FIFTH MEETING OF THE POPS REVIEW COMMITTEE: 12-16 OCTOBER 2009

The fifth meeting of the Persistent Organic Pollutants Review Committee (POPRC-5) of the Stockholm Convention on Persistent Organic Pollutants (POPs) took place from 12-16 October 2009 in Geneva, Switzerland. Over 117 participants attended the meeting, including 29 of 31 Committee members, 52 government and party observers, one intergovernmental organization, 30 non-governmental organizations, and five invited experts.

POPRC-5 addressed several operational issues, including, inter alia: work programmes on new POPs; substitutions and alternatives; toxicological interactions; and activities undertaken for effective participation in the work of the Committee. The POPRC also considered the draft risk profiles for endosulfan and short-chained chlorinated paraffins (SCCPs), and discussed whether hexabromocyclododecane (HBCD) met the Annex D criteria for listing under the Stockholm Convention.

OPENING OF THE MEETING

On Monday, 12 October 2009, Donald Cooper, Executive Secretary of the Stockholm Convention, welcomed participants to POPRC-5. Likening the Committee to a family, Cooper noted that “in family we have disagreements, changes of opinion, and established beliefs,” and emphasized that the POPRC can have serious, emotional debate without affecting participants’ trust in one another. Cooper lauded the hard work of the Committee, which led to the addition of nine new chemicals to the annexes of the Convention at the fourth meeting of the Conference of Parties to the Stockholm Convention (COP-4), and stressed that the COP’s consensual decision to list the chemicals in spite of extensive debate “restored the world’s faith that scientific evaluation can still be the basis for decision-making in environmental treaties.”

Participants adopted the provisional agenda (UNEP/POPS/POPRC.5/1) and the proposed organization of work (UNEP/POPS/POPRC.5/INF/2). The Committee met in plenary throughout the week, and contact groups, open to observers, and drafting groups, limited to POPRC members, convened on a variety of topics. This summary of the meeting is organized according to the agenda.

REVIEW OF THE OUTCOMES OF COP-4

On Monday, the Secretariat reviewed the outcomes of COP-4 relevant to the work of the POPRC (UNEP/POPS/POPRC.5/INF/3), including, inter alia: listing the nine new chemicals recommended by the POPRC, rotation of membership, a work programme on new POPs, and the proposed conflicts-of-interest procedure.

OPERATIONAL ISSUES

ROTATION OF MEMBERSHIP IN MAY 2010: The Secretariat noted that the COP confirmed the appointments of the new members whose terms started in 2008, and also adopted the list of 17 parties to nominate Committee members for terms beginning in May 2010 (UNEP/POPS/POPRC.5/INF/4). POPRC Chair Reiner Arndt (Germany) underscored that as current members complete their terms, other members will be asked to take over responsibilities such as chairing intersessional working groups.

OPERATING PROCEDURES: The Secretariat noted that COP-4 endorsed the POPRC’s proposed conflicts-of-interest procedure, which included a revised declaration form and plans for a closed-door discussion of relevant concerns prior to each POPRC meeting. These procedures were implemented for the first time at POPRC-5. All but two members were present at the Monday morning meeting, and no conflicts of interest were determined.

Highlighting the Committee’s extensive discussions on procedural issues during POPRC-4 and the related concerns raised at COP-4, Chair Arndt requested clarification from the Secretariat on the POPRC’s rules of procedure. Masa Nagai, UNEP Legal Adviser to the Stockholm Convention, informed the Committee that the basis for its decision-making is spelled out in Article 19.6(c) of the Convention, which requires the Committee to make every effort to make decisions by consensus and states that if consensus cannot be reached, decisions may be adopted by a two-thirds majority vote.

India stated its belief that decisions should be taken by consensus, noted that it had raised this issue at COP-4 but was not aware of any decision, and asked for a second opinion to that of the Legal Adviser. Nagai explained that a second interpretation of the Convention would require a consensual decision on the part of the COP, and that because several parties supported the POPRC’s decision-making process while only one country had objected, consensus had not been reached and the Committee would continue to operate under the existing interpretation of the rules of procedure.

