prevailing conditions (dose, application frequency and good agricultural practice) in Uruguay and data reviews had been performed and documented according to generally recognized scientific principles and procedures.

181. With respect to paragraph (c) of Annex II, the notification indicated that a ban on the use of methyl parathion from the final regulatory action could be expected to lead to a significant reduction in the quantity of the chemical used in the country and thus in the health risks for workers and consumers and contamination of the environment and its effects on fauna. On that basis, the task group had concluded that the notification complied with the requirements of paragraph (c) (i) and (ii). The notification further stated that similar human health and environmental problems were likely to be encountered in other regions where the chemical was used, particularly in developing countries, thus meeting the criterion in paragraph (c) (iii). The task group had lacked information on international trade at the time of its review and had therefore agreed to consider the criterion in paragraph (c) (iv) open pending receipt of such information.

182. The task group had considered the criterion in paragraph (d) met as there was no indication in the notification that concerns over the intentional misuse of the chemical had prompted the final regulatory action.

183. As a result of the above, the task group had not reached a final conclusion on whether the notification of final regulatory action from Uruguay met all the criteria set out in Annex II to the Convention.

(b) Discussion of the notifications

184. During the ensuing discussion, there was general agreement among the members of the Committee that, overall, none of the three notifications met the criteria of Annex II to the Convention.

185. With respect to individual criteria, one member observed that, for the sake of consistency, the basis for concluding that the notification from Indonesia met the criterion in paragraph (c) (iv) should also be applied to the notifications from China and Uruguay, and that those notifications should also be considered as having met that criterion. Several other members echoed that view.

186. In the case of the notification from Uruguay, one member recalled that the use of the EIQ tool had been discussed the previous day in the context of another notification, when it had been clearly stated that EIQ was not an appropriate tool for the purposes of risk evaluation under the Convention. Consequently, in his view, the notification did not meet the criterion in paragraph (b) (iii). Another member concurred, adding that the EIQ had been developed as an integrated pest management tool to enable farmers to compare two already acceptable pesticides, and that FAO guidance on the use of EIQ in impact assessment contained numerous caveats, including that the tool sacrificed accuracy and specificity for the sake of simplicity and could not be linked to actual impacts without validation in the field.

(c) Next steps

187. Based on the discussion, the Committee agreed that none of the new notifications met the criteria of Annex II, and that, as the Committee had only one notification of final regulatory action that met the criteria set out in Annex II to the Convention, namely the notification from the European Union, no further action on the chemical would be taken at present.

8. Mirex

188. The Committee had before it notifications of final regulatory action on mirex as an industrial chemical or pesticide from two prior informed consent regions, namely Latin America and the Caribbean (Ecuador) and Asia (Indonesia). The notifications were set out in document UNEP/FAO/RC/CRC.18/12, and relevant supporting information provided by Ecuador and Indonesia was set out in documents UNEP/FAO/RC/CRC.17/INF/25 and UNEP/FAO/RC/CRC.17/INF/25, respectively. The Committee also had before it a conference room paper containing the report of the intersessional task group that had been established to undertake a preliminary assessment of the notifications and supporting documentation to determine whether they met the criteria set out in Annex II to the Convention. Previously, at its thirteenth meeting, the Chemical Review Committee had decided that a notification related to mirex in the industrial chemical category from the North America prior informed consent region (Canada) met all the criteria of Annex II to the Convention. The notification from Canada and the rationale for the conclusion by the Committee were set out in document UNEP/FAO/RC/CRC.18/INF/27.

189. Mr. Ndiyo, chair of the intersessional task group, and Mr. Bart, on behalf Mr. Lacroix, the drafter of the group, who had completed his term of office as a Committee member in June 2022, reported on the outcome of the group's work.

(a) Notifications**(i) Notification from Ecuador**

190. The notified final regulatory action related to mirex in the pesticide category. The import, manufacture and use of mirex had been prohibited in Ecuador by a ministerial regulation of November 1992. The notification stated that the final regulatory action had been taken because of the toxic nature and hazardous properties of mirex, and its consequent harmful impacts on human health and the environment. Mirex was persistent and bio-accumulative and had been identified as possibly carcinogenic to humans, and was very toxic to aquatic life. The task group had therefore concluded that the action had been taken to protect human health and the environment, and the criterion in paragraph (a) had thus been met.

191. Regarding compatibility with the criteria set out in paragraph (b) of Annex II, the notification indicated that the final regulatory action had not been based on a risk or hazard evaluation. The notification included the physical and chemical properties of mirex but did not provide scientific data generated from the notifying country or bridging information. In addition, the final regulatory action had been developed in 1992, while the supporting documentation from the international database for pesticide risk assessments and management and the *Manual de plaguicidas de centroamérica* from Costa Rica were dated 2016 and 2019, respectively, and thus could not have been used to support the final regulatory action. The task group therefore concluded that the criteria in paragraph (b) (i), (ii) and (iii) had not been met, and therefore the requirements of paragraph (b) as a whole had not been met.

192. Regarding the criteria set out in paragraph (c), before the regulatory action, mirex had been registered for use as an insecticide in Ecuador. While the notification did not provide quantities of the pesticide formulation imported for the years before the final regulatory action, it was expected that the action to ban the importation and all uses of mirex had prevented the use of mirex in Ecuador. The task group accordingly concluded that the criterion in paragraph (c) (i) had been met. The final regulatory action to ban the import and all uses of the pesticide led to a reduction or elimination of exposure and risks to human health or the environment; the task group had therefore concluded that the criterion in paragraph (c) (ii) had been met. The considerations that led to the final regulatory action were generally applicable to other countries and were related to the intended use of mirex as a pesticide; the criterion in paragraph (c) (iii) had thus been met. While CropLife International, the Pesticide Action Network and the European Union had found no evidence of ongoing international trade in mirex as a pesticide, the possibility of international trade could not be excluded, and the task group had hence concluded that the criterion in paragraph (c) (iv) had been met.

193. There was no indication in the notification or supporting documentation that concerns over the intentional misuse of the chemical had prompted the regulatory action; thus, the criterion in paragraph (d) had been met.

194. In summary, the task group had concluded that the notification of final regulatory action of Ecuador for mirex had not satisfied all the criteria set out in Annex II to the Convention.

(ii) Notification from Indonesia

195. The notification of final regulatory action from Indonesia on mirex was submitted in both the industrial and pesticide categories. Due to the toxicological properties of the persistent organic pollutant, Indonesia had banned the import, export, manufacture and use of mirex for both industrial and agricultural (pesticide) purposes by government regulation in 2001. The task group concluded that the regulatory action had been taken to protect human health and the environment, and thus that the criterion in paragraph (a) had been met.

196. Regarding the criteria in paragraph (b) of Annex II, the notification indicated that the final regulatory action had not been based on a risk or hazard evaluation. The notification and its supporting documentation focused strictly on the physical and chemical properties of the chemical and its hazardous properties, and no exposure information had been provided. Finally, the information provided did not include scientific data generated from the notifying country or bridging information. The task group therefore concluded that the criteria in paragraph (b) (i), (ii) and (iii) had not been met, and therefore the requirements of paragraph (b) as a whole had not been met.

197. With regard to the criteria in paragraph (c), before the regulatory action mirex had been registered for use as a flame retardant in certain products, and had been used as an insecticide in agriculture. While the notification did not indicate the quantities of mirex produced, imported, exported or used in the years before the notification, it was expected that the final regulatory action to ban all uses of mirex completely prevented its use in Indonesia, and the task group therefore concluded that the criterion in paragraph (c) (i) had been met. The notification and its supporting documents

indicated that the final regulatory action had been taken to support global action to reduce and eliminate the human health and environmental impacts of persistent organic pollutants, meaning that the criterion in paragraph (c) (ii) had been met. The considerations that led to the final regulatory action were generally applicable to other countries and were related to the intended uses of mirex as an industrial chemical or pesticide; the task group thus concluded that the criterion in paragraph (c) (iii) had been met. While CropLife International, the Pesticide Action Network and the European Union had found no evidence of ongoing international trade in mirex as a pesticide, the possibility of international trade could not be excluded, and the task group had hence concluded that the criterion in paragraph (c) (iv) had been met.

198. There was no indication in the notification or supporting documentation that concerns over the intentional misuse of the chemical had prompted the regulatory action; therefore, the criterion in paragraph (d) had been met.

199. In summary, the task group had concluded that the notification of final regulatory action of Indonesia for mirex had not satisfied all the criteria set out in Annex II to the Convention.

(b) Discussion of the notifications

200. In the ensuing discussion, all the members who spoke expressed support for the conclusions of the task group with regard to the notifications of final regulatory action on mirex from both Ecuador and Indonesia. The Committee therefore concurred that neither notification had satisfied all the criteria set out in Annex II to the Convention.

(c) Next steps

201. There was consensus that the notifications on mirex from Ecuador and Indonesia had not met all the criteria set out in Annex II to the Convention. As only a notification of final regulatory action from one prior informed consent region in respect of mirex met the criteria set out in Annex II to the Convention, the Committee decided that no further action would be taken on the chemical at present.

9. Paraquat

202. The Committee had before it notifications of final regulatory action on paraquat in the pesticide category from two prior informed consent regions, namely Africa (Mozambique) and Asia (Malaysia) (UNEP/FAO/RC/CRC.18/13), along with the related supporting information (UNEP/FAO/RC/CRC.18/INF/28 and UNEP/FAO/RC/CRC.18/INF/29). The Committee also had before it a conference room paper containing the report of the intersessional task group that had been established to undertake a preliminary assessment of the notifications and supporting documentation to determine whether they met the criteria set out in Annex II to the Convention.

203. The Secretariat had previously received a number of notifications of final regulatory action on paraquat that met the information requirements of Annex I, all from countries in the Africa prior informed consent region: Burkina Faso, Cabo Verde, Chad, Mali, Mauritania, Niger and Senegal (published in PIC Circular XXXV) and Togo (published in PIC Circular XLII). Subject to the outcome of the Committee's review of the notifications submitted by Malaysia and Mozambique, those notifications would be considered at a future meeting of the Committee.

204. Mr. Helbig, on behalf of Ms. Domínguez Majin, the chair of the intersessional task group, and Mr. Peter Korytár, the drafter of the group, who had completed their terms of office as Committee members in June 2022, reported on the outcome of the group's work.

(a) Notifications

(i) Notification from Malaysia

205. The task group had concluded that the final regulatory action, which banned the import and export of paraquat and its use as a pesticide product due to its highly toxic nature, had been taken to protect human health, in accordance with the criterion in paragraph (a) of Annex II to the Convention.

