A Brief Analysis of POPRC-10

During the 1960s and 1970s, the use of chemicals and pesticides in industry and agriculture increased dramatically. In particular, a category of chemicals known as persistent organic pollutants (POPs) attracted international attention due to a growing body of scientific evidence indicating that exposure to very low doses of POPs can lead to cancer, damage to the central and peripheral nervous systems, diseases of the immune system, reproductive disorders and interference with normal infant and child development. POPs are chemical substances that persist in the environment, bioaccumulate in living organisms, and can have adverse effects on human health and the environment. With further evidence of the long-range environmental transport (LRET) of these substances to regions where they have never been used or produced, and the consequent threats they pose to the global environment, the international community called for urgent global action to reduce and eliminate their release into the environment.

In March 1995, the United Nations Environment Programme’s Governing Council (UNEP GC) adopted Decision 18/32 inviting the Inter-Organization Programme on the Sound Management of Chemicals, the Intergovernmental Forum on Chemical Safety (IFCS) and the International Programme on Chemical Safety to initiate an assessment process regarding a list of 12 POPs. The decision also invited IFCS to develop recommendations on international action on POPs. The IFCS Ad Hoc Working Group on POPs concluded that sufficient information existed to demonstrate the need for international action to minimize risks from the 12 POPs, including a global legally-binding instrument. The IFCS forwarded a recommendation to the UNEP GC and the World Health Assembly (WHA) that immediate international action be taken on these substances.

**A BRIEF HISTORY OF THE STOCKHOLM CONVENTION AND THE POPs REVIEW COMMITTEE**

During the 1960s and 1970s, the use of chemicals and pesticides in industry and agriculture increased dramatically. In particular, a category of chemicals known as persistent organic pollutants (POPs) attracted international attention due to a growing body of scientific evidence indicating that exposure to very low doses of POPs can lead to cancer, damage to the central and peripheral nervous systems, diseases of the immune system, reproductive disorders and interference with normal infant and child development. POPs are chemical substances that persist in the environment, bioaccumulate in living organisms, and can have adverse effects on human health and the environment.
The POPRC has met annually since its establishment. The first eight meetings of the POPRC were held in Geneva, Switzerland.

**POPRC-1:** The first meeting of the POPRC (POPRC-1) was held from 7-11 November 2005. The Committee considered five chemicals proposed for inclusion in the Convention and agreed that intersessional working groups would develop risk profiles on these chemicals, to be assessed at POPRC-2. POPRC-1 also reviewed the Committee’s role and mandate and took decisions on several operational issues, including developing procedures for handling confidential information, work plans for intersessional activities, and criteria and procedures for inviting additional experts.

**POPRC-2:** POPRC-2 was held from 6-10 November 2006. The Committee adopted the risk profiles for commercial pentabromodiphenyl ether (c-pentaBDE), chlordecone, hexabromobiphenyl (HBB), lindane, and perfluorooctane sulfonic acid (PFOS), and agreed that intersessional working groups would develop draft risk management evaluations for these chemicals, to be assessed by POPRC-3. The Committee also agreed to consider five newly proposed chemicals for inclusion in the Convention: alpha hexachlorocyclohexane (alphaHCH), beta hexachlorocyclohexane (betaHCH), pentachlorobenzene (PeCB), commercial octabromodiphenyl ether (c-octaBDE) and short-chained chlorinated paraffins (SCCPs), and agreed that intersessional working groups would develop risk profiles on these chemicals to be assessed at POPRC-3.

**POPRC-3:** This meeting took place from 19-23 November 2007. The Committee approved the risk management evaluations for five chemicals and recommended that COP-4 consider listing under Annexes A, B, and/or C: lindane; chlordecone; HBB; c-pentaBDE; and PFOS, its salts, and perfluorooctane sulfonic fluoride (PFOSF). Risk profiles were approved for four chemicals, and POPRC-3 adopted a work programme to prepare draft risk management evaluations for those chemicals, namely: c-octaBDE, PeCB, alphaHCH and betaHCH. The Committee decided that a proposal by the European Community to consider endosulfan for inclusion in Annexes A, B, and/or C would be considered at POPRC-4.

**POPRC-4:** This meeting convened from 13-17 October 2008. POPRC-4 considered several operational issues, including: conflict-of-interest procedures; toxic interactions between POPs; and activities undertaken for effective participation of parties in the POPRC’s work. The Committee approved the risk management evaluations for four chemicals, and recommended that COP-4 consider listing under Annexes A, B, and/or C: c-octaBDE, PeCB, alphaHCH and betaHCH. A draft risk profile for SCCPs was discussed and the Committee agreed to forward it to POPRC-5 for further consideration. POPRC-4 also evaluated a proposal to list endosulfan under the Convention and agreed, by vote, that it met the Annex D criteria for listing and that a draft risk profile should be prepared for consideration by POPRC-5. POPRC-4 also began an exchange of views on a proposal to list hexabromocyclododecane (HBCD).