WORK PROGRAMMES ON NEW POPS: On Monday, the Secretariat introduced the work programmes on new POPs (UNEP/POPS/POPRC.5/9 and UNEP/POPS/POPRC.5/INF/19), emphasizing that these could be seen as a message from the COP to the POPRC to expand its mandate from the simple review of chemicals for POPs characteristics to consideration of the implications of listing the substances. She explained that during POPRC-5 the Committee would need to develop the terms of reference for a technical paper on assessment of the possible health and environmental impacts of recycling of products containing brominated diphenyl ethers (BDEs), perfluorooctane sulfonate (PFOS), its salts, and other listed chemicals. She
noted that the Secretariat would collect information from parties on stockpiles and contaminated sites, and provided a draft questionnaire for the Committee’s comments.

Committee members discussed the elements of the work programme during plenary on Monday, with several raising concerns about their ability to meet the July 2010 deadline, and others emphasizing that the level of detail in the questionnaire would pose a problem both in terms of time and availability of information. A contact group, chaired by Bettina Hitzfeld (Switzerland), met on Monday and Tuesday to discuss these issues.

On Wednesday, Hitzfeld reported that the group had had constructive technical discussions that had led to drafting of a decision containing a paragraph on the questionnaire, draft terms of reference, and a paragraph on pentachlorobenzene (PeCB). She introduced one of two documents that will come out of the work programme on POPs, noting that while the group had provided input on the questionnaire, it fell within the mandate of the Secretariat and would be circulated separately. Hitzfeld reviewed the draft decision document submitted by the working group, which delineated the draft terms of reference for the technical paper on penta- and octaBDEs, including an outline for the paper and the requirements for the consultant (UNEP/POPS/POPRC.5/CRP.2). Chair Arndt noted that the document would not be finalized until later, in order to give participants the chance to read and comment on it.

In ensuing discussion, an observer from Colombia raised concerns about recycling and export of plastic as part of waste management in developing countries. Chair Arndt explained that this issue exceeds the mandate of the technical paper, but noted that clarification is needed on whether these wastes fall under any category of the Basel Convention. He suggested that POPRC-6 could consider recommending that the COP investigate how wastes are regulated. The POPRC continued to discuss this issue until the close of plenary, and took it up again on Thursday morning.

Syria expressed concern about the way recycled products are defined, highlighting the difficulties developing countries face in determining which articles contain diphenyl ethers. Chair Arndt emphasized that this is also a problem for developed countries, and said the first step to a solution is to collect information via the questionnaire, conduct the study, and make a recommendation to the COP.

An observer from India highlighted the need for clarification on the definition of “article,” and Hitzfeld noted that the contact group had struggled with this issue. Chair Arndt recommended that the intersessional working group explore this in conjunction with the consultant. No further comments were made on the draft terms of reference, and the Committee decided to adopt the decision with minor amendments.

**Final Decision:** In the final decision on the work programmes on new POPs (UNEP/POPS/POPRC.5/CRP.2), the POPRC:

- invites the Secretariat to collect from parties and observers information outlined in decision SC-4/19 using a revised version of the questionnaire for submitting information on new POPs;
- requests the Secretariat to prepare a summary of the information collected for consideration at POPRC-6;
- adopts the revised outline for developing a technical paper on BDEs;
- requests the Secretariat to commission the technical paper on BDEs based on this revised outline;
- recommends to the Toolkit Expert Group that it consider reviewing possible implications of listing PeCB with regard to an inventory of sources and an estimation of releases of unintentional POPs; and
- takes note of the activities on lindane proposed in the note by the Secretariat on draft questionnaires and terms of reference for the work programmes on new POPs.

On Friday afternoon, Switzerland introduced the revised draft questionnaire for collecting information on newly listed POPs (UNEP/POPS/POPRC.5/CRP.11). Togo noted that without technical support collecting data would be difficult and, supported by Morocco, asked if the questionnaire could be translated into all six UN languages. Chair Arndt noted that responding to the questionnaire is voluntary, and therefore would not be covered by the technical support made available by COP-4 for national implementation plans. The Secretariat explained that the document will be available in English, French and Spanish, and said the possibility of translating the document into all six languages will depend on the timeframe. As the POPRC was simply asked to provide comments on the questionnaire, no decision was needed.