206. With respect to the criteria in paragraph (b) of Annex II, the task group had determined that the supporting documentation showed that publications and information from international sources had been reviewed, data had been generated according to scientifically recognized methods, and data reviews had been performed and documented according to generally recognized scientific principles and procedures. Consequently, the task group had concluded that the criteria in paragraph b (i) and (ii) had been met. In addition, national-level information had been taken into account, including hospital data on poisoning incidents where paraquat was involved, and the results of a study on the use of

paraquat in palm oil cultivation, which also addressed operator exposure under local conditions. According to the supporting documentation, a risk evaluation had been conducted analysing international risk assessments and other information and applying bridging to local conditions of use of paraquat and actual exposure in Malaysia, in particular poisoning incidents and occupational risks. On that basis, the task group had concluded that the criterion in paragraph b (iii) had also been met, meaning that the notification satisfied the requirements of paragraph (b) as a whole.

207. In terms of the criteria in paragraph (c) of Annex II, the information provided showed that a significant amount of paraquat had been used in Malaysia, and that the ban resulting from the final regulatory action could be expected to lead to a notable reduction of the quantity of the paraquat used and consequently of the risk to human health. Thus, the criteria in paragraph (c) (i) and (ii) had been fulfilled. The criterion in paragraph (c) (iii) was also considered to have been met, as the final regulatory action had been taken to reduce poisoning cases, a concern that was of relevance for other countries as poisoning cases involving paraquat had been reported in various countries where the substance was used, particularly developing countries. Finally, information provided to the Secretariat confirmed ongoing international trade in paraquat, meaning that the criterion in paragraph (c) (iv) had been met.

208. As there was no indication in the notification or the supporting documentation that the final regulatory action had been prompted by concerns over the intentional misuse of the chemical, the task group had concluded that the criterion in paragraph (d) of Annex II had also been met.

209. Based on its preliminary assessment, the task group had therefore concluded that, overall, the notification from Malaysia satisfied the criteria set out in Annex II to the Convention.

(ii) Notification from Mozambique

210. The notification from Mozambique indicated that the final regulatory action banning the import and use of paraquat in the country had been taken to protect human health and the environment, thus meeting the criterion in paragraph (a) of Annex II to the Convention.

211. The notification stated that the final regulatory action was based on a risk evaluation that referenced a government project entitled “Reducing risks of highly hazardous pesticides in Mozambique”. The project had been carried out in multiple steps, the first step being to classify all pesticide formulations registered in Mozambique using the oral and dermal LD₅₀ values of the formulation and establish a shortlist of pesticides that were highly hazardous or “coming close to” highly hazardous; the paraquat 200 grams/litre (20 per cent) soluble liquid (SL) formulation was shortlisted as a pesticide “coming close to” highly hazardous. Based on highly hazardous pesticide criteria and import statistics, some of the shortlisted pesticides had then been selected for step 2 of the project, consisting of use and exposure field surveys and further hazard and risk assessments. The field surveys had shown that the use of pesticides in general, and of highly hazardous pesticides in particular, was likely to result in excessive exposure of farmers in Mozambique, owing to aspects such as inadequate training, illiteracy, in-home storage of pesticides and a lack of personal protective equipment. In a third step of the project, stakeholders had been consulted to refine the shortlist, and the fourth step had consisted of detailed occupational exposure assessment, use of different models and scenarios for the use of personal protective equipment, and consideration of different crops. Based on the study, the risk evaluation showed that acceptable operator exposure levels were greatly exceeded for all crops and all pesticide application scenarios, irrespective of the application rate or use of personal protective equipment; that the application of paraquat probably posed a high risk under Mozambican conditions; and that it was unlikely that locally feasible mitigation measures would reduce the risk of paraquat to acceptable levels. The risk evaluation thus showed that the use of paraquat under the conditions of use in Mozambique would in all likelihood result in unacceptable risks to farmers (operators), and as the final regulatory action was based on that risk evaluation, the task group had concluded that the criteria of paragraph (b) (i), (ii) and (iii), and consequently paragraph (b) as a whole, had been met.

212. The notified final regulatory action was a ban, meaning that exposure would drop to nil as paraquat would no longer be used in the country, resulting in a significant reduction of risk for human health, hence the paragraph (c) (i) and (ii) criteria had been fulfilled. As similar human health problems were likely to be encountered in other countries where paraquat was used under similar conditions, the criterion in paragraph (c) (iii) was also considered to have been met. Finally, the Secretariat had received information that confirmed ongoing international trade in paraquat, and the criterion of paragraph (c) (iv) had therefore been satisfied.

213. The task group had also determined that the criterion in paragraph (d) had been met as there was no indication in the notification that concerns over the intentional misuse of the chemical had prompted the final regulatory action.

214. The task group had therefore concluded that the notification of final regulatory action from Mozambique met all the criteria set out in Annex II to the Convention.

(b) Discussion of the notifications

215. With respect to the notification from Malaysia, there was general agreement among the Committee members that the notification met all the criteria of Annex II. One member nevertheless requested clarification of the 2019 import and export figures provided in the supporting documentation, but another pointed out that those figures were not needed for the purpose of determining whether the notification met the criteria in Annex II, as it was only necessary to ascertain whether the amount used in the country had been reduced. One member, echoing a comment by an observer, noted that the Committee would have benefitted from having access to the risk evaluation that the Malaysian Palm Oil Board had apparently carried out but not submitted.

216. Regarding the notification from Mozambique, many members also voiced support for the task group's conclusions that the notification met the Annex II criteria, with several citing the detailed explanation of the study underlying the risk evaluation as particularly helpful for concluding on the paragraph b (iii) criteria.

217. One member disagreed with the task group's conclusion, however, saying that Annex II called for an evaluation of the scientific value of the data, which was not possible because little data had been provided. In his view, there was insufficient information to assess whether paraquat should be banned, for instance. Another member, in his support for the task group's conclusions, responded that in the case of the Mozambique notification the risk evaluation could be bridged, as exposures were not acceptable and the hazards had been previously stated. A third member recalled that Committee's mandate was not to prepare for an international ban or encourage national bans, but rather to evaluate whether a notification of final regulatory action met the criteria of a Convention whose main goal was solely information exchange in international trade.

(c) Next steps

218. Based on the discussion, the Committee agreed that the notification from Malaysia met all the criteria of Annex II to the Convention, but that the notification from Mozambique required further discussion. It established a contact group, with Ms. Andrejevic Stefanovic serving as chair and Mr. Helbig as drafter, to further discuss the notification from Mozambique and, in the event that the contact group considered that it met the criteria of Annex II, to develop a draft rationale for that conclusion. The group was also to develop a draft rationale for the Committee's conclusion on the notification from Malaysia, based on the notification received and the comments made during the discussion. The Secretariat was requested to prepare, in consultation with the chair and the drafter, a draft rationale that could serve as the basis of the discussions in the contact group. If necessary, the chair of the contact group could convert the group into a drafting group, limited to members of the Committee, for the purpose of finalizing the wording of the rationale or rationales, as appropriate.

219. Subsequently, the chair of contact group reported that the group had reached agreement on the conclusion that the notification from Mozambique met the criteria of Annex II and the Secretariat had developed a draft rationale for each of the notifications from Malaysia and Mozambique.

220. The Committee therefore requested the Secretariat to prepare a draft decision with a recommendation to list paraquat in Annex III to the Convention in the pesticide category and a decision to prepare a draft decision guidance document.

221. Subsequently, the Committee, having considered a draft rationale prepared by the contact group, along with a draft decision and a draft workplan prepared by the Secretariat, adopted decision CRC-18/4. The decision, to which the rationale is annexed, is set out in annex I to the present report; the composition of the intersessional drafting group established to prepare the draft decision guidance document is set out in annex II; and the workplan is set out in annex III.

10. Thiodicarb

222. The representative of the Secretariat recalled that, at its seventeenth meeting, the Chemical Review Committee had been unable to reach consensus on whether a notification of final regulatory action from Mozambique for thiodicarb in the pesticide category met the criteria set out in Annex II to the Convention. A draft rationale for the notification had been prepared, as set out in document UNEP/FAO/RC/CRC.17/INF/35, for further consideration by the Committee at its eighteenth meeting. The supporting documentation submitted by Mozambique was set out in document UNEP/FAO/RC/CRC.17/INF/20. The Secretariat had since received from the Europe prior informed consent region (Türkiye) an additional notification for thiodicarb in the pesticide category. The notifications from Mozambique and Türkiye were set out in document UNEP/FAO/RC/CRC.18/14, and the relevant supporting documentation from Türkiye was set out in document UNEP/FAO/RC/CRC.18/INF/30. The Committee also had before it a conference room paper containing the report of the intersessional task group that had been established to undertake a preliminary assessment of the notifications and supporting documentation to determine whether they met the criteria set out in Annex II to the Convention.

223. Mr. Ormond, the chair of the intersessional task group, and Ms. Maillefer, the drafter of the group, reported on the outcome of the group's work.

(a) Notifications**(i) Notification from Türkiye**

224. The notification of final regulatory action related to thiodicarb (CAS 59669-26-0) in the pesticide category. By law, it was forbidden to manufacture, use and place on the market unlicensed plant protection products in Türkiye. The Ministry of Agriculture and Forestry had banned the production and import of thiodicarb in 2012, and its use had been banned in 2013.

225. The prohibition of thiodicarb was based on the Veterinary Services, Plant Health, Food and Feed Law, by which the Ministry of Agriculture and Forestry, in order to protect human health and the environment, prohibited the use of hazardous active substances in plant protection products. The task group had therefore concluded that the criterion in paragraph (a) had been met.

226. Regarding the criteria in paragraph (b) of Annex II, internationally peer-reviewed information and data on the hazardous properties of thiodicarb had been submitted in the supporting documents, and the notification indicated that Türkiye followed international chemicals management agreements as well as the European Union approach on restriction, prohibition and regulatory actions on chemicals. The task group had thus concluded that the criteria in paragraph (b) (i) and (ii) had been met. However, the notification stated that the final regulatory action had not been based on a risk or hazard evaluation, and no information on actual, expected or anticipated exposure under the prevailing conditions in Türkiye or bridging information relating to risk evaluations performed in other countries had been submitted in the notification. The task group had therefore concluded that the criterion in paragraph (b) (iii) had not been satisfied.

227. With regard to the criteria in paragraph (c), as the final regulatory action banned the manufacture, use and placing on the market of thiodicarb, it was expected that the regulatory action would lead to a significant reduction in the quantity of the chemical used, leading in turn to a significant reduction of risk to human health and the environment. The task group had therefore concluded that the criteria in paragraph (c) (i) and (ii) had been met. Türkiye followed international chemicals management agreements and legislation and conformed with the European Union approach on restriction, prohibition and regulatory actions on chemicals. As those considerations were applicable to other countries, the task group had concluded that the criterion in paragraph (c) (iii) had been met.

228. As there was evidence of ongoing trade international trade in the chemical, the task group had concluded that the criterion in paragraph (c) (iv) had been met.

229. As there was no indication in the notification or supporting documentation that concerns over the intentional misuse of the chemical had prompted the regulatory action, the task group had concluded that the criterion in paragraph (d) had been met.

230. In summary, the task group had concluded that the notification of final regulatory action from Türkiye had not met all of the criteria set out in Annex II to the Convention.