**COP-4:** The fourth meeting of the Conference of the Parties (COP-4) was held from 4-8 May 2009 in Geneva, Switzerland. Parties adopted 33 decisions on a variety of topics, including
financial resources and technical assistance and the listing of nine new substances under Annexes A, B, and/or C of the Convention, namely: c-pentaBDE; chlordecone; HBB; alphaHCH; betaHCH; lindane; c-octaBDE; PeCB; and PFOS, its salts and PFOSF. The amendment to list additional POPs under Annexes A, B and/or C entered into force on 26 August 2010. This amendment did not apply to those 20 parties that had declared, in their original ratification, that any amendment to Annexes A, B and/or C shall enter into force only upon deposit of their instruments of ratification with respect to such amendments. One party also provided a notification that it was unable to accept the amendments. Countries that have become parties to the Stockholm Convention following adoption of amendments to Annexes A, B, and/or C are bound to the entire Convention as amended. To date, the COP-4 amendments have entered into force for 162 parties.

**POPRC-5**: POPRC-5 met from 12-16 October 2009 and addressed several operational issues, including: work programmes on new POPs; substitutions and alternatives; toxicological interactions; and activities undertaken for effective participation in the POPRC’s work. POPRC-5 agreed that HBCD met the Annex D criteria for listing and that a draft risk profile should be prepared. Draft risk profiles for endosulfan and SCCPs were considered. SCCPs were kept in the Annex E phase for further consideration at POPRC-6 and the Committee, through a vote, decided to move endosulfan to the Annex F phase, while inviting parties to submit additional information on adverse effects on human health.

**Ex-COPs1**: The first simultaneous extraordinary Conferences of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, the Stockholm Convention and the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade were held from 22-24 February 2010 in Bali, Indonesia. Delegates adopted an omnibus synergies decision on joint services, joint activities, synchronization of the budget cycles, joint audits, joint managerial functions, and review arrangements.

**POPRC-6**: POPRC-6 met from 11-15 October 2010 and addressed several operational issues, including: support for effective participation in the POPRC’s work; work programmes on new POPs; and intersessional work on toxic interactions. POPRC-6 adopted the risk profile for HBCD and established an intersessional working group to prepare a draft risk management evaluation on HBCD. The POPRC also agreed, by a vote, to adopt the risk management evaluation for endosulfan and recommend listing endosulfan in Annex A, with exemptions. The Committee considered a revised draft risk profile for HBCD, and established an intersessional working group to continue revising the draft risk profile for SCCPs. This group began working after POPRC-9 to report to POPRC-11.

**COP-5**: COP-5 was held from 25-29 April 2011 in Geneva, Switzerland. Parties considered several reports on activities within the Convention’s mandate and adopted over 30 decisions, including: listing technical endosulfan and its isomers in Annex A of the Convention with exemptions for specified crop-pest complexes; financial and technical assistance; synergies; and endorsing seven new Stockholm Convention regional centres, in Algeria, Senegal, Kenya, South Africa, Iran, India and the Russian Federation. The COP-5 amendment to list endosulfan under Annex A entered into force for most parties on 27 October 2012. To date, the COP-5 amendment has entered into force for 158 parties. COP-5 also requested the POPRC to: assess alternatives to endosulfan; develop terms of reference for a technical paper on the identification and assessment of alternatives to the use of PFOS in open applications; and assess alternatives to DDT.

**POPRC-7**: POPRC-7 met from 10-14 October 2011 and addressed several issues, including: advancing chlorinated naphthalenes (CNs) and hexachlorobutadiene (HCBD) to the risk profile stage; recommending that parties consider listing HCBD in Annexes A, B, and/or C of the Convention; effective participation in the Committee’s work; assessment of alternatives to PFOS in open applications, DDT, and endosulfan; and the impact of climate change on POPs. The Committee also established nine intersessional working groups to address HCBD, HCB, CNs, pentachlorophenol (PCP) and its salts and esters, alternatives to endosulfan and DDT, alternatives to PFOS in open applications, the draft risk profile on SCCPs, consideration of toxic interactions, and the impact of climate change on POPs and the Committee’s work.

**POPRC-8**: POPRC-8 met from 15-19 October 2012 and adopted 12 decisions, including: advancing PCP, its salts and esters to the risk profile stage; advancing CNs and HCBD to the risk management evaluation stage; and amending POPRC-7’s decision on HCBD to recommend that parties consider listing it in Annex A with specific exemptions. POPRC-8 established six intersessional working groups to address: CNs; HCBD; PCP, its salts and esters; the impact of climate change on the POPRC’s work; issues and common practices in the application of Annex E criteria; and the guidance on alternatives to PFOS, its salts and PFOSF. The Committee also established an intersessional working group to continue revising the draft risk profile for SCCPs. This group began working after POPRC-9 to report to POPRC-11.

**COP-6**: COP-6 convened from 28 April - 10 May 2013 in Geneva, Switzerland, in a joint meeting with Basel Convention COP-11 and Rotterdam Convention COP-6, and the second simultaneous extraordinary meetings of the COPs to the three Conventions (ExCOPs-2). The COP, inter alia: decided to list HCBD in Annex A with specific exemptions for production and use in expanded and extruded polystyrene in buildings; continued negotiations on establishment of a compliance mechanism; adopted a methodology for reviewing regional centres; and adopted a revised framework for effectiveness evaluation. The amendment to list HCBD under Annex A will enter into force for most parties on 26 November 2014.
POPRC-9: POPRC-9 met from 14-18 October 2013 in Rome, Italy. The Committee adopted nine decisions, including on: the commercial mixture of decabromodiphenyl ether (c-decaBDE); PCP, its salts and esters; recommending to list CNs under Annexes A and C; recommending to list HCBD under Annexes A and C; the approach to the evaluation of chemicals in accordance with Annex E; guidance on alternatives to PFOS, its salts, PFOSF and their related chemicals; and the process for evaluation of PFOS, its salts and PFOSF for acceptable uses.