**INTERSESSIONAL WORK ON SUBSTITUTION AND ALTERNATIVES:** On Tuesday, Thomas Yormah (Sierra Leone) outlined the tasks of the intersessional working group on substitution and alternatives, including: revising the draft guidance on pentaBDE; considering the modalities for producing a document on perfluorooctane sulfonate (PFOS) alternatives; and drafting text describing the issues associated with alternatives, indicating considerations related to persistence, bioaccumulation, long-range environmental transport (LRET), and toxicity (UNEP/POPS/POPRC.5/6). Yormah noted that the guidance on flame retardant alternatives had been made available to COP-4 (UNEP/POPS/COP.4/INF/24), and is ready for publication. Working with a consultant, the group also prepared an annotated outline for guidance on PFOS alternatives (UNEP/POPS/POPRC.5/INF/10). Yormah underscored the need to consider whether language in Article 9, which encourages parties to exchange information about POPs alternatives, and Article 11, which encourages parties to undertake research on developing alternatives to POPs and POP candidates, is robust enough to underpin the requirements of the substitution regime.

Allan Astrup Jensen, FORCE Technology, outlined the guidance on PFOS, noting that the document will be revised based on the advice received at this meeting, and requested information from parties and observers on the effects of alternatives that are already in use.

Yormah highlighted the International POPs Elimination Network’s (IPEN) suggestion that labeling products containing PFOS in order to give consumers a choice could facilitate substitution. Chair Arndt noted that knowing which chemicals are incorporated into products is a problem of information, and suggested this issue could be considered in parallel by the contact group on the work programmes on new POPs.

Morocco raised concerns about the affordability of alternatives, particularly for developing countries. The Secretariat noted that a representative of the Global Environment Facility (GEF) was present and could be invited to participate in the group’s discussion.

Canada emphasized the importance of considering the safety of alternatives for human health and the environment, and suggested that any national assessments of alternatives should be noted in the general guidance and specific information.
On Friday, Yormah reported that his group had completed all three of its tasks and presented: a draft decision document (UNEP/POPS/POPRC.5/CRP.9), which includes a workplan for the next intersessional period; a summary of the outline of a guidance document on alternatives to PFOS and its derivatives (UNEP/POPS/POPRC.5/CRP.9/Add.1); and general guidance on alternatives and substitutes for POPs (UNEP/POPS/POPRC.5/CRP.9/Add.2).

**Final Decision:** In its decision (UNEP/POPS/POPRC.5/CRP.9), the POPRC:
- requests the intersessional working group to continue developing guidance on PFOS alternatives based on the revised annotated outline;
- endorses the revised general guidance on alternatives and substitutes for POPs;
- endorses the guidance on flame-retardant alternatives to pentaBDE and invites parties to make use of the document; and
- agrees to the workplan for the intersessional working group as set out in the decision document.

**TOXIC INTERACTIONS BETWEEN POPS:** On Tuesday, Hindrik Bouwman (South Africa) introduced the work of the intersessional working group on toxic interactions (UNEP/POPS/POPRC.5/7 and UNEP/POPS/POPRC.5/INF/20), emphasizing that while the POPRC may have to consider interaction among compounds in future discussions, its current task is to keep abreast of relevant scientific research.

Richard Brown, World Health Organization (WHO), presented the WHO/International Programme on Chemical Safety (IPCS) framework for risk assessment of combined exposures to multiple chemicals. Emphasizing that the framework aims to harmonize global approaches to chemical risk assessment, Brown invited members of the Committee to submit comments on the framework via the Secretariat, and suggested that the POPRC may wish to contribute case studies to the process.

An observer from IPEN underscored the importance of work on toxic interactions and highlighted the need to develop guidance on low-dose exposures, particularly in developing countries.

Sweden expressed support for action that would keep the issue of toxic interactions alive, emphasizing that the Committee is expected to address the issue.

Bouwman supported Brown’s invitation, highlighting the opportunity to establish synergy with WHO and IPCS, and suggested that the POPRC consider developing two case studies. A small drafting group was convened Wednesday evening to formalize the proposal.

On Thursday afternoon, Ivan Holoubek (Czech Republic) reviewed the draft decision on further work on toxicological interactions to be undertaken by the POPRC (UNEP/POPS/POPRC.5/CRP.6), and recommended that Fransisca Katagira (Tanzania) take over outgoing member Bouwman’s responsibilities as co-chair of the intersessional working group. On timing, Bouwman explained that because the WHO/IPCS framework is not yet finalized, the working group is likely to report on its progress at POPRC-6 and present outcomes at POPRC-7.

Environmental Health Fund (EHF) emphasized that the need for more data on the toxicity of SCCPs would warrant choosing those substances for the case studies.