(ii) Notification from Mozambique

231. The drafter of the task group presented a summary of the deliberations and outcomes of the discussion on the notification of Mozambique at the seventeenth meeting of the Chemical Review Committee. The ban on thiodicarb in Mozambique had been based on an action plan comprising the following steps: a consultancy report shortlisting chemicals, including thiodicarb, considered as highly hazardous under Mozambican conditions; a survey on the conditions under which pesticides were being used by farmers in the country; and a stakeholder consultation to refine the shortlist of highly hazardous pesticides based on the survey results and the expertise and experience of stakeholders. Based on the information contained in the notification and the information on trade, the Committee had concluded at its seventeenth meeting that the criteria in paragraphs (a), (b) (i) and (ii), (c) and (d) had been met, but that the criterion in paragraph (b) (iii) had not been met. Deliberations had not been completed on the hazard criteria applied by Mozambique to shortlist thiodicarb (based on an oral LD₅₀ of less than 200 milligrams per kilogram), or on the draft rationale for the notification from Mozambique, the current text of which had been made available to the Committee for further consideration (UNEP/FAO/RC/CRC.17/INF/35).

(b) Discussion of the notifications

232. In the ensuing discussion on the notification from Türkiye, there was general support for the findings and conclusions of the task group. Several members supported the finding that the criterion in paragraph (b) (iii) had not been met. One member noted that the regulatory action on thiodicarb by the Ministry of Agriculture and Forestry had been taken in 2012 and 2013, whereas the toxicological and ecotoxicological information drawn from the relevant sources was dated 2021, and therefore could not have been used to support the regulatory action, in which case the criteria in paragraph (b) (i) and (ii) had also not been met. Another member stated that a broader view should be adopted on that matter, and the fact that Türkiye had stated that it followed international and European Union regulations indicated that the information it provided was scientifically sound. Another member said that there were weaknesses in the risk assessment, while another said that risk assessment presented a challenge for many countries, and information sharing to build the capacity to undertake risk evaluations was of value.

233. With regard to the notification from Mozambique, several members expressed the view that all the criteria set out in Annex II to the Convention had been met, although some members were of the opinion that the criterion in paragraph (b) (iii) had not been satisfied. One member stated that the brackets in the draft rationale set out in document UNEP/FAO/RC/CRC.17/INF/35 should be removed from the text related to the national policy of Mozambique on highly hazardous pesticides, in order to clarify how the criterion in paragraph (b) (iii) had been met.

(c) Next steps

234. The Committee agreed that the notification of final regulatory action from Türkiye had not met the criteria set out in Annex II to the Convention.

235. With regard to the notification of final regulatory action from Mozambique, the Committee agreed that it required further discussion. It established a contact group, with Mr. Ormond serving as chair and Ms. Maillefer as drafter, to further discuss the notification from Mozambique and, in the event that the contact group considered that it met the criteria of Annex II, to develop a draft rationale for that conclusion, based on the draft rationale set out in document UNEP/FAO/RC/CRC.17/INF/35. If necessary, the chair of the contact group could convert the group into a drafting group, limited to members of the Committee, for the purpose of finalizing the wording of the rationale.

236. Subsequently, the Committee further discussed the notification of final regulatory action from Mozambique. While several members were of the opinion that all the criteria set out in Annex II had been met, others stated that uncertainty remained as to whether certain criteria of Annex II had been met, in particular the criterion in paragraph (b) (iii), suggesting that benefit could be gained by seeking further specific information on the matter from Mozambique to assist the Committee in its deliberations.

237. While a number of members favoured dealing with each notification on its own merits, others saw benefit in ensuring consistency on the cross-cutting issues related to the notifications submitted by Mozambique. Consequently, it was decided that the matter would be further considered as part of the informal consultations conducted by the Chair referred to in paragraphs 77 and 78 of the present report.

238. Subsequently, the Committee agreed to defer further discussion of the matter to its nineteenth meeting.

VI. Venue and dates of the nineteenth meeting of the Committee

239. The Committee agreed to hold its nineteenth meeting at the headquarters of FAO in Rome from 2 to 6 October 2023, back to back with the nineteenth meeting of the Persistent Organic Pollutants Review Committee of the Stockholm Convention and on the understanding that it was subject to sufficient financial resources and the COVID-19 pandemic situation allowing for an in-person meeting at that time. The Committee also agreed that the duration of the meeting might be adjusted, in consultation with the Bureau, depending on the number of notifications or proposals to be considered by the Committee at the meeting and the availability of financial resources.

VII. Other matters

A. Report on activities to facilitate effective participation in the work of the Committee

240. Introducing the sub-item, the representative of the Secretariat recalled that, by decision RC-10/5 on the operation of the Chemical Review Committee, the Conference of the Parties had welcomed the activities conducted by the Secretariat for new Committee members, and requested the Secretariat to continue implementing training activities for new and existing members within the framework of the technical assistance plan, subject to the availability of resources, and to consider using various delivery techniques and information channels, such as workshops and online training, reporting on the results to the Conference of the Parties at its eleventh meeting.

241. Owing to the short time frame between the election of members at the face-to-face segment of the tenth meeting of the Conference of the Parties and the present meeting, the Secretariat had not been able to conduct a face-to-face orientation workshop for new members. Instead, two webinars had been held on 13 and 14 July 2022 to support members in preparing for the work of the Committee, and for the present meeting in particular. A face-to-face orientation workshop was once again included in the programme of work of the Rotterdam Convention for 2022–2023, subject to the availability of funding.

242. In addition, webinars for all Committee members and observers had been scheduled in order to support effective meeting participation, with two briefing webinars on the agenda and organization of work of the present meeting and of the eighteenth meeting of the Persistent Organic Pollutants Review Committee of the Stockholm Convention having been held on 7 September 2022 and two de-briefing webinars on the outcomes of the current meeting, to be held following the meeting.

243. Furthermore, a range of materials was available to members to familiarize them with the work of the Committee, including the Pocket Guide for Effective Participation in the Chemical Review Committee under the Rotterdam Convention, which was available in the six official languages of the United Nations; the Handbook of Working Procedures and Policy Guidance for the Chemical Review Committee, which was available in English; a video on the work of the Committee, which was available on the Convention website; a quiz for self-assessment on knowledge related to the work of the Committee, which the Secretariat had developed recently and made available to all Committee members by email.

244. Finally, the Secretariat had provided a report to the tenth meeting of the Conference of the Parties on progress with respect to the recommendations for improving participation, openness and transparency in the Committee process, with particular attention to actions that increased the participation of experts, Parties and observers. The report was set out in document UNEP/FAO/RC/COP.10/INF/9.

245. In the ensuing discussion, many members expressed thanks to the Secretariat for its ongoing efforts in providing technical support and training to members, with several members underlining the importance of the planned orientation workshop for new members being held in person to ensure the highest levels of interaction and engagement.

246. The Committee took note of the information provided.

B. Intersessional work on new notifications of final regulatory action

247. The representative of the Secretariat said that with the publication of PIC Circular LV in June 2022, a large number of new notifications of final regulatory action had been identified for the Committee's possible consideration at future meetings, meaning that the Committee had considerable work ahead of it, in addition to the substantial number of notifications already received. A possible way forward was to advance the intersessional work once again as had been done with the intersessional work ahead of the eighteenth meeting of the Committee. The Secretariat would consult with the Bureau on the plan and scheduling of the intersessional work and the Bureau, in turn, would discuss the detailed plan for the new notifications further and communicate it to Committee members in a timely manner.

248. The Committee took note of the information provided.

VIII. Adoption of the report of the meeting

249. The Committee adopted the report on the basis of the draft that had been circulated during the meeting, as orally amended, and on the understanding that the finalization of the report would be entrusted to the Rapporteur, working in consultation with the Secretariat.

IX. Closure of the meeting

250. Following the customary exchange of courtesies, the Chair declared the meeting closed at 12.25 p.m. on Friday, 23 September 2022.

Annex I

Decisions adopted by the Chemical Review Committee at its eighteenth meeting

- CRC-18/1: Iprodione
- CRC-18/2: Terbufos
- CRC-18/3: Methyl bromide
- CRC-18/4: Paraquat
- CRC-18/5: Chlorfenvinphos

CRC-18/1: Iprodione

The Chemical Review Committee,

Recalling paragraphs 1 and 2 of Article 7 of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade,

Recalling also its decision CRC-17/1, adopted at its seventeenth meeting, in which it recommended, in accordance with paragraph 6 of Article 5 of the Convention, that the Conference of the Parties list iprodione in Annex III to the Convention as a pesticide,

Adopts the draft decision guidance document for iprodione¹ (CAS No. 36734-19-7) and decides to forward it, together with the related tabular summary of comments,² to the Conference of the Parties for its consideration.

CRC-18/2: Terbufos

The Chemical Review Committee,

Recalling paragraphs 1 and 2 of Article 7 of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade,

Recalling also its decision CRC-17/2, adopted at its seventeenth meeting, in which it recommended, in accordance with paragraph 6 of Article 5 of the Convention, that the Conference of the Parties list terbufos in Annex III to the Convention as a pesticide,

Adopts the draft decision guidance document for terbufos³ (CAS No. 13071-79-9) and decides to forward it, together with the related tabular summary of comments,⁴ to the Conference of the Parties for its consideration.

CRC-18/3: Methyl bromide

The Chemical Review Committee,

Recalling Article 5 of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade,

Recalling also the conclusion by the Chemical Review Committee, adopted at its first meeting, that the notification of final regulatory action for methyl bromide submitted by the Netherlands met the criteria set out in Annex II to the Convention,⁵

1. *Concludes* that the notification of final regulatory action for methyl bromide submitted by Colombia⁶ meets the criteria set out in Annex II to the Convention;

2. *Adopts* the rationale for the Committee's conclusion set out in the annex to the present decision;

3. *Recommends*, in accordance with paragraph 6 of Article 5 of the Convention, that the Conference of the Parties list methyl bromide in Annex III to the Convention as a pesticide;

4. *Decides*, in accordance with paragraph 1 of Article 7 of the Convention, to prepare a draft decision guidance document for methyl bromide;

5. *Also decides*, in accordance with the process for drafting decision guidance documents set out in decision RC-2/2 and amended by decision RC-6/3, that the composition of the intersessional drafting group to prepare the draft decision guidance document for methyl bromide and the workplan of the group shall be as set out in annexes II and III, respectively, to the report of the Committee on the work of its eighteenth meeting.

¹ UNEP/FAO/RC/CRC.18/3/Rev.1.

² UNEP/FAO/RC/CRC.18/INF/4/Rev.1.

³ UNEP/FAO/RC/CRC.18/4/Rev.1.

⁴ UNEP/FAO/RC/CRC.18/INF/5/Rev.1.

⁵ UNEP/FAO/RC/CRC.1/28, annex V, sect. A.

⁶ See UNEP/FAO/RC/CRC.18/10.

Annex to decision CRC-18/3

Rationale for the conclusion by the Chemical Review Committee that the notification of final regulatory action submitted by Colombia in respect of methyl bromide in the pesticide category meets the criteria of Annex II to the Rotterdam Convention

1. The notification on methyl bromide from Colombia has been verified by the Secretariat as containing the information required by Annex I to the Rotterdam Convention. This notification underwent a preliminary review by the Secretariat and the Bureau, which evaluated whether the notification appeared to meet the requirements of the Convention.

