

**Stockholm Convention
on Persistent Organic
Pollutants**

Persistent Organic Pollutants Review Committee
Tenth meeting
Rome, 27–30 October 2014

**Report of the Persistent Organic Pollutants Review Committee
on the work of its tenth meeting****I. Opening of the meeting**

1. The tenth meeting of the Persistent Organic Pollutants Review Committee was held at the headquarters of the Food and Agriculture Organization of the United Nations, Viale delle Terme di Caracalla, Rome, from 27 to 30 October 2014. Ms. Estefania Moreira (Brazil), Chair of the Committee, declared the meeting open at 9.30 a.m. on Monday, 27 October 2014, welcoming the members of the Committee, observers and invited experts.
2. Mr. David Ogden, Chief, Conventions Operations Branch of the Secretariat of the Basel Convention on the Transboundary Movements of Hazardous Wastes and Their Disposal, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and the Stockholm Convention on Persistent Organic Pollutants, added his welcome, highlighting the effectiveness of the Committee over the course of its nine previous meetings and its important role in the implementation of the Convention. He then read a statement by Mr. Rolph Payet, recently appointed Executive Secretary of the Basel, Rotterdam and Stockholm conventions Secretariat.
3. In his statement, Mr. Payet said that it was a very exciting time for the chemicals and waste agenda, as evidenced by the adoption of the outcome document “The Future We Want” at the United Nations Conference on Sustainable Development (Rio+20), which had reaffirmed the target set at the World Summit on Sustainable Development to ensure, by 2020, that chemicals and wastes were managed throughout their life cycle in ways that minimized significant adverse impacts on human health and the environment.
4. It was clear that the theme of “sustainable synergies”, adopted at the meetings of the three conferences of the parties in 2013, was embedded in the work of the three conventions, although more efforts were required at the national and regional levels to implement them on the ground. The theme of the 2015 meetings, “From science to action, working for a safer tomorrow”, highlighted the importance of the science-policy interface for the effectiveness of the conventions at the country level. Consistent with the theme, the Secretariat was organizing a science fair to be held during the 2015 meetings, with the aim of increasing awareness and understanding of the underlying scientific processes supporting decision-making under the three conventions.
5. Before moving to the adoption of the agenda, the Chair too commented on the synergies between the Persistent Organic Pollutants Review Committee and the Chemical Review Committee, noting that she had met with Mr. Jürgen Helbig (Spain), Chair of the Chemical Review Committee, on the outcomes of the tenth meeting of that Committee and the possible outcomes of the current meeting and that Mr. Helbig had stressed the value to the Chemical Review Committee of the work that the Persistent Organic Pollutants Review Committee had previously done on polychlorinated naphthalenes.

II. Organizational matters

A. Adoption of the agenda

6. The Committee adopted the agenda set out below on the basis of the provisional agenda (UNEP/POPS/POPRC.10/1):

1. Opening of the meeting.
2. Organizational matters:
 - (a) Adoption of the agenda;
 - (b) Organization of work.
3. Rotation of the membership.
4. Technical work:
 - (a) Consideration of a draft risk management evaluation on pentachlorophenol and its salts and esters;
 - (b) Consideration of a draft risk profile on decabromodiphenyl ether (commercial mixture, c-decaBDE);
 - (c) Consideration of a proposal for the inclusion of dicofol in Annexes A, B and/or C to the Convention;
 - (d) Process for the evaluation of perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride pursuant to paragraphs 5 and 6 of part III of Annex B to the Stockholm Convention on Persistent Organic Pollutants;
 - (e) Guidance on alternatives to perfluorooctane sulfonic acid, its salts, perfluorooctane sulfonyl fluoride and their related chemicals.
5. Coordination and collaboration with other scientific subsidiary bodies.
6. Report on activities for effective participation in the work of the Committee.
7. Workplan for the intersessional period between the tenth and eleventh meetings of the Committee.
8. Venue and date of the eleventh meeting of the Committee.
9. Other matters.
10. Adoption of the report.
11. Closure of the meeting.

7. The Committee decided that under item 9, "Other matters", the Secretariat would provide information on the science fair to be organized during the May 2015 meetings of the conferences of the parties to the Basel, Rotterdam and Stockholm conventions. The Committee also agreed to consider suggestions for improving the quality of information contained in risk management evaluations and risk profiles under item 9.

B. Organization of work

8. The Committee agreed to conduct the meeting in accordance with the scenario note prepared by the Chair (UNEP/POPS/POPRC.10/INF/1) and the proposed schedule set out in document UNEP/POPS/POPRC.10/INF/2, subject to adjustment as necessary. The Committee also agreed to conduct its work in plenary session and to establish contact, drafting and "friends of the Chair" groups as necessary. In considering the matters on its agenda the Committee had before it the documents in the annotations to the agenda (UNEP/POPS/POPRC.10/1/Add.1) and the list of pre-session documents by agenda item (UNEP/POPS/POPRC.10/INF/17).

9. Following agreement on the organization of work the representative of the Secretariat provided information on the outcome of the tenth meeting of the Chemical Review Committee, which had been held back to back with the current meeting from 22 to 24 October 2014.

C. Attendance

10. The meeting was attended by the following 29 Committee members: Mr. Jack Holland (Australia), Ms. Ingrid Hauzenberger (Austria), Ms. Tamara Kukharchyk (Belarus), Ms. Estefania Moreira (Brazil), Mr. Joswa Aoudou (Cameroon), Ms. Michelle Kivi (Canada), Mr. Jorge Álvarez Álvarez (Cuba), Mr. Pavel Čupr (Czech Republic), Ms. Consuelo Meneses (Ecuador), Mr. Sylvain Bintein (France), Mr. Hubert Binga (Gabon), Mr. Agus Haryono (Indonesia), Mr. Seyed Jamaledin Shahtaheri (Islamic Republic of Iran), Ms. Caroline Wamai (Kenya), Mr. Abdul Nabi Abdullah Al-Ghadban (Kuwait), Ms. Mantoa Sekota (Lesotho), Ms. Haritiana Rakotoarisetra (Madagascar), Mr. Sidi Ould Aloueimine (Mauritania), Mr. Martien Janssen (Netherlands), Ms. Liselott Säll (Norway), Mr. Said Ali Issa Al Zadjali (Oman), Mr. Zaigham Abbas (Pakistan), Ms. Kyunghye Choi (Republic of Korea), Mr. Marcus Richards (Saint Vincent and the Grenadines), Mr. Ousmane Sow (Senegal), Mr. Jayakody Sumith (Sri Lanka), Mr. Azhari Abdelbagi (Sudan), Ms. Maria Delvin (Sweden) and Mr. Armando Diaz Cortés (Bolivarian Republic of Venezuela).
11. The members of the Committee from India and the former Yugoslav Republic of Macedonia were unable to attend.
12. Mr. Reiner Arndt, former Chair of the Committee, and Ms. Heather Stapleton, Duke University, attended the meeting as invited experts.
13. The meeting was attended by representatives of the following countries as observers: Brazil, Canada, China, Denmark, Finland, France, Germany, India, Indonesia, Iraq, Japan, Kenya, Latvia, New Zealand, Norway, Poland, Russian Federation, Slovakia, South Africa, Sweden, Switzerland, United States of America and Zimbabwe. The European Union was also represented as an observer.
14. The following intergovernmental organization was represented as an observer: Comité Inter-états des pesticides d'Afrique Centrale (Central Africa Interstate Pesticides Committee).
15. Non-governmental organizations were also represented as observers. The names of those organizations are included in the list of participants (UNEP/POPS/POPRC.10/INF/20).

III. Rotation of the membership

16. Introducing the item, the representative of the Secretariat drew attention to the information provided in document UNEP/POPS/POPRC.10/INF/3, on newly designated members of the Persistent Organic Pollutants Review Committee and the forthcoming rotation of the membership in May 2016, noting that 17 experts nominated by the parties listed in the annex to decision SC-6/14 had begun four-year terms as members of the Committee on 5 May 2014, subject to confirmation by the Conference of the Parties at its seventh meeting. The terms of office of the remaining 14 members of the Committee would expire on 4 May 2016. The Conference of the Parties at its seventh meeting would decide which parties would nominate 14 new members to serve from 5 May 2016 to 4 May 2020.
17. In addition, the Committee at its ninth meeting had selected Ms. Moreira as its new Chair, subject to confirmation by the Conference of the Parties at its seventh meeting, to replace outgoing Chair Mr. Reiner Arndt. The Committee had also selected Mr. Abdelbagi to serve as Vice-Chair and Rapporteur in lieu of Ms. Choi, who had decided to step down from those offices but would continue to serve as a member of the Committee.
18. The Committee took note of the information presented.

IV. Technical work

A. Consideration of a draft risk management evaluation on pentachlorophenol and its salts and esters

19. In considering the sub-item, the Committee had before it a draft risk management evaluation for pentachlorophenol and its salts and esters (UNEP/POPS/POPRC.10/2) and comments and responses relating to it (UNEP/POPS/POPRC.10/INF/4).
20. Ms. Choi, the chair of the intersessional working group on pentachlorophenol and its salts and esters, gave a presentation on the draft risk management evaluation.
21. In the ensuing discussion, members thanked the working group for its hard work, noting the high quality of the document. There appeared to be general agreement that the chemical should be listed under the Convention, with the discussion focusing on which annex it should be listed in.

22. Several members suggested that pentachlorophenol and its salts and esters should be listed in Annex A, saying that only two countries used it, that it was only used as a wood preservative for utility poles and that alternatives were available. One member, however, expressed strong reservations regarding Annex A listing, arguing that Annex B would allow for critical uses in accordance with strict control measures while eliminating all other current or future sources of the chemicals. She contended that the information in the risk management evaluation did not clearly establish the environmental and health benefits of switching to alternatives and that switching to chemical and non-chemical alternatives was not always feasible. Two members responded to the latter assertion by reporting that their countries had had success with alternatives under conditions comparable to those in the other member's country. Another member said that while there were sufficient alternatives to support an outright ban, it would be useful to discuss the circumstances that, according to some, required the continued use of pentachlorophenol and its salts and esters by some countries.