Bouwman reiterated that the objective of this exercise is to see if this framework works, and that selection of final case studies will be based on the availability of properly referenced data sources. Chair Arndt suggested leaving the discussion on whether it is better to choose chemicals with the same or different modes of action to the intersessional working group, and the Committee adopted the draft decision with no modifications.

**Final Decision:** In its final decision (UNEP/POPS/POPRC.5/CRP.6), the POPRC:
- invites members and observers to provide comments on the draft framework for risk assessment of combined exposures to multiple chemicals to the Secretariat by 31 October 2009;
- requests the Secretariat to transmit the comments received to the WHO/IPCS;
- invites the Secretariat to investigate the strengthening of the linkage between the POPRC and the WHO/IPCS and to report to the Committee on its efforts in this area;
- requests the intersessional working group on toxicological interactions to undertake work described in the annex to the present decision;
- requests the co-chairs of the intersessional working group and the Secretariat to identify and invite experts to develop the two case studies; and
- requests the Secretariat to identify resources needed to undertake the activities contemplated by the present decision.

**EFFECTIVE PARTICIPATION OF PARTIES IN THE WORK OF POPRC:** On Wednesday, Mario Yarto (Mexico) reported on activities undertaken for effective participation, including: publication of the handbook on effective participation in French, Spanish and English; development of a “pocket guide” version of the handbook, to be published in all six UN languages (UNEP/POPS/POPRC.5/5); comments on the pocket guide (UNEP/POPS/POPRC.5/INF/12); preparation of explanatory notes to provide information on submissions for Annexes E and F of the Convention (UNEP/POPS/POPRC.5/INF/8); and implementation of the methodology via regional workshops held in Jordan and the Czech Republic, as well as national workshops in Cambodia and the Philippines (UNEP/POPS/POPRC.5/INF/6).

Jordan, supported by an observer from Egypt, called for the handbook to be published in all six UN languages. An observer from the US expressed support for the pocket guide, underscoring its potential usefulness in the US and globally as a guide to the review process. An observer from China asked if the handbook could include possible solutions to the issues it outlines, and suggested that the pocket guide include clearer instructions on the POPs review process. He also expressed hope that criteria similar to that of Annex D could be created for Annexes E and F, emphasizing that replacing POPs with toxic or inadequate substances would be harmful to implementation of the Convention.

The member from China supported the Chinese observer’s comments, underscoring the difficulties associated with using alternative substances that have not been fully evaluated, and suggested that parties that nominate chemicals for review should provide information about alternative technologies.
On Thursday, Yarto reported that the drafting group met Wednesday evening and discussed updating the handbook to include general information on emerging issues such as metabolites, isomers and precursors. Noting that no additional comments had been made on Annexes E and F, Yarto explained that the group proposes to update the handbook during the intersessional period, and will also make recommendations on activities in addition to workshops to increase effective participation in the POPRC.

During the ensuing discussion, Ghana asked if some of the activities that had been carried out in Cambodia and other places could be extended to Africa and other parts of the world. Chair Arndt suggested that a second ad hoc intersessional working group could be convened to work specifically on the issues highlighted by China, but after a short break, China informed the Committee that he believed that this is not the right time to supplement the handbook on these technical issues, and that a second intersessional working group was unnecessary.

**Final Decision:** In the final decision (UNEP/POPS/POPRC.5/CRP.5), the POPRC:
- endorses the pocket guide, as amended, and invites parties to consider using it;
- endorses the explanatory notes to the forms for the submission of information specified in Annexes E and F, and requests the Secretariat to use them;
- invites the Secretariat to continue its activities related to providing support for effective participation in the POPRC, subject to the availability of resources, including translation of the pocket guide and the handbook into the six UN languages and collaboration with existing initiatives for strengthening national structures for the collection of information;
- invites parties and observers in a position to do so to contribute to the POPRC’s work and to provide financial support for the implementation of activities; and
- requests the intersessional working group to update the handbook on effective participation on the basis of comments received.

**WORKPLAN FOR THE INTERSESSIONAL PERIOD BETWEEN POPRC-5 AND -6:** On Wednesday, the Secretariat introduced the draft timelines for the intersessional work on draft risk profiles, draft risk management evaluations, and the work related to newly listed POPs (UNEP/POPS/POPRC.5/CRP.8), noting that they could be finalized only upon application to actual cases.

Citing difficulties encountered in the work on endosulfan, France proposed to increase transparency by developing a document containing responses to comments to be distributed at each stage of work, which would explain why some comments were taken up and others were not. No members objected, so Chair Arndt asked that agreement to the proposal be reflected in the meeting report.