2. The notification and the supporting documentation were made available to the Chemical Review Committee for its consideration in documents UNEP/FAO/RC/CRC.18/10 and UNEP/FAO/RC/CRC.18/INF/19. Information on trade was made available in document UNEP/FAO/RC/CRC.18/INF/6/Rev.1.

A. Scope of the regulatory action notified by Colombia

3. The regulatory action notified by Colombia relates to the use of methyl bromide (CAS No. 74-83-9) in the pesticide category as a soil fumigant, which includes fumigants for quarantine treatments (UNEP/FAO/RC/CRC.18/10, annex, sect. 2.3 of the Colombia notification).

4. Resolution 2152 of 1996 of the Ministry of Health and Social Protection of Colombia severely restricted methyl bromide and authorized the importation, commercialization and use of methyl bromide, only for quarantine treatment for the control of exotic pests in fresh plant tissues at the port and border crossing level, until a viable substitute is found that allows its replacement. Its application must be in airtight fumigation chambers and with a closed pesticide recovery system.

5. Amendments were made to article 1 of resolution 2152 in order to ensure a more controlled and restrictive use of methyl bromide by resolutions 00643 of 2004, 01800 of 2006, 03587 of 2008 and 5049 of 2008. The notification indicates that resolution 2152 of 1996 and resolution 5049 of 2008 are currently in force and that the final regulatory action for all restrictions is resolution 5049 of 2008 (applies from publication date)⁷ (UNEP/FAO/RC/CRC.18/10, annex, sect. 2.2 of the Colombia notification).

B. Annex II paragraph (a) criterion

(a) Confirm that the final regulatory action has been taken in order to protect human health or the environment;

6. The Committee confirms that the regulatory action was taken to protect human health and the environment (UNEP/FAO/RC/CRC.18/10, annex, sects. 2.4.1 and 2.4.2 of the Colombia notification).

7. The notification states that the final regulatory action was based on a risk or hazard evaluation. According to the provided information, methyl bromide is an irritating and vesicant gas, which is extremely toxic to humans and affects different organs and systems, with high potential risks of producing acute poisoning by inhalation and absorption through the skin and mucous membranes. Additionally, methyl bromide is an ozone-depleting substance listed under the Montreal Protocol. The reduction of emissions of methyl bromide is expected to lead to a reduction of the destruction of the ozone layer, which is expected to contribute to a reduction of skin cancer incidence.

8. The Committee therefore concludes that the criterion in paragraph (a) of Annex II is met.

C. Annex II paragraph (b) criteria

(b) Establish that the final regulatory action has been taken as a consequence of a risk evaluation. This evaluation shall be based on a review of scientific data in the context of the conditions prevailing in the Party in question. For this purpose, the documentation provided shall demonstrate that:

(i) Data have been generated according to scientifically recognized methods;

⁷ See https://www.icbf.gov.co/cargues/avance/docs/resolucion_minproteccion_5049_2008.htm (in Spanish).

(ii) *Data reviews have been performed and documented according to generally recognized scientific principles and procedures;*

9. The initial resolution 2152 of 1996 was supported by the analysis of the following documents, including national studies:

(a) Toxicological concept developed by the Ministry of Health and Social Protection of Colombia in 1993 (UNEP/FAO/RC/CRC.18/INF/19, annex, document 5);

(b) *Environmental Effects Panel Report*, November 1989 (UNEP/FAO/RC/CRC.18/INF/19, annex);

(c) *1994 report of the Technology and Economic Assessment Panel for the 1995 assessment of the Montreal Protocol on Substances that Deplete the Ozone Layer* (UNEP/FAO/RC/CRC.18/INF/19, annex, document 8);

(d) 2011 booklet on the use of methyl bromide in Colombia⁸ (UNEP/FAO/RC/CRC.18/INF/19, annex, document 9).

10. Taking into account the difficulties encountered in the handling of methyl bromide, the need to amend resolution 2152 of 1996 was identified. The inter-institutional working committee on the use of methyl bromide in Colombia was established and within its framework, studies on the safe use of methyl bromide and safer alternatives were continued and the notification also includes information on reviewed documents and conclusions of committee meetings (UNEP/FAO/RC/CRC.18/INF/19, annex, documents 10–16).

11. The risk evaluation took into account the assessments provided by the assessment panels of the Montreal Protocol in their reports of 1989 and 1994.

12. The data included in the notification and supporting documentation is considered to be scientifically sound and generated according to scientifically recognized methods, and data reviews are considered to have been performed and documented according to generally recognized scientific principles and procedures.

13. The Committee therefore confirms that the criteria in paragraph (b) (i) and (ii) of Annex II are met.

(iii) *The final regulatory action was based on a risk evaluation involving prevailing conditions within the Party taking the action;*

14. The notification notes that methyl bromide was included in the Montreal Protocol as an ozone-depleting substance under the Copenhagen Amendment. Methyl bromide was identified “as one of the most powerful depleters of atmospheric ozone and therefore indirectly favours the effects of solar radiation in the production of skin cancer (Scientific, Technical and Economic Review of the Methyl Bromide Technical Options Committee of the Montreal Protocol)”. This implies that, by reducing the use of methyl bromide in Colombia, there is a contribution to reducing emissions of an ozone-depleting substance and, indirectly, to reducing the risk of skin cancer due to increased solar radiation. This was also supported by the 1989 *Environmental Effects Panel Report*, which states that though “skin cancer will increase with any increase in UV-B radiation, the relationship between skin cancer and ozone decrease is not one to one. For every 1 per cent decrease of the total ozone will result in a 3 per cent increase in the incidence of melanoma or skin cancer” (UNEP/FAO/RC/CRC.18/10, annex, sect. 2.4.2.1 of the Colombia notification). It has also been identified that the incidence of cataracts and the severity of different infections increases since the immune system is suppressed due to radiation (UNEP/FAO/RC/CRC.18/INF/19, annex, document 7, pp. 11–24).

15. In the *1994 Report of the Technology and Economic Assessment Panel*, one of the sources of exposure to methyl bromide was its use in pre-sowing and post-harvest agricultural activities, fumigation in structures (such as containers and buildings) and in intermediate chemicals. Additionally, a predictive theoretical analysis identified that between 45 and 53 per cent of the amount used in agricultural activities could be released into the atmosphere. (UNEP/FAO/RC/CRC.18/INF/19, annex, document 8).

16. The quantities of methyl bromide used in Colombia in 1994 as a soil fumigant for different crops were reported (UNEP/FAO/RC/CRC.18/10, annex, sect. 2.4.2.1, table 3 of the Colombia notification). This use was identified as an important source of emissions into the environment based

⁸ This booklet was published after the regulations of 1996. However, the document is open to the public and presents the information from 1994 that was used for resolution 2152 of 1996.

on the assessment performed by the Technology and Economic Assessment Panel of the Montreal Protocol as published in its report of 1994 (UNEP/FAO/RC/CRC.18/INF/19, annex, document 8).

17. The notification and supporting documentation show that the risk evaluation has considered prevailing conditions in Colombia. Based on the quantities of methyl bromide used as soil fumigant in Colombia, emissions into the atmosphere were estimated taking into account the assessment undertaken under the Montreal Protocol.

18. The Committee therefore confirms that the criterion in paragraph (b) (iii) of Annex II is met.

19. Consequently, the Committee confirms that the criteria in paragraph (b) of Annex II are met.

D. Annex II paragraph (c) criteria

(c) *Consider whether the final regulatory action provides a sufficiently broad basis to merit listing of the chemical in Annex III, by taking into account:*

(i) *Whether the final regulatory action led, or would be expected to lead, to a significant decrease in the quantity of the chemical used or the number of its uses;*

20. The final regulatory action severely restricted the use of formulations containing methyl bromide (UNEP/FAO/RC/CRC.18/10, annex, sect. 2.3.3 of the Colombia notification). Consequently, it is expected that the regulatory action will lead to a significant decrease of the quantity of the chemical used.

21. In the supporting documentation, a booklet in Spanish on the analysis of the use of methyl bromide in Colombia includes a section which provides a historical perspective and alternatives for the replacement of methyl bromide, which presents a reduction of methyl bromide use in Colombia since 1996 (UNEP/FAO/RC/CRC.18/INF/19, annex, p. 17). Additionally, the final regulatory action severely restricted the use of formulations containing methyl bromide to be used as gaseous formulations of methyl bromide, and it is only allowed for quarantine treatment in the control of quarantine pests in agricultural products and packaging at ports and border crossings, until a viable substitute is found that allows their replacement. Use of airtight fumigation chambers is required (UNEP/FAO/RC/CRC.18/10, annex, sect. 2.3.3 of the Colombia notification). Also, the supporting documentation refers that Colombia has not been a producer of methyl bromide. Furthermore, the notification presents that no imports are registered from 2017 (UNEP/FAO/RC/CRC.18/10, annex, sect. 2.5.1 of the Colombia notification).

22. The notification provides information on quantities of the chemical imported in 2004 (12 metric tons) and 2005 (17.5 metric tons). (UNEP/FAO/RC/CRC.18/10, annex, sect. 2.5.1 of the Colombia notification and UNEP/FAO/RC/CRC.18/INF/19, annex, document 1, sect. 3.a of the executive summary).

23. The Committee therefore confirms that the criterion in paragraph (c) (i) is met.

(ii) *Whether the final regulatory action led to an actual reduction of risk or would be expected to result in a significant reduction of risk for human health or the environment of the Party that submitted the notification;*

24. The final regulatory action severely restricted the use of formulations containing methyl bromide. The remaining allowed uses are restricted to those in hermetic chambers that will minimize the release of the fumigant. Consequently, it is expected that the regulatory action will lead to a significant reduction of risk to human health by occupational exposure and indirect health effects, taking into account the reduction of emissions of ozone-depleting substances which increase solar radiation and in the long term may increase the risk of skin cancer. Also, risks to the environment are reduced through the reduction of emissions of this ozone-depleting substance (UNEP/FAO/RC/CRC.18/10, annex, sects. 2.4.2.1 and 2.4.2.2 of the Colombia notification).

25. The Committee confirms that the criterion in paragraph (c) (ii) is met.

(iii) *Whether the considerations that led to the final regulatory action being taken are applicable only in a limited geographical area or in other limited circumstances;*

26. The notification, which was based on 1996 and 2008 legislation in Colombia, stated that methyl bromide could be used in other countries, mainly in developing countries or countries with economies in transition (UNEP/FAO/RC/CRC.18/10, annex, sect. 2.5.2 of the Colombia notification).