23. Some members said that the chemical should not be listed in Annex C, noting that there was no information on unintentional production of pentachlorophenol and its salts and esters in the draft risk management evaluation. One member, however, suggested that additional discussion of listing in Annex C might nevertheless be valuable. He also said that products treated with the chemical should be labelled to avoid their export at the end of their life cycles and to enable consumers to avoid using them inadvertently as recycled materials. He also called for the chemical to be listed in Annex C, saying that in developing countries and countries with economies in transition treated wood was often burned when no longer needed, causing the release of chemicals.

24. Responding to questions from members, a member of the intersessional working group said that the information in the presentation had been submitted by parties to the Convention and observers, including observers from industry, and was considered by the group to be fairly comprehensive. That information indicated that pentachlorophenol and its salts and esters were only used for wood preservation.

25. Many representatives of observers made statements. Most supported listing in Annex B, although one said that there was insufficient scientific evidence to justify listing in any annex at the current time, and another called for immediate listing in Annexes A and C, citing the dangers of exposure and the availability of alternatives. One representative of an observer described wood preservation as a critical use of the chemical, while another provided information that she said demonstrated the economic and technical feasibility of using galvanized steel poles as a replacement for wood poles.

26. Several members expressed appreciation for the observers' comments and suggested that they might merit further discussion in a contact group.

27. The Committee agreed to establish a contact group, chaired by Ms. Choi, to make any necessary amendments to the draft risk management evaluation, on the understanding that amendments would be restricted to those that were pertinent to decision-making and the correction of inaccurate information. The group would also prepare a draft decision on the listing of pentachlorophenol and its salts and esters in the annexes to the Convention. When appropriate, the chair of the contact group could convert the group to a drafting group limited to members only.

28. Subsequently, the chair of the contact group reported that the group had made good progress in its discussions, had established itself as a drafting group, and had prepared a revised draft risk management evaluation and revised draft decision. A member of the drafting group then presented the revised draft risk management evaluation.

29. After further discussion, the Committee adopted decision POPRC-10/1, by which it adopted the risk management evaluation, as orally amended, and decided, in accordance with paragraph 9 of Article 8 of the Convention, to recommend to the Conference of the Parties that it consider listing pentachlorophenol and its salts and esters in Annex A to the Convention with specific exemptions for the production and use of pentachlorophenol for utility poles and cross-arms. The decision is set out in annex I to the present report and the risk management evaluation is set out in document UNEP/POPS/POPRC.10/10/Add.1.

30. At the time of adoption, a one member asked that the present report reflect her view that the risk management evaluation provided equivocal information regarding the recommendation to list pentachlorophenol and its salts and esters in Annex A only.

B. Consideration of a draft risk profile on decabromodiphenyl ether (commercial mixture, c-decaBDE)

31. In considering the item, the Committee had before it a note by the Secretariat on a draft risk profile for decabromodiphenyl ether (commercial mixture, c-decaBDE) (UNEP/POPS/POPRC.10/3), supporting information (UNEP/POPS/POPRC.10/INF/5) and comments and responses relating to the draft risk profile (UNEP/POPS/POPRC.10/INF/6).

32. Mr. Holland, chair of the intersessional working group on decabromodiphenyl ether (commercial mixture, c-decaBDE), gave a presentation on the draft risk profile.

33. Ms. Heather Stapleton, an invited expert from Duke University, then gave a presentation on debromination of decabromodiphenyl ether.

34. In the ensuing discussion, general appreciation was expressed for the work of the intersessional working group in preparing the draft risk profile, which, according to one member, provided an admirable summary of the abundance of scientific knowledge on the subject. Various matters were discussed, such as the chemical's capacity for long-range environmental transport; the availability of information on the health impacts of the dismantling of electronic equipment in developing countries and low-dose effects; estimates of photodegradation kinetics and photolytic debromination in the environment; transformation products detected in biota; and the presence of photosynthesizers that could enhance the rate of debromination and the relevance of indoor dust in detecting debromination.

35. The Committee agreed to establish a contact group, to be chaired by Mr. Holland, to make any necessary amendments to the draft risk profile, on the understanding that amendments would be restricted to those that were pertinent to decision-making and the correction of inaccurate information, and to prepare a draft decision for consideration by the Committee. When appropriate, the chair of the contact group could convert the group to a drafting group limited to members only.

36. Subsequently, the chair of the contact group reported that the group had made good progress in its discussions, had established itself as a drafting group, and had prepared a revised draft risk profile and draft decision. He then presented the revised draft risk profile.

37. The Committee then adopted decision POPRC-10/2, by which it adopted the risk profile for decabromodiphenyl ether (commercial mixture, c-decaBDE), on the understanding that the Secretariat would correct a number of editorial errors, and decided to establish an intersessional working group to prepare a risk management evaluation for the substance. The decision is set out in annex I to the present report and the risk profile is set out in document UNEP/POPS/POPRC.10/10/Add.2.

C. Consideration of a proposal for the inclusion of dicofol in Annexes A, B and/or C to the Convention

38. Introducing the item, the representative of the Secretariat recalled that at its ninth meeting the Committee had considered a proposal by the European Union to list dicofol in Annexes A, B and/or C to the Convention. At that meeting a contact group, which had later established itself as a drafting group, had been unable to reach agreement on dicofol. The Committee had therefore decided to maintain the entirety of the outcome of the drafting group in square brackets, to indicate that it had not been agreed to, and to resume consideration of the matter at its tenth meeting. The outcome of the drafting group was set out in document UNEP/POPS/POPRC.10/13, annex IV.

39. All members of the Committee who spoke on this item expressed support for the conclusion that the information in the proposal fulfilled the criteria set forth in Annex D to the Stockholm Convention. A number of members noted that no additional information contradicting that conclusion had been formally submitted since the previous meeting. Several members said that further consideration of issues raised by some observers regarding persistence and other issues would be most appropriately addressed during preparation of a draft risk profile. One member expressed significant concern regarding the levels of DDT in dicofol products.

40. The Committee agreed to establish a drafting group, chaired by Mr. Abbas, to prepare a draft decision for its consideration. Observers that had expressed views during the discussion in plenary were invited to submit written information to the drafting group for its consideration.

41. Subsequently, the drafting group chair reported that the group had concluded that dicofol met the screening criteria of Annex D to the Convention and had therefore prepared a draft decision for consideration by the Committee. In response to a statement by an observer, the Chair confirmed that the drafting group had considered materials submitted by the observer regarding the persistence and bioaccumulation of dicofol.

42. The Committee adopted decision POPRC-10/3, by which it decided that dicofol met the criteria of Annex D to the Convention and decided to establish an intersessional working group to review the proposal further and prepare a draft risk profile pertaining to that substance. The decision is set out in annex I to the present report.

D. Process for the evaluation of perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride pursuant to paragraphs 5 and 6 of part III of Annex B to the Stockholm Convention on Persistent Organic Pollutants

43. Introducing the sub-item, the representative of the Secretariat recalled that under part III of Annex B to the Convention the Conference of the Parties, in 2015 and every four years thereafter, was to evaluate the continued need for perfluorooctane sulfonic acid (PFOS), its salts and perfluorooctane sulfonyl fluoride (PFOSF) for the acceptable purposes and specific exemptions listed in Annex B to the Convention. The Conference of the Parties at its sixth meeting had adopted a process for carrying out the evaluation and, to assist it in conducting the evaluation at its seventh meeting, had in decision SC-6/4 requested the Committee to prepare a report on the assessment of alternatives to PFOS, its salts and PFOSF and requested the Secretariat to collect and analyse data on those chemicals from parties and, based on its analysis, prepare a preliminary report for use by the Committee in undertaking its assessment and a further report for consideration by the Conference of the Parties at its seventh meeting to assist it in undertaking the evaluation of information on PFOS, its salts and PFOSF.

44. The Committee at its ninth meeting, in its decision POPRC-9/5, had adopted terms of reference for the assessment requested by the Conference of the Parties and had established an intersessional working group to undertake necessary work, as specified in paragraph 3 of decision SC-6/4, and to prepare a draft report on the assessment for consideration by the Committee at its tenth meeting. The Secretariat, in the period between the ninth and tenth meetings of the Committee, had collected information from parties and prepared a draft report thereon. A summary of the report by the intersessional working group was set out in document UNEP/POPS/POPRC.10/5, the full report in document UNEP/POPS/POPRC.10/INF/7 and fact sheets on selected alternatives in document UNEP/POPS/POPRC.10/INF/7. A draft report by the Secretariat for the evaluation of information on PFOS, its salts and PFOSF was set out in document UNEP/POPS/POPRC.10/INF/10.

45. The Committee agreed to discuss the report of the intersessional working group on the assessment before turning to the draft report by the Secretariat. Mr. Janssen, co-chair of the intersessional working group, reported on the group's work on his own behalf and on behalf of his co-chair, Mr. Haryono.

46. Members of the Committee expressed appreciation to the co-chairs of the intersessional working group, as well as its members, for the considerable work undertaken to prepare the report. Several noted that the report identified a large number of alternatives to the use of PFOS and its related chemicals for acceptable purposes and in accordance with specific exemptions.

47. Some members said that the report would be improved by organizing it according to the uses of the chemicals and the available alternatives for those uses. Several members highlighted what they said were uncertainties regarding the adequacy and availability of alternatives. Some said that the report should identify which persistent organic pollutant criteria each potential alternative did or did not meet. Some said that it was difficult to evaluate potential alternatives because necessary information was confidential. One said that some of the potential alternatives were not yet the subject of systematic monitoring and that her country would soon report evidence that decamethyl cyclopentasiloxane and dodecamethyl cyclohexasiloxane were present in the Arctic as a result of long-range environmental transport. Another member questioned the report's conclusion that chemicals in category IV were unlikely to be persistent organic pollutants.