On Friday morning, the Secretariat introduced the revised draft workplans (UNEP/POPS/POPRC.5/CRP.8). Section A, on draft risk profiles, was agreed. Section C, on the workplan for work on newly listed POPs, was agreed upon with the modification noted by Switzerland that the work programme contact group preferred to see an advance draft of the technical paper in March rather than June 2010. On Friday afternoon, Section B, on draft risk management evaluations, was agreed upon with the modification that the date for a first draft and compilation of responses be changed from 2 March to 8 June 2010.

**CONSIDERATION OF DRAFT RISK PROFILES**

POPRC-5 considered draft risk profiles for two substances: endosulfan and short-chained chlorinated paraffins (SCCPs).

**ENDOSULFAN:** On Monday, Chair Arndt asked Ricardo Barra (Spain) to present the draft risk profile on endosulfan (UNEP/POPS/POPRC.5/3, UNEP/POPS/POPRC.5/INF/9 and UNEP/POPS/POPRC.5/INF/11).

Prior to Barra’s presentation, India raised concerns about the procedural validity of considering the draft risk profile for the substance, emphasizing that in the absence of the COP’s approval of the vote taken at POPRC-4 to move endosulfan to the risk profile stage, the POPRC’s decision is “null and void.” Nagai reiterated that the Committee’s decision-making process is governed by Article 19.6(c). Chair Arndt explained that he had exhausted all efforts to achieve consensus at POPRC-4, and that the members present and voting at that meeting had voted in consensus to move to the risk profile stage. China expressed support for India, emphasizing that the Convention and its rules of procedure are not very clear and that continuing to resort to voting is dangerous and harmful to the Convention.

Chair Arndt reminded the Committee that its actions would be reviewed by the COP, and said that in the absence of guidance from the COP, there was no alternative to continuing the meeting under the current rules of procedure. India agreed to participate under protest, emphasizing that the best course of action would be to postpone controversial issues.

In the absence of support from other Committee members for this proposal, the meeting continued with Barra’s presentation of the draft risk profile, which concluded that, as a result of long-range environmental transport, endosulfan is likely to lead to significant adverse effects on human health and the environment, such that global action is warranted. Barra noted that while endosulfan has been banned in 60 countries, it is still widely produced and used as an insecticide.

Martin Scheringer, Swiss Federal Institute of Technology, Zurich, presented the findings of a study evaluating the persistence and potential for LRET of endosulfan found in the global environment. Scheringer concluded that it is possible to model the environmental fate of alpha- and beta-endosulfan and sulfate, and that using the model delineated in his presentation allows for consistency checks of emissions, chemical property data, and field data.

A contact group chaired by Barra convened on Monday night and Tuesday morning to discuss remaining questions about the validity of the evidence presented in the draft risk profile and the value of the model presented by Scheringer.

On Wednesday, Barra reported that after an hour and a half of discussions, a small group introduced modifications and alterations to the draft risk profile, and subsequent discussion delved further into issues such as bioaccumulation and LRET. Barra explained that a drafting group was making changes to the document, and that a draft decision document was expected to be finalized by Wednesday night. Chair Arndt expressed concern about a possible lack of clarity about the POPRC’s task, and outlined the principles by which scientific review is conducted, delineated the distinct levels of evaluation required at each stage of the POPRC’s review process, and encouraged members of the drafting group to concentrate on reaching a conclusion.

On Thursday, Barra reported that a drafting group met Wednesday evening and produced a draft decision document with some bracketed text (UNEP/POPS/POPRC.5/CRP.7). The POPRC reviewed each section of bracketed text in the document.
working only in English when translation ended at 6:10 pm. The Committee reached agreement on some points but left many others in brackets for further discussion in Friday’s plenary session.

On Friday morning, Barra introduced a revised draft decision document, which incorporated the changes agreed upon in Thursday’s plenary session, including bracketed text that reflected the two opposing conclusions reached by members of the drafting group (UNEP/POPS/POPRC.5/CRP.7/Rev.1): Option 1, which concluded that endosulfan fulfills the Annex E criteria and should proceed to Annex F, and Option 2, which concluded that Annex E criteria were not met, due to the existence of significant gaps in data, particularly on impacts on human health and the environment.