27. Additional information on countries using methyl bromide for quarantine and pre-shipment purposes can be found in the *2018 Assessment Report of the Methyl Bromide Technical Options Committee* of the Montreal Protocol.⁹
28. The report mentions that 50 countries were still regularly using methyl bromide for quarantine and pre-shipment. Additionally, the report mentions that almost all structural and commodity treatments with methyl bromide are carried out for quarantine and pre-shipment purposes. Consequently, the use of methyl bromide for quarantine and pre-shipment is not limited to a geographical area and it is a major use for this pesticide in many countries. Further, the report mentions that worldwide many fumigations continue to be conducted in poorly sealed enclosures, leading to high rates of leakage and gas loss.
29. It can be expected that for similar reasons as those mentioned in the Colombian notification (minimization of emissions of a highly toxic and ozone-depleting gas), other countries still using methyl bromide for quarantine and pre-shipment purposes in poorly sealed enclosures should consider introducing regulations to replace methyl bromide and/or adopt technologies to capture the fumigant and minimize its emission.
30. The Committee therefore confirms that the criterion in paragraph (c) (iii) is met.
- (iv) *Whether there is evidence of ongoing international trade in the chemical;*
31. The Secretariat collected information on trade. The received information shows that there is evidence of ongoing trade (UNEP/FAO/RC/CRC.18/INF/6/Rev.1).
32. The Committee therefore confirms that the criterion in paragraph (c) (iv) is met.

E. Annex II paragraph (d) criterion

(d) *Take into account that intentional misuse is not in itself an adequate reason to list a chemical in Annex III.*

33. There is no indication in the notification concerning intentional misuse which prompted the regulatory action.
34. On the basis of the above point, the Committee confirms that the criterion in paragraph (d) of Annex II is met.

F. Conclusion

35. The Committee concludes that the notification of final regulatory action submitted by Colombia meets the criteria set out in Annex II to the Convention.

CRC-18/4: Paraquat

The Chemical Review Committee,

Recalling Article 5 of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade,

1. *Concludes* that the notifications of final regulatory action for paraquat submitted by Malaysia and Mozambique¹⁰ meet the criteria set out in Annex II to the Convention;
2. *Adopts* the rationale for the Committee's conclusion set out in the annex to the present decision;
3. *Recommends*, in accordance with paragraph 6 of Article 5 of the Convention, that the Conference of the Parties list paraquat in Annex III to the Convention as a pesticide;
4. *Decides*, in accordance with paragraph 1 of Article 7 of the Convention, to prepare a draft decision guidance document for paraquat;
5. *Also decides*, in accordance with the process for drafting decision guidance documents set out in decision RC-2/2 and amended by decision RC-6/3, that the composition of the intersessional drafting group to prepare the draft decision guidance document for paraquat and the workplan of the

⁹ Available at https://ozone.unep.org/sites/default/files/2019-04/MBTOC-assessment-report-2018_1.pdf.

¹⁰ See UNEP/FAO/RC/CRC.18/13.

group shall be as set out in annexes II and III, respectively, to the report of the Committee on the work of its eighteenth meeting.

Rationale for the conclusion by the Chemical Review Committee that the notifications of final regulatory action submitted by Malaysia and Mozambique in respect of paraquat in the pesticide category meet the criteria of Annex II to the Rotterdam Convention

36. The notifications on paraquat from Malaysia and Mozambique have been verified by the Secretariat as containing the information required by Annex I to the Rotterdam Convention. These notifications underwent a preliminary review by the Secretariat and the Bureau, which evaluated whether the notifications appeared to meet the requirements of the Convention.

37. The notifications and supporting documentation were made available to the Chemical Review Committee for its consideration in documents UNEP/FAO/RC/CRC.18/13, UNEP/FAO/RC/CRC.18/INF/28 and UNEP/FAO/RC/CRC.18/INF/29. Information on trade was made available in document UNEP/FAO/RC/CRC.18/INF/6/Rev.1.

I. Malaysia

A. Scope of the regulatory action notified by Malaysia

38. The notified regulatory action relates to paraquat (CAS No. 4685-14-7), paraquat dichloride (CAS No. 1910-42-5), paraquat bistribromide (CAS No. 27041-84-5) and paraquat bis (methyl sulfate) (CAS No. 2074-50-2), in the pesticide category.

39. The regulatory action is notified as a ban. Malaysia by this action prohibited all applications of paraquat as a pesticide product as well as its import and export. The ban was introduced by the official circular JP/KRP/207/12/656/2 Vol.6 (54) on 16 May 2014 and entered into force on 1 January 2020 (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.2 of the Malaysia notification and UNEP/FAO/RC/CRC.18/INF/28, annex, p. 16).

40. The ban on paraquat was introduced due to the highly toxic nature of paraquat, which has caused many incidences of poisoning and deaths of consumers (UNEP/FAO/RC/CRC.18/INF/28, annex, p. 20).

41. The notification was found to comply with the information requirements of Annex I to the Convention.

B. Annex II paragraph (a) criterion

(a) *Confirm that the final regulatory action has been taken in order to protect human health or the environment;*

42. Before the final regulatory action, paraquat was registered as a herbicide for various crops, including oil palm, rubber, pineapple stump and hill paddy (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.3.1 of the Malaysia notification). The pesticide formulations registered in Malaysia were Gramoxone 100, capayam, CS paraquat 13, Farmcare Paraquat 13, CH Paraquat P130, PP Paraquat 13, Agr Para 13 and WA Paraquat 130 (UNEP/FAO/RC/CRC.18/13, annex, sect. 1.3 of the Malaysia notification). According to the official circular JP/KRP/207/12/656/2 Vol.6 (54) of 16 May 2014, the ban was due to its highly toxic nature, which has caused many incidences of poisoning, sometimes leading to the death of users (UNEP/FAO/RC/CRC.18/INF/28, annex, p. 20). Paraquat is highly toxic if swallowed. Following ingestion of small amounts of the liquid concentrate, pulmonary oedema, cardiac failure, renal failure, liver failure and convulsions caused by central nervous system involvement can occur. Death from multiple organ failure may follow within hours or days. Furthermore, long-term and delayed health effects may occur, including Parkinson's disease, lung effects and skin cancer. There is no effective antidote for paraquat poisoning. Effects on humans indicate that spillage of concentrated poisons on the eyes can cause serious irritating effects. Exposure to the skin in turn can cause irritating effects and if this exposure is for a long period of time or chronic, skin cancer can occur. One of the long-term effects of exposure to paraquat over a long period of time is problems with nails, where the nails will come off or pull out. This situation is common among workers who carry out paraquat spray work on farms, if users do not practice safe use and

spraying. If spray mist is inhaled during use on the farm it can cause nasal bleeding (UNEP/FAO/RC/CRC.18/INF/28, p. 4). The regulatory action taken entered into force on 1 January 2020 (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.2.3 of the Malaysia notification).

43. The Committee concludes that the final regulatory action was taken in order to protect human health; accordingly, the criterion in paragraph (a) of Annex II is met.

C. Annex II paragraph (b) criteria

(b) *Establish that the final regulatory action has been taken as a consequence of a risk evaluation. This evaluation shall be based on a review of scientific data in the context of the conditions prevailing in the Party in question. For this purpose, the documentation provided shall demonstrate that:*

- (i) *Data have been generated according to scientifically recognized methods;*
- (ii) *Data reviews have been performed and documented according to generally recognized scientific principles and procedures;*
- (iii) *The final regulatory action was based on a risk evaluation involving prevailing conditions within the Party taking the action;*

44. The notification states that the final regulatory action was based on a risk evaluation to protect human health (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.1 of the Malaysia notification). The evaluation referenced the tasks allotted to the Pesticides Board to undertake the review of paraquat because of concerns over its potential risk to occupational health and safety and the environment. The scope of the review considered the assessment of risks for humans and the environment and socioeconomic impacts. (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.1 of the Malaysia notification). During the review period from 2002 to 2013, the Ministry of Agriculture and Agro-based Industry of Malaysia, through the Department of Agriculture and the Pesticides Board, reviewed and scrutinized many research information documents and publications related to paraquat from within and outside the country (UNEP/FAO/RC/CRC.18/INF/28, annex, p. 3).

45. The following topics were covered by the paraquat registration review:

- (a) Facts about paraquat;
- (b) Status of paraquat registration in Malaysia;
- (c) International status;
- (d) Assessment of paraquat poisoning cases in Malaysia;
- (e) Evaluation of cases of poisoning and suicide caused by paraquat at the international level;
- (f) Status of paraquat under the Rotterdam Convention;
- (g) Evaluation of alternative pesticides to paraquat;
- (h) Verification of the effectiveness of paraquat and alternative pesticides and demonstration;
- (i) Impact assessment on the agriculture sector;
- (j) Evaluation of the study by CABI/Roundtable on Sustainable Palm Oil;
- (k) Evaluation of paraquat study by the Malaysian Palm Oil Board;
- (l) Evaluation of the opinions of all stakeholders on paraquat.

46. In the supporting documentation, international risk evaluations are presented, including the 2003 evaluation report on paraquat dichloride of the Food and Agriculture Organization of the United Nations; the review report for the active substance paraquat by the European Commission (SANCO/10382/2002), which includes that knapsack and handheld use should be limited to trained/certified personnel where appropriate training and certification schemes are in operation; the 1991 World Health Organization (WHO) and International Programme on Chemical Safety "Paraquat: health and safety guide", which included that a face shield should be worn even when handling and using a diluted formulation; and the fact sheet from the 1997 reregistration eligibility decision of the Environmental Protection Agency of the United States of America, which states that personal protective equipment (PPE) requirements include a chemical resistant apron, face shield and gloves variously for mixers, loaders and sprayers. (UNEP/FAO/RC/CRC.18/INF/28, annex, p. 171).

47. The Pesticides Board classified paraquat under class Ib instead of class II (under the WHO Recommended Classification of Pesticides by Hazard) after taking into consideration that under local conditions paraquat cannot be used safely due to hot and humid weather, making wearing full protective equipment not always practical. In addition, pesticide poisoning cases reported yearly indicate that paraquat is the number one pesticide associated with poisoning incidences either due to suicide, accidental or occupational poisoning (UNEP/FAO/RC/CRC.18/INF/28, annex, p. 4). Supporting documentation further shows information related to cases of poisoning caused by chemicals, including pesticides, in Malaysia. The information is based on information from the Ministry of Health of cases of poisoning referred to government clinics and hospitals only. This means that the number of actual cases of poisoning is far greater if cases referred to private clinics and hospitals and unreported cases are taken into account. The pesticide involved in the most poisoning cases is paraquat, making up 45 per cent of cases (1,082 cases of poisoning) and involving at least 272 deaths. Analysis of poisoning data shows that the cause of paraquat poisoning is suicide, accidental drinking and occupational poisoning (UNEP/FAO/RC/CRC.18/INF/28, annex, p. 6).

48. At the international level, a report by the company Syngenta for the German national pesticides authority included that poisoning due to exposure through the skin is quite frequently reported and is mostly due to not wearing appropriate protective clothing and unsafe working methods such as inhaling spray mist or using leaky spray equipment. Among the effects reported was damage to nails and skin as a result of repeated exposure. The study also recommended that several measures be taken to prevent poisoning from occurring, such as specific preventive measures and training for users. Malaysia notes that these may need strict implementation and enforcement (UNEP/FAO/RC/CRC.18/INF/28, annex, p. 7).