POPRC-10 REPORT

On Monday, 27 October 2014, Chair Estefânia Gastaldello Moreira (Brazil) opened the tenth meeting of the Persistent Organic Pollutants Review Committee. David Ogden, Secretariat, welcomed participants on behalf of Rolph Payet, Executive Secretary of the Basel, Rotterdam and Stockholm Conventions, noting that since its creation the POPRC has recommended 11 chemicals to be listed under the Convention. Referring to a “post-synergy world” for the Basel, Rotterdam and Stockholm Conventions, he highlighted decisions taken by the tenth meeting of the Chemicals Review Committee (CRC) of the Rotterdam Convention on polychlorinated naphthalenes and short-chained chlorinated paraffins and underscored the importance of cooperation between the POPRC and CRC.

POPRC Chair Moreira then introduced the provisional agenda (UNEP/POPS/POPRC.10/1 and Add.1), which was adopted without amendment. On the proposed organization of work (UNEP/POPS/POPRC.10/INF/2), she suggested moving the discussions on perfluorooctane sulfonic acid (PFOS) its salts and perfluorooctane sulfonyl fluoride (PFOSF) to Monday afternoon in order to allow discussion of other matters on Tuesday. The organization of work was approved as orally amended.

The Secretariat then presented the outcomes of CRC-10, highlighting the establishment of an intersessional drafting group for short-chained chlorinated paraffins. On rotation of membership (UNEP/POPS/POPRC.10/INF/3), the Secretariat reported that the 17 new POPRC members are: Australia, Austria, Belarus, Canada, Czech Republic, Ecuador, Gabon, Iran, Lesotho, Mauritania, Oman, Pakistan, Saint Vincent and the Grenadines, Senegal, Sri Lanka, Sweden and Venezuela. The other current members of POPRC are: Brazil, Cameroon, Cuba, France, India, Indonesia, Kenya, Kuwait, Madagascar, Netherlands, Norway, Republic of Korea, Sudan, and the former Yugoslav Republic of Macedonia. The members from India and the former Yugoslav Republic of Macedonia were unable to attend POPRC-10.

The Committee met in plenary throughout the week. Contact groups, open to observers, and drafting groups, limited to POPRC members, convened on a variety of topics. One item, the draft report for the evaluation of information on perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride, was considered in a Friends of the Chair group, which included both members and observers. The summary of this meeting is organized according to the order of the agenda.

TECHNICAL WORK

Draft risk management evaluation on pentachlorophenol (PCP) and its salts and esters: On Monday, the Secretariat introduced the documents related to the draft risk management evaluation (RME) on PCP, its salts and esters (UNEP/POPS/POPRC.10/2 and INF/4). Kyunghee Choi (Republic of Korea), Chair of the intersessional working group, presented the chemical identity, data sources, status of PCPs under other international conventions and national control actions for PCP. Noting that PCP has already been replaced in many countries, she reported that consensus could not be reached in the working group on whether there is a net benefit for the environment or health of using alternatives to PCP for some applications. She highlighted that the group’s conclusion that the POPRC list PCP in Annexes A, B and/or C remained in brackets.

Austria, supported by Sweden, the Netherlands, Sudan, Indonesia, and an observer from the Japanese government expressed support for not listing PCP in Annex C because there was no information that unintentional release occurs. Norway said POPRC needs to clarify the issue of releases of dioxins and furans from PCP-treated wood. Referring to Article 3.6 of the Convention (measures to reduce or eliminate releases from intentional production and use), the Netherlands noted that including PCP in Annex A or B would imply that all efforts to avoid unintentional production should be undertaken by parties without explicitly listing PCP in Annex C. Cameroon and Sudan expressed support for listing PCP in Annex A.

Noting that the draft RME states that it is not clear whether countries with similar climatic conditions to Canada have transitioned away from PCP use, Sweden and Norway stated that they are currently phasing out the use of PCP to treat utility poles.

Noting that there are alternatives to PCP and that it is used for wood utility poles in the US and Canada, France favored prohibiting the use of PCP. He underlined the importance of labelling to ensure that wood products treated with PCP are not exported or used as recycled wood for consumer uses.

Canada underlined that the draft RME states that the widespread uses and conditions under which PCP was used no longer exist, including as pesticides, biocides or disinfectants. Highlighting trend data showing that concentrations of PCP in the high Arctic have declined, she said that there is no net benefit for the environment or health to switching to alternatives and expressed support for a listing that would prevent historic uses from returning and would allow for critical uses with control measures, which could be achieved by listing PCP in Annex B.

Norway requested more information on the consequences of listing PCP in Annex A versus Annex B. The Secretariat responded that Annex A allows specific exemptions for five years from the date that the amendment enters into force while Annex B allows acceptable uses without a time limit, but she added that there is a process to review the continued need for these acceptable uses.