Before proceeding, Chair Arndt explained that his role is to facilitate discussion and decision-making, and emphasized the importance of achieving consensus. He highlighted the transparency and openness of the review process, emphasizing that anyone could submit comments and information at several stages and that this issue had been discussed in plenary, contact or drafting groups each day during the meeting. Arndt noted that due to disagreement about some evidence, several points in the draft risk profile indicated that one or a few members challenged the data while all others were of the opinion that the data were valid.

Barra expressed frustration with the process, noting that India had walked out of the drafting group because he felt his information was not being included in the profile, but said that he was “at ease” as Chair because the document incorporated all relevant evidence and reflected the divergent viewpoints of the group.

In response, India emphasized that a number of documents submitted by the Indian delegation had not been taken on board, underscored the need to reach consensus, questioned the transparency of the process, and stated his preference for Option 2. Sierra Leone, supported by Japan and Ghana, called on the Committee to keep the issue on the table for another year in order to fill data gaps. Barra explained that much of the data submitted by India had been analyzed in the Annex D phase, and emphasized that the document reflected many of India’s submissions.

South Africa expressed disappointment that India had left the drafting group in spite of efforts to convince him to stay, and emphasized that India’s comments and submissions had been taken on board, as evidenced by the inclusion of Option 2 in the document, which was drafted by the rest of the group after India left. France noted that while more data could be gathered on genotoxicity and persistence, such information would have little effect on the risk profile, which was already solid. China expressed concerns about the accuracy of references in the document and the “borderline nature” of some of the data, and called on the Committee to avoid being too hasty in its decision-making.

Switzerland supported Option 1, noting that the effects of endosulfan have long been known and that Article 8.7(a) states that lack of full scientific certainty shall not prevent a chemical from proceeding. Australia supported Switzerland’s statement, emphasized that Option 2 had been included as a courtesy to India, and suggested that voting may be the only way to give expression to the view of the vast majority of members.

After further discussion about data gaps and the appropriate method of decision-making, Chair Arndt proposed that the POPRC postpone further consideration of endosulfan until POPRC-6. France emphasized that postponing the discussion until POPRC-6 would not be helpful and expressed a preference for a decision to be made during POPRC-5. Burkina Faso, Thailand, Republic of Korea, Honduras, and Togo expressed support for Option 1, and after some discussion of possible ways forward, China called for a ten-minute break to allow members to clear their heads.

Upon resumption of the meeting, Chair Arndt suggested that the members may be able to reach consensus if they agreed to take Option 1, with the addition of wording about lack of full scientific certainty and an agreement to collect and discuss data on toxicity and eco-toxicity. Japan, Thailand, Mauritius, Jordan, and Morocco expressed support for the Chair’s proposal, and Switzerland noted that a similar action had been taken in the case of chlordecone at POPRC-2.

India objected to this proposal, questioning the legal basis for filling data gaps in Annex F, and asked the Secretariat to explain Article 8.7(a). After clarification from the Legal Adviser, India continued to object to the proposal and called for endosulfan to remain in the Annex E phase while more data is gathered. Chair Arndt noted that consensus was being blocked by one member of the Committee, called for a five-minute break, and afterward announced that the India’s position had not changed.

Thailand, expressing his reluctance to take this action, called for a vote and asked for support. India expressed his opposition to the advice of the Legal Advisor on Article 8.7(a), and, referring to Article 19.6(c), questioned whether all efforts to achieve consensus has been exhausted.

Chair Arndt asked for a show of hands to decide whether a vote should be taken. Twenty members voted in favor, four voted against, and two abstained, so the Committee proceeded with a vote on the proposal made by Thailand to move endosulfan to the Annex F phase, while inviting parties to submit additional information on adverse effects on human health.

Twenty-two members voted in favor of the proposal, one voted against, and three abstained.

India, who voted, emphasized that he is against voting and asked that a note of protest be included in the meeting report. The Secretariat clarified that while written statements cannot be attached to the meeting report as addendums, the views in his statement will be captured in the report.