49. The Malaysian Palm Oil Board, in collaboration with Universiti Sains Malaysia, Universiti Putra Malaysia and several other parties conducted a study on the implication of a paraquat ban in Malaysia. The secretariat of the Pesticides Board commented in the study that in “the operator exposure level study, the findings support the argument that the risk of paraquat exposure to consumers under local conditions is unacceptably high and it was recommended that the use of complete PPE (long sleeves, long pants, face masks, gloves, boots and hats) when handling paraquat products. However, the use of complete PPE is not always practical in hot and humid countries like Malaysia.” The secretariat of the Pesticides Board added that some users experienced signs of paraquat poisoning, especially when not using PPE. Low levels of paraquat were detected in urine and blood analysis studies in samples taken from several operators who frequently sprayed paraquat (UNEP/FAO/RC/CRC.18/INF/28, annex, p. 11).

50. Based on the outcome of the above report and wide consultation, the Pesticides Board concluded that the continued registration of paraquat in the country would contribute to the high number of incidences of pesticide poisoning, as paraquat has been constantly reported to be the number one pesticide associated with poisoning; paraquat cannot be applied and used safely without complete PPE to prevent exposure, which is not always feasible in a country like Malaysia with hot and humid conditions; paraquat is very highly hazardous to humans, is in WHO class Ib (highly hazardous) and has no antidote for treating cases of poisoning; paraquat has been identified by the Roundtable on Sustainable Palm Oil as one of the pesticides that cannot be used in oil palm cultivation as it is not compatible with sustainable palm oil cultivation and production. Final analysis shows that the risks of paraquat outweigh the benefits (UNEP/FAO/RC/CRC.18/INF/28, annex, p. 12).

51. According to the supporting documentation, Malaysia developed a risk evaluation in which they analysed international risk assessments and compared these with local conditions of use of paraquat and actual exposure. Specifically, Paraquat has been classified by the Pesticides Board under class Ib (highly hazardous) instead of class II, after taking into consideration that under local conditions paraquat cannot be used safely, due to hot and humid weather making wearing full PPE not always practical. This decision was supported by the analysis of the operator exposure level identified by the evaluation of paraquat conducted by the Malaysian Palm Oil Board. Furthermore, the Ministry of Health of Malaysia has confirmed actual exposure to the pesticide according to the cases of poisoning referred to government clinics and hospitals; poisoning data shows that the main cause of paraquat poisoning is suicide, followed by accidental drinking and occupational poisoning.

52. Summarizing the above, the final regulatory action was based on a health hazard evaluation of paraquat, the prevailing conditions of the use of pesticides in Malaysia (intended uses, application doses, methods, protective measures, agricultural practices, etc.), and a risk assessment with a particular focus on occupational risks.

53. Based on the above, the Committee concludes that the criteria in paragraph (b) (i), (ii) and (iii) of Annex II are met.

54. Therefore, the Committee concludes that the criteria in paragraph (b) of Annex II as a whole are met.

D. Annex II paragraph (c) criteria

(c) Consider whether the final regulatory action provides a sufficiently broad basis to merit listing of the chemical in Annex III, by taking into account:

(i) Whether the final regulatory action led, or would be expected to lead, to a significant decrease in the quantity of the chemical used or the number of its uses;

55. The final regulatory action is a ban on all imports and uses of paraquat to reduce poisoning cases amongst the public, users and bystanders (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.2.1 of the Malaysia notification). Malaysia reported that significant quantities of paraquat were exported and used in 2018 and 2019 (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.5.1 of the Malaysia notification).

56. The final regulatory action would be expected to lead to zero exposure as no quantity of paraquat could be used in the country. Therefore, a ban is considered as fulfilling the criterion in paragraph (c) (i).

57. Hence, the Committee concludes that the criterion in paragraph (c) (i) is met.

(ii) Whether the final regulatory action led to an actual reduction of risk or would be expected to result in a significant reduction of risk for human health or the environment of the Party that submitted the notification;

58. Since the final regulatory action bans the import and use of paraquat in Malaysia, it can be expected that this will reduce poisoning cases amongst the public, users and bystanders in Malaysia, which will represent a significant reduction of risk for human health.

59. Hence, the Committee concludes that the criterion in paragraph (c) (ii) is met.

(iii) Whether the considerations that led to the final regulatory action being taken are applicable only in a limited geographical area or in other limited circumstances;

60. The final regulatory action to ban all imports and uses of paraquat was taken to reduce poisoning cases amongst the public, users and bystanders (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.2.1 of the Malaysia notification). The same concerns are considered to be relevant for other regions as poisoning cases involving paraquat have been reported in various countries (UNEP/FAO/RC/CRC.18/INF/28, p. 7).

61. Therefore, the Committee concludes that the criterion in paragraph (c) (iii) is met.

(iv) Whether there is evidence of ongoing international trade in the chemical;

62. In response to the Secretariat request to provide information on ongoing international trade in candidate chemicals for the seventeenth meeting of the Chemical Review Committee, CropLife International and the Pesticide Action Network confirmed ongoing international trade in paraquat. The European Union, in response to the same request, provided proof of ongoing international trade in paraquat, through the data on the number of export notifications sent by the European Union and a number of importing countries that received or are expected to receive imports from the European Union (UNEP/FAO/RC/CRC.18/INF/6/Rev.1). Additionally, the Pesticide Action Network submitted a link to an online database with information on export notifications of paraquat processed by the European Union (<https://echa.europa.eu/information-on-chemicals/pic/export-notifications>).

63. Therefore, the Committee concludes that the criterion in paragraph (c) (iv) is met.

E. Annex II paragraph (d) criterion

(d) Take into account that intentional misuse is not in itself an adequate reason to list a chemical in Annex III.

64. The Pesticides Board was designated to undertake a review of paraquat because of concerns over its potential risk to occupational health and safety and to the environment. The scope of the review included an assessment of risk for human health and the environment and socioeconomic impacts (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.1 of the Malaysia notification). As additional information related to the chemical or the final regulatory action, Malaysia noted that paraquat is highly used for suicidal purposes according to the cases reported by the Ministry of Health. Although analysis of poisoning data shows that the main cause of paraquat poisoning is suicide, accidental drinking and occupational poisoning have also been reported (UNEP/FAO/RC/CRC.18/INF/28, p. 7)

and were taken into account by the Pesticides Board when adopting the decision to ban the use of paraquat.

65. Based on the above point, the Committee concludes that the criterion in paragraph (d) is met.

F. Conclusion

66. The Committee concludes that the notification of final regulatory action submitted by Malaysia fulfils all the information requirements of Annex I and the criteria set out in Annex II to the Convention.

II. Mozambique

A. Scope of the regulatory action notified by Mozambique

67. The regulatory action notified by Mozambique relates to paraquat (CAS No. 4685-14-7) in the pesticide category. The regulatory action is notified as a ban. Mozambique, by this action, banned the further import and use of paraquat in its territory. The ban was introduced by decision Nr 001/DNSA/2014 of the National Directorate of Agrarian Services. The ban of all formulations for all uses and the cancellation of the products containing paraquat in the country was decided due to the toxic nature and hazardous properties of this active substance, which, combined with the local conditions of use, can damage human and animal health and cause potential damage to the environment. The decision was taken as the last step of the project for risk reduction of highly hazardous pesticides. After consultations with different actors (public sector, private sector, civil society and others), the cancellation of registrations and consequent non-approval for their use in Mozambique was approved.

68. The notification was found to meet the information requirements of Annex I.

B. Annex II paragraph (a) criterion

(a) Confirm that the final regulatory action has been taken in order to protect human health or the environment;

69. Before the final regulatory action, paraquat was registered as a herbicide for various crops, including sugar cane, various vegetables and bananas (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.3.1 of the Mozambique notification). The pesticide formulations registered in Mozambique were Moz Paraquat 20 per cent soluble liquid (SL) (paraquat 200 g/l), Paracot 20 per cent SL (paraquat 200 g/l), Para-Cure 20 per cent SL (paraquat 200 g/l), Paraxone 20 per cent SL (paraquat 200 g/l), Gramozat 20 per cent SL (paraquat 200 g/l), Agroquat 200 SL (paraquat 200 g/l), Universal Skoffos 14.5 percent SL (Paraquat 145 g/l) and Volquato 20-SL (Paraquat 200 g/l) (UNEP/FAO/RC/CRC.18/13, annex, sect. 1.3 of the Mozambique notification and UNEP/FAO/RC/CRC.18/INF/29, annex, pp. 34–35).

70. According to the notification and supporting documentation, the final regulatory action was taken because of the toxic nature and hazardous properties of paraquat, which, combined with the local conditions of use, can damage human and animal health and cause potential damage to the environment (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.2.1 of the Mozambique notification).

71. The regulatory action entered into force on 31 December 2014 (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.2.3 of the Mozambique notification).

72. Therefore, the Committee concludes that the final regulatory action was taken in order to protect human health and the environment; accordingly, the criterion in paragraph (a) of Annex II is met.

C. Annex II paragraph (b) criteria

(b) Establish that the final regulatory action has been taken as a consequence of a risk evaluation. This evaluation shall be based on a review of scientific data in the context of the conditions prevailing in the Party in question. For this purpose, the documentation provided shall demonstrate that:

- (i) Data have been generated according to scientifically recognized methods;*
- (ii) Data reviews have been performed and documented according to generally recognized scientific principles and procedures;*

(iii) *The final regulatory action was based on a risk evaluation involving prevailing conditions within the Party taking the action;*

73. The notification states that the final regulatory action was based on a risk evaluation to protect human health and the environment (UNEP/FAO/RC/CRC.18/13, annex, sects. 2.4.1 and 2.4.2 of the Mozambique notification). The risk evaluation is referenced to project EP/MOZ/101/UEP, entitled “Reducing risks of highly hazardous pesticides (HHPs) in Mozambique”, initiated by the Government of Mozambique with the objective of reducing the greatest risks associated with pesticide use in the country. The ultimate goal was to develop and implement a highly hazardous pesticides risk reduction action plan for the most dangerous pesticides and use situations (UNEP/FAO/RC/CRC.18/INF/29).

74. The first phase of the project reviewed all pesticides registered in Mozambique. As a result, a shortlist of HHPs and pesticides “coming close” to HHPs was established. All pesticide formulations registered in Mozambique, including paraquat formulations, were classified using the formulations’ oral and dermal LD₅₀ values, as provided in the registration dossier. LD₅₀ values for the formulations were available or could be estimated for all registered pesticide products except for three microbial pesticides and one citronella oil (i.e., more than 99 per cent of the total) (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.2.1 of the Mozambique notification).