48. Regarding the draft report prepared by the Secretariat (UNEP/POPS/POPRC.10/INF/10), several members said that it was important to provide parties with the ability to identify textiles, carpets and other materials that contained PFOS and therefore supported examining labelling options. Some said that there were potential inconsistencies, inaccuracies and other issues requiring clarification or additional information in the report.

49. In response to a question regarding the source of information used in preparing the Secretariat's report, it was explained that it included information from the 33 national reports submitted under Article 15 of the Convention by the deadline of 31 August 2014, as well as additional communications received prior to 16 September 2014, by which time 44 parties had submitted reports. Additional communications had arrived after that date, and those and any others received in a timely manner, along with the comments at the current meeting, would be taken into account by the Secretariat in preparing a revised draft of the report.

50. One member said that the Secretariat's report should include information on alternatives to PFOS and related chemicals used in open applications. He also, as did another member, lamented the fact that relatively few parties had submitted information necessary for the preparation of the report; that, he suggested, was a function of the difficulty that parties faced in identifying PFOS and related chemicals in products and should perhaps be further discussed in a contact group or in plenary.

51. In response to another question, the representative of the Secretariat said that the Conference of the Parties, should it decide that one or more specific exemptions or acceptable purposes for the production and use of PFOS, its salts and PFOSF were no longer necessary, could follow the procedure that it had followed under similar circumstances in respect of other chemicals listed in Annexes A and B. With regard to those chemicals, a footnote in the publication issued by the Secretariat setting out the Convention text indicated that as of a given date there were no parties registered for the specific exemptions and that, accordingly, no new registrations for those exemptions could be made.

52. A number of observers raised issues, expressing the hope that they could be discussed in a contact group.

53. Following the discussion the Committee established a contact group, co-chaired by Mr. Janssen and Mr. Haryono, to further consider the report by the intersessional working group and the draft report prepared by the Secretariat and to prepare a draft decision for consideration by the Committee. Members and observers were invited to submit written comments to facilitate the discussion by the contact group.

54. The Committee also agreed to establish a friends of the chair group to provide comments to the Secretariat regarding potential improvements to the draft report for the evaluation of information on PFOS, its salts and PFOSF (UNEP/POPS/POPRC.10/INF/10). The Chair noted that, as the Conference of the Parties had requested the Secretariat to prepare the report, the Committee needed only to provide input to the Secretariat, which would prepare the final report. At a later session, the representative of the Secretariat presented a conference room paper submitted by the friends of the chair group containing comments on the draft report on the evaluation of information on PFOS, its salts and PFOSF.

55. Also at a later session the co-chair of the contact group reported that the group had established itself as a drafting group and had prepared three conference room papers. The first contained a revised version of the report on the Committee's assessment of alternatives to PFOS, its salts and PFOSF; the second contained the revised fact sheets on those alternatives; and the third contained a draft decision on the process for the evaluation of PFOS, its salts and PFOSF by which the Committee would, among other things, submit the report on the assessment of alternatives to PFOS, its salts and PFOSF to the Conference of the Parties for consideration at its seventh meeting, together with the fact sheets on those alternatives, and request the Secretariat to finalize its report for the evaluation of information on PFOS, its salts and PFOSF.

56. Following further discussion in plenary and further revision of the three documents to reflect that discussion, the Committee adopted decision POPRC-10/4, on the process for the evaluation of PFOS, its salts and PFOSF pursuant to paragraphs 5 and 6 of part III of Annex B to the Convention. The decision as adopted is set out in annex I to the present report, the Committee's report on its assessment of alternatives to PFOS, its salts and PFOSF, in document UNEP/POPS/POPRC.10/INF/7/Rev.1, the fact sheets on those alternatives, in document UNEP/POPS/POPRC.10/INF/8/Rev.1, and the comments by the Committee on the Secretariat's report for the evaluation of information on PFOS, its salts and PFOSF, in document UNEP/POPS/POPRC.10/INF/18.

57. At the time of adoption of the decision one member expressed concern, saying that the headings of the various classes in the Committee's report on the assessment of alternatives appeared to promise more than they could deliver; for example, she said, the Committee could not say whether a given alternative fulfilled the bioaccumulation criterion of Annex D to the Convention. She also said that the manner in which the report and fact sheets were presented to the Conference of the Parties was very important.

E. Guidance on alternatives to perfluorooctane sulfonic acid, its salts, perfluorooctane sulfonyl fluoride and their related chemicals

58. Introducing the sub-item, the representative of the Secretariat recalled that at its sixth meeting the Committee had endorsed the guidance on alternatives to PFOS, its salts, PFOSF and their related chemicals and decided that it should be regularly reviewed as necessary to take into account available information. At its ninth meeting the Committee had decided to review the guidance at its tenth

meeting, taking into account the assessment discussed in section D above and the information in a technical paper on alternatives to PFOS, its salts, PFOSF and related chemicals in open applications (UNEP/POPS/POPRC.8/INF/17/Rev.1).

59. In the ensuing discussion, there was general support for the establishment of an intersessional working group to revise the guidance to consolidate the documents containing information on PFOS, its salts and PFOSF and related chemicals, although there was some discussion regarding the group's mandate and the timeline for the work being proposed.

60. Following the discussion, the Committee requested the Secretariat to prepare, with the assistance of a number of Committee members, a draft decision for consideration by the Committee based on the draft decision text in the relevant note by the Secretariat (UNEP/POPS/POPRC.10/6) and taking into account the comments made.

61. The representative of the Secretariat subsequently introduced a conference room paper containing a draft decision by which the Committee would establish an intersessional working group to prepare a proposal for the revision of the guidance on alternatives to PFOS, its salts, PFOSF and their related chemicals. The representative of an observer, echoed by a member, asked whether the working group was limited, in its mandate to revise the guidance, to using existing information. In response the representative of the Secretariat read from the text of decision SC-6/7, which requested the Committee "to revise the guidance to incorporate information contained in the technical paper on the identification and assessment of alternatives to the use of PFOS, its salts and PFOSF and their related chemicals in open applications (UNEP/POPS/POPRC.8/INF/17/Rev.1) and any other pertinent information."

62. The Committee then adopted the draft decision. Decision POPRC-10/5 is set out in annex I to the present report.

V. Coordination and collaboration with other scientific subsidiary bodies

63. Introducing the item, the representative of the Secretariat recalled that a joint intersessional working group established by the Committee and the Chemical Review Committee of the Rotterdam Convention at their joint meeting in 2013 had prepared guidance to assist the parties to the Rotterdam Convention and the Chemical Review Committee when a chemical under consideration was a persistent organic pollutant under the Stockholm Convention. The Chemical Review Committee had commented on the draft guidance at its tenth meeting and the Persistent Organic Pollutants Review Committee was asked to do likewise at the current meeting. The draft guidance was discussed in a note by the Secretariat (UNEP/POPS/POPRC.10/7) and was set out in an information document (UNEP/POPS/POPRC.8/INF/11). Comments on the draft guidance were compiled in document UNEP/POPS/POPRC.8/INF/12.

64. She explained that, at its tenth meeting, the Chemical Review Committee had praised the outcome of the joint intersessional working group and had adopted a decision on the matter (UNEP/FAO/RC/CRC.10/10, annex I, decision CRC-10/6).

65. She also recalled that in its decision SC-6/14 the Conference of the Parties to the Stockholm Convention had requested the Committee to report to the Conference at its seventh meeting on its experience with the back-to-back and joint meetings of the two committees held in October 2013. To that end the Secretariat at the request of the Committee had circulated a questionnaire, the responses to which were compiled in document UNEP/POPS/POPRC.10/INF/13. The comments of the Chemical Review Committee and the Persistent Organic Pollutants Review Committee would be forwarded to the joint intersessional working group and the revised draft guidance document resulting from its work would be presented at the seventh meeting of the Conference of the Parties.

66. Following the Secretariat's introduction Mr. Abdelbagi, co-chair of the joint intersessional working group, gave a presentation on the structure and content of the draft guidance contained in UNEP/POPS/POPRC.10/INF/11.

67. In the ensuing discussion, one member referred to paragraphs 8 (c) and 18 of the draft guidance, which stated that, for the criterion in subparagraph b (iii) of Annex II to the Rotterdam Convention to be met, a final regulatory action pertaining to a chemical had to be based on "a national or regional risk evaluation taking into account prevailing conditions within the notifying party". He asked if the intersessional working group might consider whether national implementation plans might play a role in satisfying that criterion. He and another member also welcomed the statement in paragraph 29 of the document that parties could use their national decisions on persistent organic

pollutants under the Stockholm Convention to develop their import responses for chemicals listed in Annex III to the Rotterdam Convention, which would be of benefit for parties with limited resources. In response, Mr. Abdelbagi said that paragraph 29 had been drafted to help developing countries and countries with economies in transition in preparing such responses. Referring to paragraph 18, he confirmed that a final regulatory action did have to be based on a risk evaluation taking into account the prevailing conditions in the notifying country to satisfy the criterion in paragraph b (iii) of Annex II.

68. Some members inquired about progress in cooperation with the Open-ended Working Group of the Basel Convention and whether it would be possible to hold a joint meeting with that body. In response, the representative of the Secretariat said that there had been no request by the conferences of the parties to the Basel and Stockholm conventions for such a meeting in the 2014–2015 biennium. As for other cooperation, cross-cutting issues and potential collaboration had been identified, in particular in respect of the technical guidelines for the environmentally sound management of wastes consisting of, containing or contaminated with persistent organic pollutants. The involvement of members and observers of the Persistent Organic Pollutants Review Committee in the work of the small intersessional working group on persistent organic pollutant waste guidelines had been welcomed by the Conference of the Parties to the Basel Convention. There would be further deliberation on climate change and persistent organic pollutants at the seventh meeting of the Conference of the Parties, including on relevant guidelines adopted by the Committee at its ninth meeting, and further information on scientific work and collaboration would be presented under agenda item 9 (other matters).