**Final Decision:** In its decision (UNEP/POPS/POPRC.5/CRP.13), the POPRC:
- adopts the risk profile for endosulfan;
- invites the ad hoc working group on endosulfan to explore any further information on adverse human health effects and, if appropriate, revise the risk profile for the consideration of POPRC-6;
- considers that, although information on adverse human health effects is not fully conclusive, there is evidence suggesting the relevance of some effects on humans;
- decides that endosulfan is likely, as a result of LRET, to lead to significant adverse human health and environmental effects such that global action is warranted;
- decides to establish an ad hoc working group to prepare a risk management evaluation in accordance with Annex F of the convention; and
- invites parties and observers to submit to the Secretariat the information specified in Annex F before 8 January 2010.
**SCCPs:** On Tuesday, Mohammad Aslam Yadallee (Mauritius) presented the draft risk profile on short-chained chlorinated paraffins (SCCPs) (UNEP/POPS/POPRC.5/2 and UNEP/POPS/POPRC.5/INF/18). He noted that the draft risk profile had been discussed at POPRC-3 and POPRC-4. The issue was deferred to POPRC-4 when members requested the ad hoc intersessional working group to collect additional information on toxicity and LRET, and was subsequently deferred to POPRC-5 to allow the Committee to invite experts to aid in discussions. No intersessional work on this issue took place between POPRC-4 and 5. Yadallee reviewed the information in the draft risk profile, which concludes that empirical and model data indicate that SCCPs are persistent, bioaccumulative and toxic, particularly to aquatic organisms, and undergo LRET. Emphasizing that the risk profile provides a balanced presentation of information, including discussion of exposures in local and remote areas, Yadallee noted that key unresolved issues include: chemical identity, interpretation of toxicity information with regard to potential for ecological and human health effects, and whether there is enough evidence to conclude that SCCPs warrant global action.

Salah Soliman, Alexandria University and Egyptian State Ministry of Environmental Affairs, discussed the effects of SCCPs on human health, and highlighted gaps in information about quantitative exposure to the chemicals.

India supported Soliman’s concerns about gaps in data on human health effects of SCCPs, and stated that SCCPs do not warrant further action under the Convention.

Japan introduced additional information on SCCPs in the form of a bioconcentration study of a chlorinated paraffin (C=13) (UNEP/POPS/POPRC.5/INF/23), which indicates that the bioconcentration factor of this paraffin is below the threshold set by the Convention, and asked that the data be incorporated into the draft risk profile. Canada thanked Japan for its contribution, noting that it confirmed some of existing data on bioconcentration factors.

Chair Arndt informed the Committee that the current draft risk profile was bracket-free, except for the conclusion, and explained that a decision could be taken after the document had been updated to incorporate the information from Japan. He then presented the Committee with the options given by the Convention for proceeding: reaching consensus or voting. Without going into detail, he also highlighted the possibility of a third option designed to give the Committee time and information that might compensate for lack of full scientific certainty.

China expressed its belief that SCCPs do not meet Annex E criteria and that precautionary action is unnecessary. He emphasized that while China does not produce SCCPs, it does produce medium- and long-chained CPs, and explained that China investigated the risks of SCCPs out of concern that any CPs could contain SCCPs and have contamination effects. He reiterated his opposition to voting, and underscored the need for consensus-based decision-making.

India reiterated the need for conclusive scientific evidence, and emphasized that concentrations are so low as to be insignificant. He raised concerns about voting, emphasizing that proceeding with a vote would be an insult to the COP.

France asked China to clarify his country’s production and usage of SCCPs. China emphasized that his country produces medium- and long-chained CPs, and said he did not have information about usage of SCCPs.

Canada expressed support for consideration of the Chair’s proposal of a third option. Sierra Leone called for consideration of any option that would allow the POPRC to avoid voting. The Secretariat outlined the possibility of keeping SCCPs at the Annex E stage, while, without prejudice to future decisions, asking the Secretariat to look at the risk management and risk reduction measures and to present this information at POPRC-6. She explained that this information, which would be added to the risk profile, would support decision-making and possibly allow the group to reach consensus.

India and Sierra Leone expressed support for this option, while Ecuador raised concerns about the legal basis for the proposal. Chair Arndt asked the Committee to consider this proposal overnight so members could discuss it, and any related ideas, in plenary on Wednesday.

On Wednesday, Chair Arndt clarified his proposed “third option” for action on SCCPs, explaining that an intersessional working group of Committee members and observers would collect information on toxicology and eco-toxicology, as well as any risk reduction measures already implemented on a national level. France and Switzerland expressed concern about the proposal and its possible consequences for future action on SCCPs, and asked for time to consider the idea and consult with others. Ecuador reiterated his concern about the legal basis for this option, and asked the Legal Adviser to explain how it is justified in the Convention. In the absence of objections from members, Chair Arndt asked Mauritius and Canada to join him in a “Friends of the Chair” group to develop the third option for further discussion.