Canada observed that key consideration for deciding between the Annexes is the availability and feasibility of alternatives and not the number of parties that require exemptions.
Noting the difference between listing chemicals in Annex A and B is “a matter of time,” Kuwait suggested reviewing the information on economic impacts in the draft RME.

Senegal suggested listing PCP in Annex A and cautioned that listing PCP under Annex B should be informed by the toxicity of available alternatives. The Indian Chemical Council observed that a small amount of PCP used for particle boards and paint in India is not reflected in the document.

Alaska Community Action on Toxics (ACAT), for the International POPs Elimination Network (IPEN), recommended listing PCP in Annex A and C without specific exemptions, underlining the risks to human health and the existence of cost-effective alternatives.

An observer from the US, noting a lack of scientific and technical evidence in the RME, opposed listing PCP in the Convention. An observer from Canada underlined the value of PCP as an industrial wood preserver.

An observer from China supported listing in Annex A or B and not Annex C, citing the lack of evidence of unintentional release. An observer from India recommended inclusion in Annex B, as did Wood Preservations Canada.

The American Galvanizers Association highlighted the cost effectiveness and availability of steel alternatives to PCP-treated wood poles.

POPRC Chair Moreira observed the general agreement on the high quality of the draft RME. The Committee established a contact group chaired by Kyunghee Choi (Republic of Korea). The contact group met Monday evening and Tuesday morning. On Tuesday evening, and throughout Wednesday, POPRC members met in a drafting group on the issue.

On Thursday, Sylvain Bintein (France) presented the revised draft RME on PCP (UNEP/POPS/POPRC.10/CRP.9) noting that changes included additional factual information provided by Canada in two new annexes to the draft RME. He reported that the group recommended PCP, its salts and esters should not be included in Annex C and should be considered for listing in Annex A or B, but that the decision between Annex A with or without specific exemptions or Annex B is a political issue to be taken by the COP, as there appears to be no technical basis for choosing one annex over the other. He further noted the recommendations that: no specific exemption be given to PCP salts and esters; production of PCP be restricted only to industrial wood preservation purposes for the treatment of utility poles and cross-arms under specific risk management procedures in order to minimize exposure; and measures should be implemented to easily identify PCP-treated articles by labelling or other means throughout the life cycle.

Observing that only 15% of the wood utility poles in Canada are treated with PCP, Kenya said this does not constitute a critical use and supported listing PCP in Annex A with a specific exemption. Gabon, Austria, and the Republic of Korea also supported listing PCP in Annex A with a specific exemption.

Sweden, supported by the Netherlands and Norway, suggested: moving the information provided by an observer from Canada from an annex to the draft RME to an information document. Sweden also suggested changing the statement that there is no technical basis to recommend Annex A or B to instead read that there is no agreement that there is a technical basis to choose one annex or another. Senegal suggested removing that statement. Norway, with Pakistan, stated her disagreement on the lack of a technical basis to make a recommendation and supported listing PCP in Annex A with a specific exemption.

Canada clarified that the statement meant that the drafting group had agreed on the soundness of the technical information but could not find consensus on the conclusions that could be drawn from that information.

Citing her country’s unique conditions, Canada stated that wood utility poles are key to the utility infrastructure, and said that removing PCP may mean using chemicals that may also be of concern. She noted that an Annex B listing may not “open the door to other uses” because strict control measures can be specified to reduce or prevent exposure. Noting that socio-economic issues are part of Annex F criteria, she said these issues are likely to be important to Canada’s decision on how best to ratify an amendment to list a new chemical in the Convention and said that these considerations are beyond her expertise as a POPs expert.

Norway noted that listing PCP would not affect articles currently in use. She said that a specific exemption under Annex A would provide time to switch to alternatives such as steel poles or other chemicals.

Indonesia said he could support either an Annex A or Annex B listing recommendation, with specific exemptions, and encouraged parties to label products containing PCP.

Canada reiterated that the preference for a time-limited option is based on the availability and feasibility of alternatives and the ability of parties to convert to those alternatives, not the number of parties using a chemical. She said that the “ultimate goal” of both Annex A and B is elimination, except that Annex B provides sufficient time for parties to find and implement alternatives.

The Indian Chemical Council said that there is a “strong reason” for allowing continued use of sodium pentachlorophenate for a specific period. Saying the revised RME was not developed in an inclusive manner, an observer from India emphasized that the use of sodium pentachlorophenate in India must be taken into account.

An observer from the US stated that, based on a technical analysis, the US concluded that the benefits of using PCP outweigh the risks to society and said a “better case” needs to be made to support a recommendation to the COP to list PCP.

Wood Preservation Canada said currently there are “no better alternatives” than PCP when treating wood utility poles and cross-arms and suggested listing PCP under Annex B, saying that “sound regulatory decision making” in North America can ensure safe use of PCP. Stating support to list PCP in Annex A, the Inuit Circumpolar Council, on behalf of IPEN, Pesticide Action Network (PAN) and ACAT, said the use of PCP in the treatment of utility poles in one developed country does not constitute a critical use, and suggested including non-chemical alternatives in the risk management evaluation.