69. A number of Committee members said that the draft decision set out in the note by the Secretariat (UNEP/POPS/POPRC.10/7) should refer to any negative aspects of the back-to-back meetings of the Chemical Review Committee and the Persistent Organic Pollutants Review Committee as well as their benefits. The Committee then adopted the decision, as orally amended. Decision POPRC-10/6 is set out in annex I to the present report.

VI. Report on activities for effective participation in the work of the Committee

70. Introducing the item, the representative of the Secretariat outlined the relevant documents, including the Secretariat's report on the matter (UNEP/POPS/POPRC.10/7), containing a draft decision, and a note by the Secretariat listing the capacity-building and training activities planned and completed between the ninth and tenth meetings of the Committee as mandated by the Conference of the Parties in its decision SC-6/14 (UNEP/POPS/POPRC.10/INF/14). The activities, some of which contributed to enhancing cooperation and coordination between the Committee and the scientific bodies of the Rotterdam and Basel conventions, included both in-person and online training activities such as webinars, as well as the development of a manual for chairs of meetings under the Basel, Rotterdam and Stockholm conventions.

71. In the ensuing discussion, there was considerable debate about the relative merits of in-person training versus webinars. In addition to other responsibilities that could prevent them from being available at scheduled webinar times, some members reported communication difficulties in their regions that could hamper participation in webinars. It was suggested that these challenges could be overcome by downloading the webinars from the Convention's online library, but it was noted that that would prevent participation in live question and answer sessions. Several members stressed the desirability of in-person training where possible, saying that it could be effectively supplemented by webinars.

72. One member said that new members of the Committee should be routinely referred to the handbook for effective participation in the work of the Persistent Organic Pollutants Review Committee, available on the Convention website. Noting that the Chemical Review Committee of the Rotterdam Convention had a welcome package for new members, the representative of the Secretariat indicated that such a welcome package, including the handbook, the convention text and other materials, could be developed for incoming members of the Committee. She also noted that incoming members were routinely invited to attend a Committee meeting as observers prior to the start of their terms of office, and she suggested that it might be feasible also to hold orientation sessions for the new members during those meetings. One observer, applauding the idea, suggested that at such meetings new members could also be paired with sitting or former members who would act as mentors.

73. Following the discussion, the Committee adopted decision POPRC-10/7 as orally amended. The decision is set out in annex I to the present report.

VII. Workplan for the intersessional period between the tenth and eleventh meetings of the Committee

74. In its consideration of the item the Committee had before it a note by the Secretariat on a draft workplan for the intersessional period between the tenth and eleventh meetings of the Committee (UNEP/POPS/POPRC.10/9). The representative of the Secretariat introduced the item, outlining the information contained in the note, following which the Committee adopted the workplan without amendment.

75. In accordance with paragraph 6 of Article 8 of the Convention and paragraph 29 of the annex to decision SC-1/7, the Committee established a number of intersessional working groups to carry forward the work necessary to implement its decisions.

76. The composition of the intersessional working groups is set out in annex II to the present report, and the workplan is set out in annex III to the present report.

VIII. Venue and date of the eleventh meeting of the Committee

77. The Committee agreed that its eleventh meeting would be held from 19 to 23 October 2015, back to back with the eleventh meeting of the Rotterdam Convention's Chemical Review Committee, at the headquarters of the Food and Agriculture Organization of the United Nations in Rome. It was understood that the Chair, in consultation with the Vice-Chair, might adjust the length of the meeting to accord with the work requirements.

IX. Other matters

A. Science fair

78. Introducing the sub-item, the representative of the Secretariat reported that the bureaux of the conferences of the parties to the Basel, Rotterdam and Stockholm conventions had welcomed a proposal by the Secretariat to organize a science fair in the margins of the May 2015 meetings of the conferences of the parties to the three conventions, which would centre on the theme "From science to action, working for a safer tomorrow". Information on the fair was available in a note by the Secretariat (UNEP/POPS/POPRC.10/INF/16). The aim of the fair was to increase awareness and understanding of scientific issues for analysis and decision-making under the three conventions. Along with a number of special events, it would feature interactive booths on specific topics, including one on scientific processes under the Basel, Rotterdam and Stockholm conventions that would present the work of the Open-ended Working Group of the Basel Convention, the Chemical Review Committee and the Persistent Organic Pollutants Review Committee. The Chemical Review Committee had discussed the matter and put forward several suggestions for the booth on scientific processes under the three conventions at its meeting that had taken place the previous week, and the Persistent Organic Pollutants Review Committee was invited to do likewise.

79. The Committee decided to convene an informal group, coordinated by Ms. Wamai and open to both members and observers, to discuss possible further elements and modalities relevant to its work for presentation at the science fair.

80. Subsequently, the coordinator of the informal group reported that the group had held participatory and informative discussions during which several new ideas had been put forward. Based on her report, the Committee agreed that those ideas should be made available to the members of the Committee and the Chemical Review Committee and that, together with any further ideas put forward by the members, they should be taken into account in the planning for the science fair.

B. Improving the quality of information in risk management evaluations and risk profiles

81. Introducing the item, the representative of the Secretariat recalled that at its ninth meeting the Committee had invited members and observers to provide suggestions for improving the quality of information contained in draft risk management evaluations and draft risk profiles to be considered by the Committee. The Committee had requested the Secretariat, with the support of Mr. Sow, to compile the comments received and circulate them before its tenth meeting. The comments received were compiled in the annex to document UNEP/POPS/POPRC.10/INF/15.

82. In the ensuing discussion many members underscored the importance of continuing to seek improvements in the quality, quantity, breadth and timeliness of information submitted by parties and observers, including industry observers, for consideration by the Committee in its preparation of draft

risk profiles and draft risk management evaluations. That included addressing issues associated with the confidentiality of certain information, which posed a significant obstacle to the efficient evaluation of alternatives. Both parties and industry should work to address those issues.

83. Several members drew attention to the annex to decision POPRC-9/7, which set out strategies on issues related to the evaluation of chemicals in accordance with Annex E to the Stockholm Convention, saying that it was important to maintain awareness of the information and lessons described in that annex in seeking to improve the information in draft risk profiles. Among other insights, the document underscored the importance of recognizing that no single set of instructions, particularly one developed by a single set of stakeholders, could guide the Committee effectively in addressing all circumstances that might arise in future cases.

84. The representative of an observer drew attention to the global assessment of the state of the science on endocrine disruptors produced by the World Health Organization. One member, recalling the request made at the ninth meeting of the Committee, suggested that the Secretariat seek to convene a side event during the Committee's next meeting at which experts could present information on endocrine disruptors and their relevance to the work of the Committee.

85. The Committee took note of the information presented.

X. Adoption of the report

86. The Committee adopted the present report on the basis of the draft report contained in documents UNEP/POPS/POPRC.10/L.1 and Add.1, as orally revised, on the understanding that the Vice-Chair, serving as rapporteur and working in consultation with the Secretariat, would be entrusted with its finalization.

XI. Closure of the meeting

87. Following the customary exchange of courtesies the meeting was declared closed at 5.45 p.m. on Thursday, 30 October 2014.

Annex I

Decisions adopted by the Persistent Organic Pollutants Review Committee at its tenth meeting

- POPRC-10/1: Pentachlorophenol and its salts and esters
- POPRC-10/2: Decabromodiphenyl ether (commercial mixture, c-decaBDE)
- POPRC-10/3: Dicofol
- POPRC-10/4: Process for the evaluation of perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride pursuant to paragraphs 5 and 6 of part III of Annex B to the Stockholm Convention on Persistent Organic Pollutants
- POPRC-10/5: Guidance on alternatives to perfluorooctane sulfonic acid, its salts, perfluorooctane sulfonyl fluoride and their related chemicals
- POPRC-10/6: Coordination and collaboration with other scientific subsidiary bodies
- POPRC-10/7: Effective participation in the work of the Persistent Organic Pollutants Review Committee

POPRC-10/1: Pentachlorophenol and its salts and esters

The Persistent Organic Pollutants Review Committee,

Having concluded in its decision POPRC-8/4 that pentachlorophenol and its salts and esters meet the criteria set out in Annex D to the Stockholm Convention,

Having evaluated the risk profile for pentachlorophenol and its salts and esters, including consideration of the transformation product pentachloroanisole, adopted by the Committee at its ninth meeting¹ in accordance with paragraph 6 of Article 8 of the Convention,

Having concluded in its decision POPRC-9/3 that pentachlorophenol and its salts and esters are likely, as a result of their long-range environmental transport, to lead to significant adverse human health and environmental effects such that global action is warranted,

Having completed the risk management evaluation for pentachlorophenol and its salts and esters in accordance with paragraph 7 (a) of Article 8 of the Stockholm Convention,

1. *Adopts* the risk management evaluation for pentachlorophenol and its salts and esters;²
2. *Decides*, in accordance with paragraph 9 of Article 8 of the Convention, to recommend to the Conference of the Parties that it consider listing pentachlorophenol and its salts and esters in Annex A to the Convention with specific exemptions for the production and use of pentachlorophenol for utility poles and cross-arms;
3. *Recommends* the insertion of a new note in Part 1 of Annex A to the Convention as follows:

Pentachlorophenol (CAS No: 87-86-5), sodium pentachlorophenate (CAS No: 131-52-2 and 27735-64-4 (as monohydrate)), pentachlorophenyl laurate (CAS No: 3772-94-9) and pentachloroanisole (CAS No: 1825-21-4) were assessed and identified as persistent organic pollutants.