On Thursday morning, Yadallee reported that the contact group met on Wednesday evening to discuss the next steps on SCCPs, and outlined the possible information that could be sought from parties and observers. Yadallee noted that some members expressed concern about the process itself. On Thursday afternoon, Yadallee introduced the revision of the draft risk profile on SCCPs (UNEP/POPS/POPRC.5/CRP.3) and the draft proposal on next steps for SCCPs (UNEP/POPS/POPRC.5/CRP.4).

Thailand, supported by France and Switzerland, expressed concern about requesting additional information on risk reduction measures, environmental releases, and the extent of substitution practices, emphasizing that these issues should be dealt with at the risk management phase of evaluation. Ecuador underscored the likely availability of additional information on SCCPs in the near future and suggested deferring the issue to POPRC-6.

IPEN urged Committee members to address the data gap on toxicity and eco-toxicity by convincing their governments to actively generate the data needed to help the POPRC in its deliberations. India and Japan supported the proposal, emphasizing the value of risk reduction information for producers and users of SCCPs.

Explaining that consensus would be necessary to proceed with the proposal, Chair Arndt asked for an informal show of hands to get a sense of the members’ views. The Committee was not in consensus, as it revealed that twelve members would favor and nine would oppose the proposal, while eight would abstain.

Ecuador again proposed keeping SCCPs in the Annex E phase for further consideration at POPRC-6. The Committee agreed, with the provision that parties and observers would be invited to provide additional information on: production data; inventories...
of uses; information on releases; and additional information that could assist with evaluation, including on toxicity and ecotoxicity and on national and international risk evaluations.

**CONSIDERATION OF CHEMICALS PROPOSED FOR INCLUSION IN ANNEXES A, B, OR C**

**HEXABROMOCYCLODODECANE (HBCD):** On Tuesday, Georg Becher, Norwegian Institute of Public Health, introduced a proposal to list HBCD in Annex A of the Stockholm Convention. Becher explained that HBCD is used primarily in expanded and extruded polystyrene for thermal insulation foams, is mainly used in Europe, and is subject to increasing demand. Noting that environmental monitoring has established persistence, Becher reviewed a number of studies indicating that HBCD is bioaccumulative, an environmental and potential human toxicant, and subject to LRET, and concluded that HBCD meets the Annex D screening criteria.

Gregg Tomy, Department of Fisheries and Oceans Canada, presented information on persistence. Using Annex D as a guide, Tomy explained that HBCD does not meet the criteria for persistence in soil or sediment, but does meet the criteria in water. Tomy highlighted a need to consider persistence in food webs, and noted that the presence of monohydroxilated HBCD in seagull eggs and harbor seals indicates the persistence of HBCD and its metabolites.

Japan offered to provide data indicating that HBCD has a high bioconcentration factor. India expressed concerns about variation in data on persistence, lack of validation of the model used by Tomy, and the conclusion that HBCD has adverse effects on human health.

On Wednesday, Ian Rae (Australia) introduced the draft decision on HBCD (UNEP/POPS/POPRC.5/CRP.1) and outlined the evidence that the substance meets all four of the Annex D screening criteria. The Committee reviewed the document, and several members asked for clarification about various aspects of the data on persistence.

Rae noted that if a chemical bioaccumulates, it must be persistent. Canada emphasized that the trophic food chains under consideration are indications of what is happening in the environment, that transfer from one trophic level to another in the food chain requires not only bioconcentration but also bioaccumulation, and subjectivity to trophic transfers requires a great deal of persistence. China expressed concern about the scientific practices and transparency of the Committee, and said that although there are some uncertainties, he could accept that the substance meets the Annex D criteria.

India expressed doubts about the evidence for persistence and adverse effects, and said the data gap needed to be bridged. Jordan highlighted the work resulting from addition of the nine new POPs to the Convention at COP-4, and emphasized that it would be it would be useful to be less hasty in introducing more new chemicals. Sierra Leone expressed concern that the Committee feels that the moment a substance passes the Annex D criteria.

In its decision (POPS/POPRC.5/CRP.1), the POPRC: • decides the screening criteria have been fulfilled; • decides to establish an ad hoc working group to review the proposal and prepare a draft risk profile; and • invites parties and observers to submit to the Secretariat the information specified in Annex E before 8 January 2010.