Noting that the draft RME report now included reference to findings that PCP is more carcinogenic than previously understood, an observer from South Africa underscored the
need to protect human health and the environment and stressed that the POPRC’s role is as a subsidiary technical body to the Convention, which should not “entertain politics.”

The American Galvanizers Association reiterated that steel utility poles could be viable alternatives and could lead to 10-20% cost savings throughout the lifecycle.

Oman said that sufficient information is available to recommend the listing in Annex A with specific exemptions and limited time. Saint Vincent and the Grenadines said health and safety should not be compromised, and supported an Annex A listing with a time-bound exemption.

Responding to the comments made on his presentation, France said that he endorsed the comments on the inappropriateness of the paragraph on the lack of technical basis and supported recommending listing in Annex A with specific exemption.

POPRC Chair Moreira noted agreement in the Committee on: not recommending listing PCP in Annex C; the need for an exemption or allowable purpose; and the need to redraft the paragraph referring to the technical basis of the decision regarding under which Annex to list PCP. She then asked whether the Committee could agree on recommending to list PCP under Annex A with specific exemptions.

Canada reiterated her concern with the time-limited nature of specific exemptions for chemicals listed in Annex A.

POPRC Chair Moreira asked the Secretariat to clarify the timeline of a possible exemption under Annex A. The Secretariat explained that a specific exemption for PCP if it were listed under Annex A would begin from the date of entry into force of the amendment to list PCP. She explained that this would not occur until August or November 2016, and that the exemption would expire in 2021. She noted that Canada is one of the parties that have chosen an opt-in approach to new listings and said that all parties have the option to opt out from any amendment.

Observing that consensus could still not be reached, POPRC Chair Moreira called for an informal group to meet during the lunch break.

In the afternoon, the Secretariat introduced the revised draft RME, which removed reference to the technical basis for choosing to list PCP in Annex A or B. The Secretariat also introduced the revised draft decision that recommended listing PCP under Annex A with specific exemptions for the production and use of PCP for utility poles and cross-arms.

France, with Norway, appreciated the flexibility shown by members and underlined that restrictions could also be linked to measures to control emissions. The Committee then adopted the further amended draft RME and draft decision as introduced by the Secretariat.

Canada requested that the meeting report reflect that, in her view, the RME contains equivocal information regarding recommending only an Annex A listing.

**Final Decision:** In its decision (UNEP/POPS/POPRC.10/CRP.8), the POPRC adopts the risk management evaluation for PCP and its salts and esters and recommends to the COP that it consider listing PCP and its salts and esters in Annex A to the Convention with specific exemptions for the production and use of PCP for utility poles and cross-arms.

**Draft risk profile on decabromodiphenyl ether (commercial mixture, c-decaBDE):** On Monday, the Secretariat introduced the draft risk profile on commercially available decabromodiphenyl ether (c-decaBDE) (UNEP/POPS/POPRC.10/3), its supporting information (UNEP/POPS/POPRC.10/INF/5) and comments and responses on the draft risk profile (UNEP/POPS/POPRC.10/INF/6). He explained c-decaBDE is a polybrominated diphenyl ether (PBDE) formulation consisting of decaBDE (mostly BDE-209) with small amounts of nona- and octa-BDE, and that it is used as a flame retardant in many applications worldwide, especially in electronic equipment and textiles. Jack Holland (Australia), Chair of the intersessional working group on c-decaBDE, presented the draft risk profile, including sources, environmental fate, and exposure and hazard assessments for the endpoints of concern. Highlighting c-decaBDE’s widespread uses and releases to the environment, he said the group concluded that c-decaBDE is likely, as a result of its LRET, to lead to significant adverse human health and environmental effects such that global action is warranted.

Heather Stapleton, Duke University, an invited expert on debromination, presented evidence of photolytic and metabolic debromination of decaBDE. On photolytic debromination, she said that debromination of decaBDE does occur with exposure to natural and artificial sunlight and noted that hepta-and octa-BDE have been identified as “markers” for decaBDE in indoor dust samples. She observed that, in soils, shielding by organic matter or light attenuation with depth will significantly reduce photolytic debromination in the environment. On metabolic debromination, she reported evidence in fish, mammals and birds. The studies on fish and rodents, she underlined, show that the relative accumulation of lower brominated congeners are from debromination of decaBDE and not impurities in the dose or mixtures. Drawing on evidence of debromination near landfills, in rivers and in wildlife, she concluded that debromination of decaBDE occurs in the environment, and not only in the laboratory.

France praised the succinct synthesis provided by Stapleton, given the large amount of data available on decaBDE.

Iran inquired about the low water solubility and bioavailability and Norway clarified that evidence exists of both LRET and bioavailability of BDE-209.

Pakistan asked if there are health impacts posed by decaBDE from dismantling electronic equipment in developing countries, to which Norway responded that there are several studies of exposure to decaBDE from dismantling activities, for example in China and Nigeria.

An observer from Japan suggested that scientific information on LRET was missing and suggested revising the document intercessionally unless more scientific information is made available during the week.

An observer from the US suggested the risk profile should focus on BDE-209 and not on the commercial mixture.