4. *Recommends*, in the event of listing with specific exemptions, the insertion of a new part in Annex A as follows:

Each Party that has registered for the exemption for the production and use of pentachlorophenol for utility poles and cross-arms shall take necessary measures to ensure that utility poles and cross-arms containing pentachlorophenol can be easily identified by labelling or other means throughout their life cycle. Articles treated with pentachlorophenol should not be reused for purposes other than those exempted.

POPRC-10/2: Decabromodiphenyl ether (commercial mixture, c-decaBDE)

The Persistent Organic Pollutants Review Committee,

Having completed an evaluation of the proposal by Norway to list decabromodiphenyl ether (commercial mixture, c-decaBDE) in Annexes A, B and/or C to the Stockholm Convention and having decided at its ninth meeting, in its decision POPRC-9/4, that the proposal meets the criteria set out in Annex D to the Convention,

Having also completed the risk profile for decabromodiphenyl ether (commercial mixture, c-decaBDE) in accordance with paragraph 6 of Article 8 of the Convention,

1. *Adopts* the risk profile for decabromodiphenyl ether (commercial mixture, c-decaBDE);³
2. *Decides*, in accordance with paragraph 7 (a) of Article 8 of the Convention, that the decabromodiphenyl ether component (BDE-209) of c-decaBDE is likely as a result of its long-range environmental transport to lead to significant adverse human health and environmental effects such that global action is warranted;

¹ UNEP/POPS/POPRC.9/13/Add.3.

² UNEP/POPS/POPRC.10/10/Add.1.

³ UNEP/POPS/POPRC.10/10/Add.2.

3. *Also decides*, in accordance with paragraph 7 (a) of Article 8 of the Convention and paragraph 29 of the annex to decision SC-1/7 of the Conference of the Parties, to establish an ad hoc working group to prepare a risk management evaluation that includes an analysis of possible control measures for decabromodiphenyl ether (commercial mixture, c-decaBDE) in accordance with Annex F to the Convention;

4. *Invites*, in accordance with paragraph 7 (a) of Article 8 of the Convention, parties and observers to submit to the Secretariat the information specified in Annex F before 5 January 2015.

POPRC-10/3: Dicofol

The Persistent Organic Pollutants Review Committee,

Having examined the proposal by the European Union to list dicofol in Annexes A, B and/or C to the Stockholm Convention and having applied the screening criteria specified in Annex D to the Convention,

1. *Decides*, in accordance with paragraph 4 (a) of Article 8 of the Convention, that it is satisfied that the screening criteria have been fulfilled for dicofol as described in the evaluation contained in the annex to the present decision;

2. *Also decides*, in accordance with paragraph 6 of Article 8 of the Convention and paragraph 29 of the annex to decision SC-1/7, to establish an ad hoc working group to review the proposal further and to prepare a draft risk profile in accordance with Annex E to the Convention;

3. *Invites*, in accordance with paragraph 4 (a) of Article 8 of the Convention, parties and observers to submit to the Secretariat the information specified in Annex E before 5 January 2015.

Annex to decision POPRC-10/3

Evaluation of dicofol against the criteria of Annex D

A. Background

1. The primary source of information for the preparation of the present evaluation was the proposal submitted by the European Union (UNEP/POPS/POPRC.9/3), which is a party to the Convention.
2. Additional sources of scientific information included critical reviews prepared by recognized authorities.

B. Evaluation

3. The proposal was evaluated in the light of the requirements of Annex D to the Convention regarding the identification of the chemical (paragraph 1 (a)) and the screening criteria (paragraphs 1 (b)–(e)):

(a) Chemical identity:

- (i) Adequate information was provided in the proposal, which relates to dicofol, CAS No. 115-32-2 and its isomers (*p,p'*-dicofol, CAS No: 115-32-2; and *o,p'*-dicofol, CAS No. 10606-46-9);
- (ii) The chemical structures were provided;

The chemical identity of dicofol and its isomers is adequately established;

(b) Persistence:

- (i) Degradation in water is primarily by hydrolysis. At a pH of 5, the half-life of dicofol's main *p,p'*-isomer was 85 days, fulfilling the cut-off value of 60 days for persistence in water. Approximately 10 per cent of northern European Union member State surface waters have a pH of around 5 (Refs. 1, 2). Also, blackwater rivers found in several areas around the world (Australia, Amazonia, Europe, Indonesia, the Orinoco basin and the northern and southern areas of the United States) typically have a pH of around 5. Conservative estimates for half-life in aerobic soil of dicofol (considering the parent compound and its major degradates) are as high as 313 days, fulfilling the cut-off value of 6 months for persistence in water. Isomers of dicofol are hydrolyzed relatively quickly at neutral and alkaline pH. Both isomers are

hydrolyzed within 8 hours at a pH of 7, with half-lives of 64 hours. Dicofol is hydrolyzed very rapidly under neutral and alkaline conditions (Ref. 3);

- (ii) According to the database of the National Institute of Technology and Evaluation (NITE) of Japan, dicofol is characterized as non-biodegradable;

There is sufficient evidence that dicofol meets the persistence criterion;

(c) Bioaccumulation:

- (i) A study with *p,p'*-dicofol in bluegill sunfish resulted in a bioconcentration factor (BCF) of 10,000. A study of fathead minnows reported BCF values as high as 43,000 after 296 days of exposure to dicofol. Residues of *p,p'*-dicofol accumulated in bluegill sunfish with BCF of 6,600, 17,000 and 10,000 in fillet, viscera and whole fish, respectively, during 28 days of exposure. No information is available on bioaccumulation in fish for *o,p'*-dicofol since *o,p'*-dicofol hydrolyzes quickly (Ref. 3). BCF values of 8,200 and 6,100 obtained for common carp were available in the NITE database, which were in the same range as the BCF values found in another study involving zebra fish. Comparison with BCF values obtained from QSAR models showed good agreement with those obtained in the study with zebra fish. There is therefore strong evidence from several fish studies indicating that BCF values are above the threshold of 5,000;

Metabolism testing on rat elimination half-lives were estimated to be 1.5–4 days for *o,p'*-dicofol and 4–7 days for *p,p'*-dicofol (Ref. 4);

The measured log Kow value of dicofol is 4.30 according to the Pesticide Manual (14th edition 2012). Measured log Kow values vary from 4.08 to 5.02. A high log Kow of 6.06 has been reported (Ref. 3). A high log Koa of 8.9 is reported in air-breathing organisms (Ref. 5);

There is sufficient evidence that dicofol meets the bioaccumulation criterion;

(d) Potential for long-range environmental transport:

- (i) and (ii) There are little data on the presence of dicofol in remote areas. Dicofol has been detected in the Arctic environment (Ref. 6);
- (iii) The estimated atmospheric half-life exceeds the screening criteria of 2 days (3–10.5 days). The calculated transport distance in Europe is 1,650 km for dicofol (Ref. 1);

There is sufficient evidence that dicofol meets the criterion on potential for long-range environmental transport;

(e) Adverse effects:

- (i) There are no specific data available;
- (ii) There are animal data showing a potential of dicofol to have adverse effects on human health, including effects on the liver, kidney, adrenal gland and urinary bladder. The no observed adverse effect level (NOAEL) for induction in mice is 2.1 mg/kg bw/day. In document UNEP/POPS/POPRC.8/INF/13, the Committee concluded that based on available data there was no evidence of the carcinogenicity of dicofol. However, a recent study (Ref. 7) indicates that dicofol might raise the risk of cancer incidence through effects on the frame conformation of proteins, disturbing their physiological function;

In a two-year study of rats, growth, enzyme induction and other changes in the liver, adrenal gland and urinary bladder were observed at doses of 2.5 mg/kg/day, resulting in a limit dose value, acceptable daily intake (ADI), of 0.0022 mg/kg bw/day (Ref. 8);

In another two-year study on hormonal effects in dogs a NOAEL of 0.22 mg/kg/day has been determined, leading to a reference dose (RfD) of 0.0004 mg/kg/day (Ref. 3);

A dietary concentration of 7 mg/kg of dicofol fed to mice for three generations produced defects in 12-day-old offspring of the third generation. Effects,

however, were not identified in another study with rabbits at similar or higher exposure levels;

Dicofol is highly toxic to aquatic animals as defined in the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). It is classified as aquatic acute and chronic category 1 in the European Union's regulation on the classification, labelling and packing of substances and mixtures (Regulation (EC) No. 1272/2008);

The lowest LC₅₀ for fish is 0.053 mg/l; the lowest value for crustaceans is 0.06 mg/l (Ref.9);

The no observed effect concentration (NOEC) in a 60-d fish early life stage test was 4.4 µg/l and NOEC for chronic exposure was 4.5 – 9 µg/l. The United States Environmental Protection Agency reregistration eligibility decision for dicofol (1998) (Ref. 3) cites effects on the reproductive physiology of the fathead minnow from concentrations as low as 5 µg/l;

A two-generation study of reproductive and morphological effects of dicofol on captive American kestrels by MacLellan *et al.* (1996) showed significantly thinner egg shells at 20 mg/kg of dicofol. Male embryos from females dosed with 5 and 20 mg/kg of dicofol had gonads that were significantly different from those of control chicks (Ref. 10);

Wiemeyer *et al.* (2001) reported that the lowest observed dietary effect concentration for eggshell thinning was 3 mg/kg and that the no observed adverse effect concentration (NOAEC) was 1 µg/g (Ref. 11). This is slightly lower than the NOEC of 2.5 mg/kg for eggshell thinning in ducks reported by Belfroid A. *et al.* (2005) (Ref.1);

According to the OSPAR document on dicofol (Ref. 9), the pattern and magnitude of dicofol on eggshell thinning was similar as that observed with *p,p'*-DDE. Schwarzbach *et al.* (1988), cited in OSPAR (2002) (Ref.9), showed that dicofol was not metabolized to DDE in birds and therefore concluded that the adverse effect was caused by dicofol itself;

In a study with earthworms by Shi *et al.* (2006), dicofol significantly inhibited the reproductive ability of earthworms (Ref. 12);

Lavado *et al.* (2004) (Ref. 13) and Thibaut and Porte (2004) (Ref. 14) showed that dicofol could interfere with the synthesis of sex hormones in fish microsomes;

Haeba *et al.* (2008) (Ref. 15) demonstrated in daphnia that 0.1 mg/l of dicofol resulted in a significant shift of the sex ratio in favour of males at 0.1 mg/l. Kojima *et al.* (2004) (Ref. 16) showed estrogenic activity of dicofol in an in vitro test;

Endocrine effects were also observed by Vinggaard *et al.* (2000) (Ref. 17), Okubo *et al.* (2004) (Ref. 18), Hoekstra *et al.* (2006) (Ref. 19) and Thiel *et al.* (2011) (Ref. 20).