75. The notification states that according to the WHO classification, paraquat 200 g/l SL pesticide formulation was classified as class II but with a chronic toxicity alert and dermal hazard was identified as “close to” class Ib (Come and van der Valk, 2014)¹¹ (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.2.1 of the Mozambique notification). Additionally, the WHO classification notes that paraquat “has serious delayed effects if absorbed. It is of relatively low hazard in normal use but may be fatal if the concentrated product is taken by mouth or spread on the skin” (WHO, 2010). Specifically, the occupational hazard of paraquat is demonstrated by the very low acceptable operator exposure level defined in the Pesticides Properties DataBase¹² (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.2.1 of the Mozambique notification). Consequently, the paraquat 200 g/l SL pesticide formulation was placed on the list as “coming close to a highly hazardous pesticide”, based on the following criteria. For liquid formulations: pesticide products with an acute oral LD₅₀ of less than 200 mg/kg or an acute dermal LD₅₀ of less than 400 mg/kg (note that these are the class Ib limits in the previous 2005 version of the WHO classification).

76. In the second phase of the project, field surveys with farmers were carried out to assess actual use and exposure to pesticides under local conditions in Mozambique (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.2.1 of the Mozambique notification, UNEP/FAO/RC/CRC.18/INF/29, annex, p. 52). The survey results showed that 95 per cent of the farmers used pesticides, up to 14 times per growing season. The survey also showed that the use of pesticides, including HHPs and “coming close to highly hazardous pesticides” was likely to result in excessive exposure of farmers in Mozambique. Half of the farmers interviewed in the survey had not received any training in using agrochemicals, and those who had often lacked a good understanding of the risks involved. Almost half of the farmers declared that they did not read pesticide labels, including instructions such as proper dosage and protective measures, the main reason being illiteracy. A third of the farmers were storing pesticides inside their houses. Approximately half of the farmers surveyed reported that they had noticed deposits of pesticides on their clothes, bare skin or eyes when using pesticides, and a range of acute poisoning symptoms were reported but not linked to a particular pesticide. Almost none of the farmers (93 per cent) owned or wore adequate PPE (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.2.1 of the Mozambique notification). The notification concludes that enforcing risk mitigation measures depending solely on wearing the appropriate PPE under the local conditions of use would be difficult and unlikely to give results.

77. In the third step of the project, stakeholders were consulted to further discuss the use and risks of HHPs in Mozambique and fine-tune the shortlist based on the survey results and the expertise of the stakeholders (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.2.1 of the Mozambique notification).

78. In the fourth step of the project, the risk of occupational exposure was assessed in further detail for a subset of the shortlisted pesticides. The subset included nine pesticides, including paraquat, in seven different cropping systems and using 13 application scenarios, each with and without PPE (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.2.1 of the Mozambique notification). Exposure of operators was estimated and then compared to a toxicologically acceptable level.

¹¹ A.M. Come and H. van der Valk, “Reducing risks of highly hazardous pesticides in Mozambique: step 1 – shortlisting highly hazardous pesticides”, consultancy report undertaken under project EP/MOZ/101/UEP (2014).

¹² Available at <https://sitem.herts.ac.uk/aeru/ppdb/en/Reports/505.htm>.

79. The exposure assessment used the registered dose rates and other application parameters for each pesticide based on farming conditions in Mozambique, including application with backpack sprayers (used in vegetables, tobacco, cereals and several other crops), handheld rotary atomizers (used in cotton) and tractor-mounted sprayers. In addition, the exposure of pesticide applicators wearing full PPE realistically available in Mozambique was compared to the exposure of applicators wearing shorts and a T-shirt, as is often the case for smallholder farmers (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.2.1 of the Mozambique notification).

80. The toxicologically acceptable level of exposure applied in this study was the acceptable operator exposure level, which is defined as the maximum amount of active substance to which the operator may be exposed without any adverse health effects (European Commission, 2006).¹³ The cropping systems that were evaluated are those for which the pesticides were registered. In some cases, crops were grouped when the exposure to the pesticide was likely to be similar, based on the height of the crop and the application method (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.2.1 of the Mozambique notification).

81. The volume application rates used in the model were generally those recommended on the label of the registered pesticide in Mozambique. If a volume application rate was not indicated on the label, 200 litres of pesticide mixture per ha was used as a default for emulsifiable concentrate (EC) or soluble concentrate (SC) formulations applied with hydraulic nozzles or by air-assisted sprayers (high volume application). In the case of cotton applications, a scenario where 10 litres of mixture per ha was applied using rotary atomizers (low-volume application) was also evaluated. The dose rates used in the models were the highest rates recommended on the labels of the registered pesticide. In some cases where a wide range of dose rates was recommended, the lowest dose rate was also evaluated (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.2.1 of the Mozambique notification).

82. The risk of occupational exposure to pesticides was assessed, in particular when spraying the products. The risk of worker exposure in situations other than the application of the pesticide (e.g., during harvesting) or by a bystander was not evaluated. For the occupational risk assessment, an estimate of operator exposure was made, which was then compared to a toxicologically acceptable level, where workers' exposure to pesticides was estimated using occupational exposure models that are often applied in the European Union: the so-called "German model" and the predictive operator exposure model of the United Kingdom of Great Britain and Northern Ireland (UK-POEM) (Hamey and others, 2008;¹⁴ European Food Safety Authority, 2010)¹⁵ (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.2.1 of the Mozambique notification).

83. The models are different in their exposure calculations and also include different exposure scenarios. Therefore, both models are often used in parallel in the EU when assessing occupational exposure. The models' exposure scenarios and application parameters were based on Mozambican pesticides application conditions (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.2.1 of the Mozambique notification).

84. The risk for the pesticide operator has been expressed as a risk quotient, which is the ratio between the estimated exposure of the operator to the pesticide (in mg a.i./kg bw/day) and the acceptable operator exposure level (in mg a.i./kg bw/day). A risk quotient of more than 1 implies that the risk is not acceptable; a risk quotient of less than 1 implies an acceptable risk. Risk quotients are given for the scenario when no PPE is worn during both mixing and spraying (worst case situation) and for the scenario with full PPE during both mixing and spraying (best-practice situation). Crops were grouped together as crop structure, and the application scenarios were considered similar (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.4.2.1 of the Mozambique notification).

85. The occupational risk assessments that were conducted showed that acceptable operator exposure levels were greatly exceeded for all crops and all pesticide application scenarios, irrespective of the application rate or use of PPE. This indicates that the application of paraquat likely poses a high risk under Mozambican conditions. Given the large risk quotient, it is unlikely that locally feasible mitigation measures would reduce the risk of paraquat to acceptable levels.

¹³ European Commission, "Draft guidance for the setting and application of acceptable operator exposure levels (AOELs)", SANCO 7531 – rev. 10 (Brussels, 2006).

¹⁴ P. Hamey and others, "Project to assess current approaches and knowledge with a view to develop a Guidance Document for pesticide exposure assessment for workers, operators, bystanders and residents: final report", European Food and Safety Authority Nr EFSA/PPR/2007/01 (Brussels, 2008).

¹⁵ European Food and Safety Authority, "Scientific opinion on preparation of a guidance document on pesticide exposure assessment for workers, operators, bystanders and residents" (Parma, Italy, 2010).

86. Summarizing the above, the final regulatory action was based on a health hazard evaluation of paraquat, the prevailing conditions of use of pesticides in Mozambique (intended uses, application doses, methods, protective measures, agricultural practices, etc.) and a risk assessment with a particular focus on occupational risks.

87. The Committee therefore confirms that the criteria in paragraph (b) (i), (ii) and (iii) of Annex II are met.

88. Therefore, the Committee concludes that the criteria in paragraph (b) of Annex II as a whole are met.

D. Annex II paragraph (c) criteria

(c) Consider whether the final regulatory action provides a sufficiently broad basis to merit listing of the chemical in Annex III, by taking into account:

(i) Whether the final regulatory action led, or would be expected to lead, to a significant decrease in the quantity of the chemical used or the number of its uses;

89. The final regulatory action bans all imports and uses of paraquat in Mozambique. In addition, the quantities of paraquat imported to Mozambique before the ban (i.e., between 2003 and 2013) were significant (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.5.1 of the Mozambique notification).

90. Therefore, the final regulatory action would be expected to lead to zero exposure as no quantity of paraquat could be used in the country. Therefore, a ban is considered as meeting the criterion in paragraph (c) (i).

91. Hence, the Committee concludes that the criterion in paragraph (c) (i) is met.

(ii) Whether the final regulatory action led to an actual reduction of risk or would be expected to result in a significant reduction of risk for human health or the environment of the Party that submitted the notification;

92. Since the final regulatory action bans the use of paraquat in Mozambique, it can be expected that the action will result in a significant reduction of risks for human health caused by the use of paraquat.

93. Hence, the Committee concludes that the criterion in paragraph (c) (ii) is met.

(iii) Whether the considerations that led to the final regulatory action being taken are applicable only in a limited geographical area or in other limited circumstances;

94. The human health concerns related to the use of paraquat are likely to be encountered in other countries with similar conditions, including where farmers use pesticides without the necessary PPE. Consequently, as also stated in the notification (UNEP/FAO/RC/CRC.18/13, annex, sect. 2.5.2 of the Mozambique notification), countries with similar conditions could apply the same considerations and make a similar decision to protect human health.

95. Therefore, the Committee concludes that the criterion in paragraph (c) (iii) is met.

(iv) Whether there is evidence of ongoing international trade in the chemical;

96. In response to the Secretariat request to provide information on ongoing international trade in candidate chemicals for the seventeenth meeting of the Chemical Review Committee, CropLife International and the Pesticide Action Network confirmed ongoing international trade in paraquat. The European Union, in response to the same request, provided proof of ongoing international trade in paraquat, through the data on the number of export notifications sent by the European Union and the number of importing countries that received or are expected to receive imports from the European Union (UNEP/FAO/RC/CRC.18/INF/6/Rev.1). Additionally, the Pesticide Action Network submitted a link to an online database with information on export notifications of paraquat processed by the European Union (<https://echa.europa.eu/information-on-chemicals/pic/export-notifications>).

97. Therefore, the Committee concludes that the criterion in paragraph (c) (iv) is met.

E. Annex II paragraph (d) criterion

(d) Take into account that intentional misuse is not in itself an adequate reason to list a chemical in Annex III.

98. There is no indication in the notification or supporting documentation that intentional misuse of paraquat prompted the regulatory action.

99. Based on the above point, the Committee concludes that the criterion in paragraph (d) of Annex II is met.

F. Conclusion

100. The Committee concludes that the notification of final regulatory action by Mozambique meets the criteria set out in Annex II to the Convention.

III. Conclusion

101. The Committee concludes that the notifications of final regulatory action submitted by Malaysia and Mozambique fulfil all the information requirements of Annex I and the criteria set out in Annex II to the Convention.

CRC-18/5: Chlorfenvinphos

The Chemical Review Committee,

Recalling Article 5 of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade,

1. *Concludes* that the notification of final regulatory action for chlorfenvinphos submitted by Norway¹⁶ meets the criteria set out in Annex II to the Convention;
2. *Adopts* the rationale for the Committee's conclusion set out in the annex to the present decision;
3. *Notes* that, as only a notification of final regulatory action from one prior informed consent region in respect of chlorfenvinphos meets the criteria set out in Annex II to the Convention, it will take no further action on the chemical at present.