The Bromine Science and Environmental Forum (BSEF) stated that there may be many equivocal or contradictory data in the draft risk profile.
BSEF further questioned the definition of “accumulation” and the research methodology in the expert presentation. Stapleton explained that both in vivo and in vitro approaches led to the conclusion that bioaccumulation does occur and she offered to provide three relevant peer-reviewed studies. POPRC Chair Moreira referred participants to the definitions of bioconcentration, bioaccumulation and biomagnification contained in Annex III of the POPRC-1 meeting report (UNEP/POPS/POPRC.1/10/AnnexIII). She also emphasized that parties should not expect a risk assessment in the risk profile stage.

Underscoring that the debromination of decaBDE leads to lower congeners that are POPs listed in the Stockholm Convention, IPEN said the draft risk profile provided a “compelling picture” of the bioaccumulation of decaBDE.

POPRC Chair Moreira proposed, and the Committee agreed, to establish a contact group to amend the draft risk profile on c-decaBDE, chaired by Jack Holland (Australia). The contact group met Monday evening, converted to a drafting group on Tuesday morning, and continued to meet Tuesday evening and Wednesday morning and afternoon.

On Thursday, Holland introduced the revised draft risk profile (UNEP/POPS/POPRC.10/CRP.4), noting the additional information and references provided and the changes to the draft. He reported that the group concluded that c-decaBDE with its main constituent BDE-209 is likely, as a result of its LRET, to lead to significant adverse human health and environmental effects, such that global action is warranted.

Hearing no comments from the members of the Committee, POPRC Chair Moreira invited observers to comment. An observer from the US suggested the risk profile should focus on the single fully brominated decaBDE itself instead of the commercial mixture.

BSEF questioned the conclusion on bioaccumulation and adverse effects of decaBDE, and said the new studies incorporated in the revised draft were not made available to observers with sufficient time for review. In response, an observer from the University of Manitoba outlined that the additional studies he brought forward “reinforced” the information on the bioaccumulation and trophic magnification factors of decaBDE that were already provided.

IPEN reiterated that the evidence presented in the risk profile is “solid and clear.”

An observer from Japan stated that the revised draft did not fully reflect the issues discussed in the contact group, which he felt did not complete its work by discussing all the issues.

Indonesia highlighted a possible inconsistency in the data regarding the persistence of decaBDE, notably that the risk profile notes that the evidence for sediment-related long-term transformation processes is almost 30 years, whereas in the table of POP characteristics it says it is more than 30 years. Holland responded that it can seem an “enigma” that a persistent chemical also degrades, but that this is linked to where the chemical is found: it is very persistent in deep sediments and when exposed to light, in biota particularly, it can debrominate very quickly.

The Committee then adopted the draft risk profile. The Secretariat introduced the draft decision, which was also adopted.

**Final Decision:** In its decision (UNEP/POPS/POPRC.10/CRP.1), the POPRC:
- adopts the draft risk profile for c-decaBDE;
- decides that the decaBDE component BDE-209 of c-decaBDE is likely, as a result of its LRET, to lead to significant human health and environmental effects such that global action is warranted;
- decides to establish an ad hoc working group to prepare a draft risk management evaluation that includes any possible control measures for c-decaBDE 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 5 January 2015.

**Proposal for the inclusion of dicofol in Annexes A, B and/or C to the Convention:** On Monday, the Secretariat introduced a proposal to list dicofol in Annexes A, B and/or C to the Convention (UNEP/POPS/POPRC.10/4), explaining it contained the proposal to list dicofol as submitted by the European Union to POPRC-9 and, in brackets, the outcome of discussions at POPRC-9.

POPRC Chair Moreira recalled the “intensive and exhaustive” discussions on dicofol at POPRC-9 and requested Committee members’ comments on whether the proposal fulfils the Annex D criteria.

The Republic of Korea, France, Kenya, Indonesia, Canada, Norway, Austria, Saint Vincent and the Grenadines, and Sudan stated that the proposal fulfils all the screening criteria.

Iran asked if there is more information on the degradability of dicofol at different pH levels in water bodies, noting that the proposal says that dicofol meets the Annex D criteria for persistence in water bodies with a pH value of 5 or less.

An observer from India questioned whether dicofol meets the criteria for persistence and LRET because many lakes in the countries cited in the proposal have a pH greater than 6 and monitored levels in remote areas are inadequate to show LRET.

An observer from Japan highlighted that dicofol is found in seawater in remote areas, saying this is evidence of persistence and LRET.

An observer from the US supported moving forward to the Annex E phase, saying that dicofol is expected to increase the environmental loading of DDT and its degradates.

Stating that all criteria are met, PAN reported that pH levels of 5 are common in Arctic waters, and noted that Arctic ecosystems are singled out in the Convention as particularly at risk.

An observer from China noted that much of the section on LRET discussed DDT and not dicofol.

An observer from India said that more evidence is required before moving forward because the half life “varies widely” depending on the pH value of water.

Iran supported moving to the Annex E stage, at which point more information on pH levels could be provided. Indonesia reported that water bodies in Sumatra can have pH levels below 6 and said there is sufficient information to move forward.