There is sufficient evidence that dicofol meets the criterion on adverse effects;

C. Conclusion

4. The Committee concluded that dicofol met the screening criteria specified in Annex D.

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POPRC-10/4: Process for the evaluation of perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride pursuant to paragraphs 5 and 6 of part III of Annex B to the Stockholm Convention on Persistent Organic Pollutants

The Persistent Organic Pollutants Review Committee,

Recalling decision SC-6/4, by which the Conference of the Parties adopted a process, set out in the annex to that decision, for the evaluation of perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride pursuant to paragraphs 5 and 6 of part III of Annex B to the Stockholm Convention,

Having completed the assessment of alternatives to perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride in accordance with paragraph 3 of decision SC-6/4 and having reviewed the draft report of the Secretariat for the evaluation of information on perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride⁴ in accordance with the terms of reference set out in the annex to decision POPRC-9/5,

1. *Decides* to submit the summary of the report on the assessment of alternatives to perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride set out in the annex to the present decision, together with the full assessment report⁵ and fact sheets on nine of the alternatives assessed,⁶ to the Conference of the Parties for consideration at its seventh meeting;

2. *Requests* the Secretariat to finalize its report for the evaluation of information on perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride on the basis of comments and suggestions provided by the Committee⁷ and to submit it to the Conference of the Parties for consideration at its seventh meeting;

3. *Recommends* that the Conference of the Parties encourage parties that have registered or will register for specific exemptions for the production and use of perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride pursuant to Article 4 of the Stockholm Convention to take measures necessary to ensure that articles containing perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride that are allowed to be produced and used can be easily identified by labelling or other means throughout their life cycles;

4. *Also recommends* that the Conference of the Parties encourage parties that have registered or will register for the production and use of perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride for an acceptable purpose by notifying the Secretariat in accordance with Annex B to the Convention to take measures necessary to ensure that articles containing perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride that are allowed to be produced and used can be easily identified by labelling or other means throughout their life cycles.

⁴ UNEP/POPS/POPRC.10/INF/10.

⁵ UNEP/POPS/POPRC.10/INF/7/Rev.1.

⁶ UNEP/POPS/POPRC.10/INF/8/Rev.1.

⁷ UNEP/POPS/POPRC.10/INF/18.

Annex to decision POPRC-10/4

Summary of the report on the assessment of alternatives to perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride

Introduction

1. The present annex is a summary of a report on the assessment of alternatives to perfluorooctane sulfonic acid (PFOS), its salts and perfluorooctane sulfonyl fluoride (PFOSF)⁸ conducted by the Persistent Organic Pollutants Review Committee in accordance with decisions SC-6/4 and POPRC-9/5.
2. The assessment of alternatives to PFOS, its salts and PFOSF was undertaken by applying the methodology used by the Committee in the assessment of chemical alternatives to endosulfan.⁹ Accordingly, the Committee assessed chemical alternatives to PFOS, its salts and PFOSF for persistent-organic-pollutant characteristics using experimental data and information from quantitative structure-activity relationship (QSAR) models available at the date of applying the methodology.
3. Information on alternatives to PFOS, its salts and PFOSF was provided by parties and observers¹⁰ using a format developed by the Committee.¹¹ In addition, information on the identity of alternatives to PFOS, its salts and PFOSF was compiled from guidance on alternatives to PFOS, its salts and PFOSF and their related chemicals¹² and a technical paper on the identification and assessment of alternatives to the use of PFOS, its salts and PFOSF and their related chemicals in open applications.¹³ Both the guidance and the technical paper were developed on the basis of information about alternatives to PFOS, its salts and PFOSF provided by parties and observers. Additional information was also obtained from recent publications on the topic.¹⁴
4. A full report on the results of the assessment may be found in document UNEP/POPS/POPRC.10/INF/7/Rev.1. In addition, fact sheets on nine chemical alternatives to PFOS, its salts and PFOSF that were subjected to detailed assessment are set out in document UNEP/POPS/POPRC.10/INF/8/Rev.1.

A. Assessment of chemical alternatives to PFOS, its salts and PFOSF

5. The methodology used for the assessment consists of a two-step screening process, as mandated. In the first step, to prioritize the alternatives to PFOS for assessment, alternatives were screened to identify those that had the potential to be persistent organic pollutants and those that were unlikely to be persistent organic pollutants. The second step consisted of a more detailed assessment of the persistent-organic-pollutant characteristics of the alternatives that had been identified as having the potential to be persistent organic pollutants. In the second assessment step, alternatives to PFOS, its salts and PFOSF were classified according to their likelihood to meet all the criteria of Annex D to the Stockholm Convention.
6. A total of 54 chemical alternatives to PFOS, its salts and PFOSF were identified for assessment. The alternatives are used in a wide range of applications that are listed as specific exemptions and acceptable purposes in part I of Annex B to the Convention and most of them are

⁸ UNEP/POPS/POPRC.10/INF/7/Rev.1,

⁹ UNEP/POPS/POPRC.8/INF/28.

¹⁰ The information, submitted by 11 parties and 3 others, is available on the website of the Stockholm Convention at: <http://chm.pops.int/TheConvention/POPsReviewCommittee/Meetings/tabid/3565/Default.aspx>.

¹¹ UNEP/POPS/POPRC.9/INF/10/Rev.1.

¹² UNEP/POPS/POPRC.9/INF/11/Rev.1.

¹³ UNEP/POPS/POPRC.8/INF/17/Rev.1.

¹⁴ ENVIRON, Assessment of POP Criteria for Specific Short-Chain Perfluorinated Alkyl Substances, project number: 0134304A, (2014).

<http://chm.pops.int/TheConvention/POPsReviewCommittee/Meetings/PFOSSubmission/tabid/3565/Default.aspx>; OECD/UNEP Global PFC Group, "Synthesis paper on per- and polyfluorinated chemicals (PFCs)", (2013), http://www.oecd.org/env/ehs/risk-management/PFC_FINAL-Web.pdf; Nordic Council of Ministers, *Per- and Polyfluorinated Substances in the Nordic Countries: Use, Occurrence and Toxicology*, TemaNord 2013:542, ISBN: 978-92-893-2562-2, (2013), <http://dx.doi.org/10.6027/TN2013-542>.

industrial chemicals. Given the range of applications, the alternatives have diverse functions and can have different properties. The alternatives include both fluorinated and non-fluorinated substances. The majority of the alternatives are commercially available. A list of the alternatives is set out in appendix 1 to the full report.

7. In prioritizing chemicals for assessment, the criteria of bioaccumulation (B) and persistence (P) (criteria (c) and (b) of Annex D to the Convention) were used. Experimental data and information from QSAR models were collated for each substance to assess their persistent-organic-pollutant characteristics, which are set out in appendices 2 and 3 to the full report. The chemicals were grouped into four screening categories based on the cut-off values for persistent-organic-pollutant characteristics listed below.

<p>Screening category I: potential persistent organic pollutants</p> <p>Cut-offs: bioaccumulation: experimental bioconcentration factor (BCF) > 5000 and/or experimental log Kow > 5 and/or biomagnification factor or trophic magnification factor (BMF/TMF) > 1 (for fluorinated substances). Persistence: half-life (experimental) in water greater than two months (60 days), in soil greater than six months (180 days) or sediment greater than six months (180 days). The substances identified in this screening category fulfilled both bioaccumulation and persistence criteria.</p>
<p>Screening category II: candidates for further assessment</p> <p>Cut-offs: bioaccumulation: experimental BCF > 1000 and/or experimental log Kow > 4 and/or BMF/TMF > 0.5 (for fluorinated substances). Persistence: A PB-score > 1 (P-score > 0.5) and/or half life (experimental and/or estimated) in water greater than two months (60 days), in soil greater than six months (180 days) or in sediment greater than six months (180 days).</p>
<p>Screening category III: candidates for further assessment with limited data</p> <p>Cut-offs: bioaccumulation: no experimental data for BCF and log Kow and for BMF/TMF (for fluorinated substances).</p>
<p>Screening category IV: not likely to fulfil the criteria on persistence and bioaccumulation in Annex D</p> <p>Cut-offs: bioaccumulation: experimental BCF < 1000 and/or experimental log Kow < 4.0 (for non-fluorinated substances) and BMF/TMF values ≤ 0.5 (for fluorinated substances) and/or persistence: half life (experimental) in water less than two months (60 days), in soil less than six months (180 days) and in sediment less than six months (180 days).</p>

8. Depending on the screening category in which they had been placed in the prioritization step, the alternatives to PFOS, its salts and PFOSF were further assessed and assigned to one of the four classes based on their likelihood to meet all the criteria in Annex D to the Convention. The four classes are the following:

- Class 1:** Substances that the committee considered met all Annex D criteria;
- Class 2:** Substances that the committee considered might meet all Annex D criteria but remained undetermined due to equivocal or insufficient data;
- Class 3:** Substances that are difficult to classify because of insufficient data;
- Class 4:** Substances that are not likely to meet all Annex D criteria (b), (c), (d) and (e).