Annex to decision CRC-18/5

Rationale for the conclusion by the Chemical Review Committee that the notification of final regulatory action submitted by Norway in respect of chlorfenvinphos in the pesticide category meets the criteria of Annex II to the Rotterdam Convention

1. The notification on chlorfenvinphos from Norway has been verified by the Secretariat as containing the information required by Annex I to the Rotterdam Convention. The notification underwent a preliminary review by the Secretariat and the Bureau, which evaluated whether the notification appeared to meet the requirements of the Convention.
2. The notification and supporting documentation were made available to the Chemical Review Committee for its consideration in documents UNEP/FAO/RC/CRC.18/8 and UNEP/FAO/RC/CRC.18/INF/16. Information on trade was made available in document UNEP/FAO/RC/CRC.18/INF/6/Rev.1.

A. Scope of the regulatory action notified by Norway

3. The regulatory action notified by Norway relates to chlorfenvinphos (CAS No. 470-90-6) as a pesticide. Prior to the final regulatory action entering into force, chlorfenvinphos was used as a pesticide on cultivated land under planting or after sowing against larvae living on the roots of swedes, turnips, celery root and coles and mustards, except celery cabbage, as well as for production of vegetable seedlings in greenhouses and seed disinfectants.
4. Norway severely restricted the use of chlorfenvinphos, with the only allowed use being the production of vegetable seedlings in greenhouses and seed disinfection (Decree of the Norwegian Agricultural Inspection Services of 2000; entry into force of the final regulatory action on 1 January 2003). As at 1 June 2015, plant protection products in Norway are regulated by the Norwegian

¹⁶ See UNEP/FAO/RC/CRC.18/8.

regulation implementing the European Union regulation (EC) No. 1107/2009 with specific transitional measures for Norway. Chlorfenvinphos is no longer approved in the European Union.

B. Annex II paragraph (a) criterion

(a) *Confirm that the final regulatory action has been taken in order to protect human health or the environment;*

5. The Committee confirms that the final regulatory action was taken to protect the environment.
6. According to the notification, chlorfenvinphos was severely restricted due to its high persistence and high toxicity in terrestrial and aquatic environment. Concentration measured in the environment had shown considerable effects in laboratory animals.
7. The Committee therefore concludes that the final regulatory action was taken in order to protect the environment and that the criterion in paragraph (a) of Annex II is met.

C. Annex II paragraph (b) criteria

(b) *Establish that the final regulatory action has been taken as a consequence of a risk evaluation. This evaluation shall be based on a review of scientific data in the context of the conditions prevailing in the Party in question. For this purpose, the documentation provided shall demonstrate that:*

- (i) *Data have been generated according to scientifically recognized methods;*
 - (ii) *Data reviews have been performed and documented according to generally recognized scientific principles and procedures;*
8. In the notification, a summary of the effects on laboratory organisms and a brief summary on the environmental risk evaluation have been provided. The summary includes the key findings and a summary with relevant figures (predicted and measured environmental concentrations and estimated risks) of the risk evaluation.
 9. In the supporting documentation, the recommendations of the Board of Pesticides and the holistic evaluation (risk evaluation) of the Norwegian Agricultural Inspection of Birlane Granulat (chlorfenvinphos) have been provided.
 10. The Committee confirms that the criteria in paragraph (b) (i) and (ii) of Annex II are met.
 - (iii) *The final regulatory action was based on a risk evaluation involving prevailing conditions within the Party taking the action;*
 11. The notification indicates that the final regulatory action is based on a risk evaluation relevant to the environment.
 12. The evaluation took into account toxicology, environmental fate and behaviour, ecotoxicology, residues and availability of alternatives. Through the agricultural and environmental monitoring programme of pesticides in Norway (JOVÅ), chlorfenvinphos was found on several occasions in 1997, 1998 and 1999. The active substance was detected at maximum concentrations of 0.22, 0.20 and 0.37 µg/l in January, February and April 1998, respectively.
 13. Chlorfenvinphos was found to be moderately persistent in Norwegian soils and may be expected to accumulate. It also showed high toxicity to terrestrial organisms and extremely acute toxicity to aquatic organisms such as daphnia, fish, algae and aquatic plants.
 14. The review concluded that Birlane Granulat containing chlorfenvinphos has high persistence and high toxicity in terrestrial and aquatic environments. In addition, environmentally relevant concentrations had also shown considerable effects in laboratory animals.
 15. Norway also provided a summary with relevant figures on their risk evaluation. In their exposure assessment for the product Birlane Granulat, a maximum predicted environmental concentration for surface water (PEC_{sw}) of 12.5 µg/L was calculated. The exposure concentration was estimated by assuming that 0.1 per cent of the total dose was distributed to the surface water through run-off. By comparing the PEC with the lowest EC₅₀ for daphnia, a toxicity exposure ratio (TER) of 0.2 was obtained (trigger = 100). Furthermore, a PEC in soil of 35.75 mg/kg was estimated. This concentration is higher than the concentration which gave 100 per cent mortality in a laboratory study with spring tails. Thus, a high and unacceptable acute risk (TER = 0.02) to soil living organisms was identified with the proposed use pattern.

16. The Committee confirms that the criterion in paragraph (b) (iii) of Annex II is met.
17. The Committee therefore concludes that the criteria in paragraph (b) of Annex II are met.

D. Annex II paragraph (c) criteria

(c) *Consider whether the final regulatory action provides a sufficiently broad basis to merit listing of the chemical in Annex III, by taking into account:*

(i) *Whether the final regulatory action led, or would be expected to lead, to a significant decrease in the quantity of the chemical used or the number of its uses;*

18. The final regulatory action severely restricted the use of formulations containing chlorfenvinphos. Consequently, it is expected that the regulatory action will lead to a significant reduction of the quantity of the chemical used and the number of its uses.

19. The Committee therefore confirms that the criterion in paragraph (c) (i) is met.

(ii) *Whether the final regulatory action led to an actual reduction of risk or would be expected to result in a significant reduction of risk for human health or the environment of the Party that submitted the notification;*

20. The final regulatory action severely restricted the use of formulations containing chlorfenvinphos. Consequently, it is expected that the regulatory action will lead to a significant reduction of risk to the environment.

21. The Committee therefore confirms that the criterion in paragraph (c) (ii) is met.

(iii) *Whether the considerations that led to the final regulatory action being taken are applicable only in a limited geographical area or in other limited circumstances;*

22. The supporting document states that similar conditions of environmental exposure, such as contamination of surface water and exposure of terrestrial and aquatic organisms, are likely to occur also in other states and regions.

23. The Committee therefore confirms that the criterion in paragraph (c) (iii) is met.

(iv) *Whether there is evidence of ongoing international trade in the chemical;*

24. The notification and the supporting documentation give information on quantities of chemicals imported from 1994 to 2002. The Secretariat collected information on international trade. The received information shows that there is evidence of ongoing trade (UNEP/FAO/RC/CRC.18/INF/6/Rev.1).

25. The Committee therefore confirms that the criterion in paragraph (c) (iv) is met.

E. Annex II paragraph (d) criterion

(d) *Take into account that intentional misuse is not in itself an adequate reason to list a chemical in Annex III.*

26. There is no indication in the notification that intentional misuse prompted the regulatory action.

27. On the basis of the above point, the Committee confirms that the criterion in paragraph (d) of Annex II is met.

F. Conclusion

28. The Committee concludes that the notification of final regulatory action by Norway meets the criteria set out in Annex II to the Convention.

Annex II

Composition of the intersessional drafting groups

Drafting group on methyl bromide

- Chair: Mr. Jonah Ormond (Antigua and Barbuda)
- Drafter: Ms. Sarah Maillefer (Switzerland)
- Members: Ms. Anahit Aleksandryan (Armenia)
- Ms. Mirijam Seng (Belgium)
- Mr. Christian Bart (Canada)
- Mr. Li Cangmin (China)
- Mr. Carles Escriva (Germany)
- Mr. Joseph Cantamanto Edmund (Ghana)
- Mr. Suresh Lochan Amichand (Guyana)
- Mr. Dinesh Runiwal (India)
- Ms. Yenny Meliana (Indonesia)
- Ms. Judite Dipane (Lativa)
- Mr. Shankar Prasad Paudel (Nepal)
- Mr. Charles Bodar (Netherlands)
- Ms. Aïta Sarr Seck (Senegal)
- Mr. Sumith Jayakody Arachchige (Sri Lanka)
- Ms. Victorine Pinas (Suriname)
- Mr. Youssef Zidi (Tunisia)
- Mr. Daniel William Ndiyo (United Republic of Tanzania)
- Mr. Clourence Matewe (Zimbabwe)

Drafting group on paraquat

- Chair: Mr. Juergen Helbig (Austria)
- Drafter: Ms. Suzana Stefanovic (Serbia)
- Members: Ms. Qinghong Pu (Australia)
- Ms. Mirijam Seng (Belgium)
- Mr. Christian Bart (Canada)
- Ms. Li Cangmin (China)
- Mr. Carles Escriva (Germany)
- Mr. Joseph Cantamanto Edmund (Ghana)
- Mr. Carlos Enrique Acevedo González (Guatemala)
- Mr. Suresh Lochan Amichand (Guyana)
- Mr. Dinesh Runiwal (India)
- Mr. Hassan Azhar (Maldives)
- Ms. Saida Ech-chayeb (Morocco)
- Mr. Shankar Prasad Paudel (Nepal)
- Mr. Charles Bodar (Netherlands)
- Mr. Sumith Jayakody Arachchige (Sri Lanka)
- Ms. Victorine Pinas (Suriname)
- Ms. Palarp Sinhaseni (Thailand)
- Mr. Hasmath Ali (Trinidad and Tobago)
- Mr. Daniel William Ndiyo (United Republic of Tanzania)
- Mr. Clorence Matewe (Zimbabwe)

Annex III

Workplan for the preparation of draft decision guidance documents

<i>Tasks to be carried out</i>	<i>Responsible persons</i>	<i>Deadlines</i>
Draft an internal proposal based on the information available to the Committee	Chair Drafter	9 December 2022
Send the draft internal proposal to the drafting group members for comments via email	Secretariat	9 December 2022
Replies	Drafting group members	16 January 2023
Update the internal proposal on the basis of comments from drafting group members	Chair Drafter	16 February 2023
Send the updated internal proposal to the Committee members and observers for comments via email	Secretariat	16 February 2023
Replies	Committee members and observers	16 March 2023
Draft a decision guidance document on the basis of the comments of the Committee members and observers	Chair Drafter	10 April 2023
Send the draft decision guidance document to the drafting group members for comments via email	Secretariat	10 April 2023
Replies	Drafting group members	24 April 2023
Finalize the draft decision guidance document on the basis of the comments of the drafting group members	Chair Drafter	18 May 2023
Send the draft decision guidance document to the Secretariat	Chair Drafter	18 May 2023
Submit the draft decision guidance document for consideration by the Committee at its nineteenth meeting	Secretariat	21 August 2023