POPRC Chair Moreira suggested, and the Committee agreed, to establish a drafting group chaired by Zaigham Abbas (Pakistan). Observers were invited to submit written comments to the group, which met on Tuesday evening.
On Thursday afternoon, the Secretariat introduced the draft decision on dicofol (UNEP/POPS/POPRC.10/CRP.3). After no members commented, POPRC Chair Moreira invited observers to comment.

An observer from India stated his objections to the process, saying that a contact group should have been established and that the submission from India was not considered. POPRC Chair Moreira clarified that all submissions were taken into consideration by the drafting group.

The Committee then adopted the decision without amendment.

**Final Decision:** In its decision (UNEP/POPS/POPRC.10/CRP.3), the POPRC:

- decides that dicofol fulfills the Annex D screening criteria;
- decides 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; and
- invites parties and observers to submit to the Secretariat the information specified in Annex E before 5 January 2015.

**Process for the evaluation of perfluorooctane sulfonic acid (PFOS), its salts and perfluorooctyl fluoride (PFOSF):** On Monday, the Secretariat introduced: the process for the evaluation of PFOS, its salts and PFOSF for the various acceptable purposes and specific exemptions (UNEP/POPS/POPRC.10/5); the draft report on the assessment of alternatives to PFOS, its salts and PFOSF (UNEP/POPS/POPRC.10/INF/7); draft factsheets on alternatives to PFOS, its salts and PFOSF (UNEP/POPS/POPRC.10/INF/8); comments and responses relating to the draft report and factsheets (UNEP/POPS/POPRC.10/INF/9); and the draft report for the evaluation of information on PFOS, its salts and PFOSF (UNEP/POPS/POPRC.10/INF/10).

Martien Janssen (the Netherlands), Co-Chair of the intersessional working group for the assessment of alternatives to PFOS, its salts and PFOSF, recalled that the assessment used the same methodology that was approved for the assessment of chemical alternatives to endosulfan (UNEP/POPS/POPRC.8/INF/28). He explained it comprised a two-step approach, first screening for persistency and bioaccumulation, then for all POP characteristics. He highlighted the draft report’s conclusions that alternatives are available for most exemptions and acceptable purposes. He noted that of these alternatives, octamethyl cyclotetrasiloxane, was identified as likely to meet all Annex D criteria; chloropyrifos as meeting all of the Annex D criteria but with equivocal data; and a further 18 substances were classified as unlikely to be POPs. Janssen underscored that substances not meeting all POP criteria are not necessarily harmless and stressed the need for in-depth assessment of the alternatives before they are applied. He stated that the information gaps are due to the confidentiality of information on industrial chemical PFOS alternatives, which he characterized as the “main challenge” for the assessment.

France suggested presenting the results on the basis of the acceptable use or specific exemption rather than by substance. Sweden proposed specifying that some alternatives do meet some criteria in Annex D, although not all of them. Cameroon asked clarification on chloropyrifos as a substitute for PFOS.

Norway reported high levels of decamethyl cyclopentasiloxane and dodecamethyl cyclohexasiloxane were found in Arctic air according to recent results of their national monitoring programme.

Kuwait asked how the confidentiality issue could be solved. IPEN pointed out that it is in the power of countries to control the confidentiality information regimes.

Canada supported the evaluation and assessment of alternatives, but raised concerns with the characterization of manufacturing intermediates as alternatives to PFOS.

An observer from the US characterized the methodology applied for endosulfan as “problematic” in this case and said other options would have been preferable to evaluate the alternatives to PFOS, such as the guidance on alternatives for listed POPs and candidate chemicals (UNEP/POPS/POPRC.5/10/Add.1).

International Council of Chemical Associations (ICCA) noted missing information and technical inaccuracies in the draft report. Global Silicones Council questioned the use of siloxanes identified in the draft report as PFOS alternatives.

Responding to a query by Sweden, the Secretariat clarified that the draft report on the assessment of alternatives will be amended with comments made at POPRC-10 and further information provided by parties. She also clarified that amendments to acceptable purposes or specific exemptions can be recorded in a footnote to the Convention text as done under similar circumstances for other chemicals listed in Annexes A and B.

POPRC Chair Moreira then invited comments from members on the draft report on the evaluation of information on PFOS, its salts and PFOSF (UNEP/POPS/POPRC.10/INF/10).

France requested, *inter alia*, information on the link between the draft report and the submission of information that will allow the COP to decide whether or not an exemption or use should be renewed, and called for more discussion regarding the dearth of information provided by the parties. Noting the difficulties identifying the presence of PFOS in textiles and other articles, he suggested further discussion of labelling.

Norway noted inconsistencies in the draft report, particularly regarding information on Norway’s use of PFOS in fire-fighting foams and as a pesticide for fire ants. She queried if similar inconsistencies are present for other countries, and supported France’s suggestion to discuss labelling of products.

IPEN observed that for only one acceptable purpose and two specific exemptions has a country reported use. She recalled previous POPRC recommendations to eliminate “open uses” of PFOS and underlined the need to reflect this decision in the draft documents. Reiner Arndt, an invited expert and former POPRC Chair, recalled that POPRC previously recommended to COP-6 that certain open uses of PFOS had alternatives and that specific exemptions for those uses could end. He also suggested further clarifying whether continued use of PFOS for a specific exemption or acceptable use meant that the country was using up a stockpile, or if there was ongoing production. He further suggested including the expiry date for the specific exemptions in the report.
Belarus suggested developing a registry of the goods, preparations and formulations for PFOS based on existing databases and registries of countries. Norway explained that they had previously attempted to set up such a registry, but encountered problems because perfluorinated substances are generally used in very small amounts, below what was is reported on the safety data sheets provided by industry.