9. The following criteria were used for further assessing the substances classified according to the screening categories described above:

(a) Categories I and II: an assessment of persistent-organic-pollutant characteristics and other hazard indicators (toxicity and ecotoxicity) was performed. For each substance, a detailed fact sheet was compiled on the properties selected for assessment;

(b) Category III: a more exhaustive search for experimental data on bioaccumulation was performed. If such data were obtained, an evaluation was made of whether the substance met the Annex D (c) (i) criterion or if it biomagnified (TMF/BMF > 1). If those criteria were met and the substance was considered likely to be bioaccumulative, the procedure set out in subparagraph (a) above was followed. If no data were obtained, no fact sheet was compiled and the substance was assigned to class 3;

(c) Category IV: no further action was taken and the substances were assigned to class 4.

10. Detailed fact sheets were compiled for nine chemicals, as set out in document UNEP/POPS/POPRC.10/INF/8/Rev.1. The results of the analysis based on the fact sheets are summarized in appendix 4 to the full report (UNEP/POPS/POPRC.10/INF/7/Rev.1).

11. The conclusions of the assessment of the 54 alternatives to PFOS, its salts and PFOSF are as follows:

Class 1: Substances that the committee considered met all Annex D criteria

Non-fluorinated alternatives (one substance)	
CAS No.	Substance
556-67-2	Octamethyl cyclotetrasiloxane (D4)*

Class 2: Substances that the committee considered might meet all Annex D criteria but remain undetermined due to equivocal or insufficient data

Pesticides (one substance)	
CAS No.	Substance
2921-88-2	Chlorpyrifos

Class 3: Substances that are difficult to classify because of insufficient data

Fluorinated alternatives (20 substances)	
CAS No.	Substance
29420-49-3	Perfluorobutane sulfonate potassium salt
3871-99-6	Perfluorohexanesulfonate potassium salt*
647-42-7	3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluoro-1-octanol*
27619-97-2	3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctane-1-sulfonate
355-86-2	Tris(octafluoropentyl) phosphate
563-09-7	Tris(heptafluorobutyl) phosphate
40143-77-9	Sodium bis(perfluorohexyl) phosphinate
34455-29-3	Carboxymethyl dimethyl-3-[[3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)sulfonyl]amino]propylammonium hydroxide
358-63-4	Tris(trifluoroethyl) phosphate
163702-07-6	Methyl nonafluorobutyl ether
163702-08-7	Methyl nonafluoro-isobutyl ether
59587-38-1	3,3,4,4,5,5,6,6,7,7,8,8,8-Tridecafluorooctane-1-sulphonate potassium salt
2043-47-2	1 <i>H</i> ,1 <i>H</i> ,2 <i>H</i> ,2 <i>H</i> -Perfluorohexanol or 3,3,4,4,5,5,6,6,6-nonafluorobutyl ethanol*
	2-(6-chloro-1,1,2,2,3,3,4,4,5,5,6,6-dodecafluorohexyloxy)-1,1,2,2-tetrafluoroethane sulfonate
	1,1,2,2,-tetrafluoro-2-(perfluorohexyloxy)-ethane sulfonate
	Perfluorohexane ethyl sulfonyl betaine
756-13-8	Dodecafluoro-2-methylpentan-3-one
40143-76-8	Perfluorohexyl phosphonic acid
	1-chloro-perfluorohexyl phosphonic acid
2144-53-8	2-Propenoic acid, 2-methyl-, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl ester*

Non-fluorinated alternatives (four substances)	
541-02-6	Decamethyl cyclopentasiloxane (D5)*
577-11-7	Di-2-ethylhexyl sulfosuccinate, sodium salt
4261-72-7	Stearamidomethyl pyridine chloride
67674-67-3	(Hydroxyl) Terminated polydimethylsiloxane
Commercial brands (11 brands)	
	Polyfox®
	Emulphor® FAS
	Enthone®
	Zonyl®
	Capstone®
	Nuva®
	Unidyne®
	Rucoguard®
	Oleophobol®
	Asahiguard®
	Solvera®

Class 4: Substances that are not likely to meet all Annex D criteria (b), (c), (d) and (e)

Non-fluorinated alternatives (nine substances)	
CAS No.	Substance
540-97-6	Dodecamethyl cyclohexasiloxane (D6)*
107-46-0	Hexamethyl disiloxane (MM or HMDS)*
107-51-7	Octamethyl trisiloxane (MDM)*
141-62-8	Decamethyl tetrasiloxane (MD2M)*
141-63-9	Dodecamethyl pentasiloxane (MD3M)*
25640-78-2	1-Isopropyl-2-phenyl-benzene
38640-62-9	Diisopropyl-naftalene (DIPN)
35860-37-8	Triisopropyl-naftalene /TIPN)
69009-90-1	Diisopropyl-1,1'-biphenyl
Pesticides (eight substances)	
CAS No.	Substance
52315-07-8	Cypermethrin
52918-63-5	Deltamethrin
95737-68-1	Pyriproxyfen
138261-41-3, 105827-78-9	Imidacloprid
120068-37-3	Fipronil
122-14-5	Fenitrothion
71751-41-2	Abamectine
67485-29-4	Hydramethylnon

*Manufacturing intermediate for alternatives to PFOS.

12. A total of 17 substances were considered unlikely to be persistent organic pollutants. These 17 substances have been reported as alternatives to PFOS, its salts and PFOSF for the following applications: carpets; leather and apparel; textiles and upholstery; coating and coating additives; insecticides for the control of red imported fire ants and termites; and insect bait for the control of leaf-cutting ants from *Atta* spp. and *Acromyrmex* spp. Additional information may be found in document UNEP/POPS/POPRC.10/INF/10.

13. It is important to note that the assessment of the persistent-organic-pollutant characteristics and other hazard indicators of each alternative should not be seen as a comprehensive and detailed assessment of all available information, since only a selected number of databases have been consulted. The fact sheets on which the more detailed assessment of selected alternatives is based provide an analysis on a screening level as to whether or not the assessed substances meet the numerical thresholds in Annex D to the Stockholm Convention, but contain no analysis of monitoring data or other evidence as provided for in Annex D. Accordingly, the failure of a given substance to meet the thresholds should not be taken as evidence that the substance is not a persistent organic pollutant. In addition, substances that, according to the present report, are not likely to meet the criteria on persistence and bioaccumulation in Annex D may still exhibit hazardous characteristics that should be assessed by parties and observers before considering such substances to be suitable alternatives to PFOS, its salts and PFOSF.

B. Information gaps

14. The methodology used for the assessment of alternatives to endosulfan, which was adapted for the current assessment, was developed for a group of chemicals that are all pesticides. Because pesticides are subject to a process of registration and risk assessment in many countries, reliable information about their properties is readily available in a number of public databases. By contrast, the alternatives to PFOS, its salts and PFOSF are mostly industrial chemicals about which much less information is made publicly available. In many cases, relevant information is classified as confidential business information. The low availability of data presented one of the main difficulties in undertaking the assessment of alternatives to PFOS, its salts and PFOSF, as evidenced by the large number of chemicals that the Committee could not assess because of a lack of data.

15. The scarcity of experimental data about alternatives to PFOS, its salts and PFOSF also made it necessary to rely more heavily on modelled data for their assessment than was the case with regard to alternatives to endosulfan. Existing modelling tools provide estimates of bioaccumulation based on log Kow values. Although modelling tools have shown in recent years some improvement in accurately predicting the properties of fluorinated substances, the further development of tools more suited for estimating bioaccumulation and biomagnification values for this group of chemicals should facilitate their assessment.

16. The identification of alternatives to PFOS, its salts and PFOSF in the report is based largely on information provided by parties and observers. Alternatives to PFOS, its salts and PFOSF that are considered not likely to meet all Annex D criteria were identified for several of the applications listed as specific exemptions and acceptable purposes in part I of Annex B to the Convention. Alternatives to PFOS, its salts and PFOSF were not reported for some applications. The report for the evaluation of information on PFOS, its salts and PFOSF being prepared by the Secretariat for consideration by the Conference of the Parties at its seventh meeting contains the most up-to-date information.

17. In assessing each potential alternative to persistent organic pollutants, it should be confirmed that the alternative does not lead to the use of other chemicals that have the properties of persistent organic pollutants as defined by the criteria in Annex D to the Convention (UNEP/POPS/POPRC.5/10/Add.1). Alternatives also need to be technically and economically feasible. The majority of alternatives identified in the report are commercially available, which is an important indicator of technical feasibility (UNEP/POPS/POPRC.5/10/Add.1). The technical and economic feasibility of an alternative are heavily influenced by the specific requirements of the user (a company, an industry or sector) of the alternative and the conditions prevailing in the country where the user operates. In addition, determining the technical feasibility of an alternative requires detailed information about the performance of the alternative for a specific use and the expertise to assess that information. The information provided by parties and others on the technical feasibility, cost-effectiveness, efficacy, availability and accessibility of chemical and non-chemical alternatives to PFOS, its salts and PFOSF did not include enough data to enable a comprehensive assessment of the availability, suitability and implementation of such alternatives. While more information on the identity of potential alternatives to PFOS, its salts and PFOSF and their properties may be available in open sources, obtaining such information was beyond the scope of the assessment and the resources and time available.

18. As pointed out in the guidance on considerations related to alternatives and substitutes for listed persistent organic pollutants and candidate chemicals (UNEP/POPS/POPRC.5/10/Add.1), in identifying and evaluating alternatives to persistent organic pollutants, it is important to describe the specific use and functionality of the persistent organic pollutants in as precise a manner as possible. In the case of PFOS, its salts and PFOSF, the various specific exemptions and acceptable purposes listed in Annex B to the Convention describe broad use categories (for example, fire fighting foams), articles (for example, electric and electronic parts for some colour printers and colour copy machines) and processes (for example, chemically driven oil production) for which PFOS, its salts and PFOSF can have a variety of uses. The lack of information about the precise use and function of PFOS, its salts and PFOSF in these applications makes it difficult to identify corresponding alternatives with a high degree of certainty. Where possible, the functionality and application of alternative substances have been indicated in the table in appendix 1 to the full report.

19. Obtaining precise and detailed information about alternatives to the use of PFOS, its salts and PFOSF and their properties is necessary for the assessment of those alternatives by the Committee. It is recommended that the format for collecting information from parties and others be revised to facilitate the provision of such information by, for example, specifying the functionality of PFOS, its salts and PFOSF under the use categories listed as specific exemptions and acceptable purposes. Parties and others should also be encouraged to provide additional information to support the assessment of alternatives to PFOS, its salts and PFOSF.

POPRC-10/5: Guidance on alternatives to perfluorooctane sulfonic acid, its salts, perfluorooctane sulfonyl fluoride and their related chemicals

The Persistent Organic Pollutants Review Committee

1. *Concludes* that the guidance on alternatives to perfluorooctane sulfonic acid, its salts, perfluorooctane sulfonyl fluoride and their related chemicals¹⁵ should be revised to incorporate pertinent information contained in the report on the assessment of alternatives to perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride,¹⁶ in addition to the information contained in the technical paper on the identification and assessment of alternatives to the use of perfluorooctane sulfonic acid, its salts, perfluorooctane sulfonyl fluoride and their related chemicals in open applications¹⁷ and, as so revised, should be submitted to the Conference of the Parties to the Stockholm Convention at its eighth meeting, in 2017;

2. *Notes* that the inclusion of the information referred to in paragraph 1 of the present decision in the guidance on alternatives to perfluorooctane sulfonic acid, its salts, perfluorooctane sulfonyl fluoride and their related chemicals could enhance parties' understanding of such information and facilitate the work of the Committee in undertaking any future assessments that the Conference of the Parties might request it to undertake as part of the process for the evaluation of perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride pursuant to paragraphs 5 and 6 of part III of Annex B to the Convention;¹⁸

3. *Decides* to establish an intersessional working group to prepare, for consideration and adoption by the Committee at its eleventh meeting, a proposal for preparing a revision of the guidance on alternatives to perfluorooctane sulfonic acid, its salts, perfluorooctane sulfonyl fluoride and their related chemicals that consolidates the information on alternatives to these chemicals in accordance with paragraph 1 of the present decision for consideration by the Committee at its twelfth meeting;

4. *Invites* parties and observers in a position to do so to provide financial support to enable the Secretariat to engage a consultant to support the activities referred to in the present decision.

¹⁵ UNEP/POPS/POPRC.9/INF/11/Rev.1.

¹⁶ UNEP/POPS/POPRC.10/INF/7.

¹⁷ UNEP/POPS/POPRC.8/INF/17/Rev.1.

¹⁸ Decision SC-6/4.

POPRC-10/6: Coordination and collaboration with other scientific subsidiary bodies

The Persistent Organic Pollutants Review Committee

1. *Requests* the joint intersessional working group established at the first joint meeting of the Chemical Review Committee of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and the Persistent Organic Pollutants Review Committee to finalize the draft guidance to assist parties to the Rotterdam Convention and the Chemical Review Committee in their work when a chemical under consideration is a persistent organic pollutant listed under the Stockholm Convention,¹⁹ taking into account any additional comments provided by the committees, and to submit it to the Conference of the Parties for consideration at its seventh meeting;

2. *Requests* the Secretariat to report to the conferences of the parties to the Rotterdam and Stockholm conventions at their seventh meetings on the benefits gained from and any negative impact of the back-to-back meetings of the two committees and on the experience in the organization of their first joint meeting, on the basis of the information gathered and additional comments provided by the committees.

POPRC-10/7: Effective participation in the work of the Persistent Organic Pollutants Review Committee

The Persistent Organic Pollutants Review Committee

1. *Invites* the Secretariat to continue its activities related to supporting effective participation in the work of the Committee, subject to the availability of resources, including:

(a) Organization of webinars, training and online meetings on topics related to the work of the Committee;

(b) Organization of workshops and other face-to-face activities to build the capacities of parties and of training-of-trainers activities, with the support of former and current Committee members, where possible, regional centres, regional networks and the regional offices of the United Nations Environment Programme and the Food and Agriculture Organization of the United Nations;

(c) Facilitation, in cooperation with members of the Committee and the regional centres, of the development of pilot projects to stimulate the active involvement in the work of the Committee of various stakeholders such as the academic community, research institutes, universities and industries;

(d) Development of tools to facilitate the sharing of information and resources to support the effective participation of parties and others in the work of the Committee, including, for example, the development of training modules and videos;

2. *Invites* regional centres to play an active role in providing assistance to facilitate effective participation in the work of the Committee, including through the exchange of information and expert knowledge in their areas of expertise;

3. *Invites* parties and observers in a position to do so to contribute to the work of the Committee and to provide financial support to facilitate the effective participation by parties in that work.

¹⁹ UNEP/POPS/POPRC.10/INF/11.

Annex II

Composition of intersessional working groups (2014–2015)

Working group on decabromodiphenyl ether

Committee members

Mr. Jack Holland (Australia) (**Chair**)
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 Ms. Ana Corado (United States of America)
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 Ms. Caroline Ciuciu (Bromine Science and Environmental Forum)
 Ms. Sylvia Jacobi (Bromine Science and Environmental Forum)
 Ms. Venetia Spencer (Bromine Science and Environmental Forum)
 Mr. Olivier de Matos (Bromine Science and Environmental Forum)
 Mr. Russell LaMotte (Crop Life International)
 Ms. Mariann Lloyd-Smith (International POPs Elimination Network)
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Working group on dicofol

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Working group on short-chained chlorinated paraffins

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Working group on perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride

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 Mr. Pavel Shirokov (Russian Federation)
 Ms. Molefe Salome Margaret (South Africa)
 Ms. Noluzuko Gwayi (South Africa)
 Ms. Katherine Weber (United States of America)
 Ms. Ana Corado (United States of America)
 Ms. Pamela Miller (Alaska Community Action on Toxics)
 Ms. Venetia Spencer (Bromine Science and Environmental Forum)
 Mr. Olivier de Matos (Bromine Science and Environmental Forum)
 Mr. Russell LaMotte (Crop Life International)
 Mr. Richard Holt (FluoroCouncil)
 Mr. Robert Simon (International Council of Chemical Associations)
 Mr. Karluss Thomas (International Council of Chemical Associations)
 Mr. Ralf Maecker (International Council of Chemical Associations)
 Ms. Kathleen Plotzke (International Council of Chemical Associations)
 Ms. Mariann Lloyd-Smith (International POPs Elimination Network)
 Mr. Joseph DiGangi (International POPs Elimination Network)
 Ms. Eva Kruemmel (Inuit Circumpolar Council)
 Mr. Edson Dias Da Silva (Leaf-Cutting Ant Baits Industries Association)
 Mr. Luiz Carlos Forti (Leaf-Cutting Ant Baits Industries Association)
 Ms. Juliana Berti (Leaf-Cutting Ant Baits Industries Association)
 Ms. Sophia Danenberg (United States Council for International Business)
 Ms. Kristen Hendricks (Wood Preservation Canada)

Annex III

Workplan for the preparation of a draft risk profile and a draft risk management evaluation during the period between the tenth and eleventh meetings of the Persistent Organic Pollutant Review Committee

<i>Scheduled date</i>	<i>Interval between activities (weeks)</i>	<i>Activity (for each chemical under review)</i>
30 October 2014	-	The Committee establishes an intersessional working group
7 November 2014	1	The Secretariat requests parties and observers to provide the information specified in Annex E for risk profiles and Annex F for risk management evaluations
5 January 2015	8	Parties and observers submit the information specified in Annex E for risk profiles and Annex F for risk management evaluations to the Secretariat <ul style="list-style-type: none"> The Secretariat sends a reminder to parties and observers regarding the request for information by 5 December 2014
13 February 2015	6	The working group chair and the drafter complete the first draft <ul style="list-style-type: none"> The chair sends the first draft to the Secretariat by 11 February 2015 The Secretariat sends the first draft to the working group by 13 February 2015
27 February 2015	2	The members of the working group submit comments on the first draft to the chair and the drafter
13 March 2015	2	The working group chair and the drafter finish their review of the comments from the working group and complete the second draft and a compilation of responses to those comments <ul style="list-style-type: none"> The chair sends the second draft to the Secretariat by 13 March 2015
20 March 2015	1	The Secretariat distributes the second draft to parties and observers for comments
8 May 2015	7	Parties and observers submit their comments to the Secretariat
5 June 2015	4	The working group chair and the drafter review the comments from parties and observers and complete the third draft and a compilation of responses to those comments <ul style="list-style-type: none"> The chair sends the third draft to the Secretariat by 3 June 2015 The Secretariat sends the third draft to the working group by 5 June 2015
19 June 2015	2	The members of the working group submit their comments on the third draft to the chair and the drafter
3 July 2015	2	The working group chair and the drafter review the comments and complete the fourth (final) draft and a compilation of responses to those comments <ul style="list-style-type: none"> The chair sends the final draft to the Secretariat by 3 July 2015
10 July 2015	1	The Secretariat sends the final draft to the Division of Conference Services, United Nations Office at Nairobi, for editing and translation
4 September 2015	8	The Division of Conference Services completes the editing and translation of the final draft
7 September 2015	<1	The Secretariat distributes the final draft in the six official languages of the United Nations
19–23 October 2015	6	Eleventh meeting of the Committee