POPRC Chair Moreira suggested, and members agreed, to establish a contact group that would consider both the process of the evaluation of the alternatives as well as the guidance on alternatives to PFOS, its salts and PFOSF and their related chemicals. She suggested that the contact group, co-chaired by Martien Janssen (the Netherlands) and Agus Haryono (Indonesia), could shift to a drafting group when appropriate, and later reopen as a Friends of the Chair group to discuss the draft report for the evaluation of information on PFOS, its salts and PFOSF and other issues such as labelling. The contact group met to consider the process for evaluating alternatives on Monday evening and Tuesday evening before converting to a drafting group, which met Wednesday morning and evening. The Friends of the Chair group met on Wednesday evening.

On Thursday, the Secretariat introduced the revised report on the assessment of alternatives to PFOS, its salts and PFOSF (UNEP/POPS/POPRC.10/CRP.6), the revised factsheets on alternatives (UNEP/POPS/POPRC.10/CRP.7) and comments by the Committee on the revised report for the evaluation of information on PFOS, its salts and PFOSF (UNEP/POPS/POPRC.10/CRP.10). Janssen highlighted the changes to the documents. On the draft report, he reported that the categories were renamed to align with POPRC’s previous decision regarding the alternatives to endosulfan, to now read: potential POPs (category I), candidates for further assessment (category II), candidates for further assessment with limited data (category III), and those not likely to fulfill the criteria on persistence and bioaccumulation in Annex D (category IV). He also highlighted changes to distinguish between PFOS alternatives and manufacturing intermediates. On the factsheets, he said that the only change is to clarify why only nine factsheets are presented.

On the revised report, France queried whether category IV included substances unlikely to fulfill only the bioaccumulation and persistence criteria or all Annex D criteria. He further reiterated his suggestion that it would be more useful to present the PFOS alternative by acceptable uses and not by substances. Janssen clarified that a table with acceptable purposes and exemptions and alternatives is included in the revised report for the evaluation of information.

Norway reiterated her comment on the high levels of decamethyl cyclopentasiloxane and dodecamethyl cyclohexasiloxane in the Arctic and that, based on this data, these chemicals should be recategorized. The Leaf-Cutting Ant Baits Industries Association emphasized that deltamethrin is used in complementary methods.

ICCA said the “preliminary nature” of the document should be emphasized, and the screening should not be considered a conclusive assessment of the POPs characteristics of the substances included in the report.

IPEN suggested specifying that information in the report for the evaluation of information refers to individual country applications. An observer from the US expressed concern with some information contained in the documents, including that the European classification is presented as a harmonized global classification for chemicals.

The Global Silicones Council said that the methodology for assessing the POP characteristics and the identification of other hazard indicators for the assessment of alternatives to PFOS are not fully in line with the screening criteria in Annex D to the Convention.

France observed inconsistencies between the screening criteria in the revised assessment of alternatives and the factsheets, and suggested resolving these inconsistencies without changing the conclusion. Janssen welcomed the proposal, and the two worked together to revise the texts during a brief suspension of plenary.

Returning to plenary, Janssen presented revised versions of the report on the assessment and the factsheets and highlighted, inter alia, that category IV was renamed to “Substances that are not likely to meet all Annex D criteria.” He said that decamethyl cyclopentasiloxane was consequently moved to the substances that are difficult for classification due to insufficient data.

Norway noted with concern that the changes do not help present a clearer document for the evaluation of alternatives to PFOS at COP-7.

Janssen then introduced the draft decision on the process for the evaluation of PFOS, its salts and PFOSF for the various acceptable purposes and specific exemptions (UNEP/POPS/POPRC.10/CRP.5) noting the same changes as in the assessment (CRP.6) and stressed that lack of information was a limitation in the evaluation process. The Committee adopted the draft decision as amended.

**Final Decision:** In its decision (UNEP/POPS/POPRC.10/CRP.5), the POPRC:

- decides to submit to COP-7 the summary of the report on the assessment of alternatives to PFOS, its salts and PFOSF with the full report on the assessment of alternatives to PFOS, its salts and PFOSF and the factsheets on alternatives to those chemicals;
- requests the Secretariat to finalize the report for the evaluation of information on PFOS, its salts and PFOSF on the basis of comments and suggestions provided by the Committee and submit it to COP-7 for its consideration;
- recommends that the COP encourage parties that have registered or will register for specific exemptions for the production and use of PFOS, its salts and PFOSF to take measures necessary to ensure that articles containing these chemicals that are allowed to be produced and used can be easily identified by labelling or other means throughout their lifecycle; and
- recommends that the COP encourage parties that have or will register for production and use for an acceptable purpose by notifying the Secretariat in accordance with Annex B to take measures necessary to ensure that articles containing PFOS, its salts and PFOSF that are allowed to be produced and used can easily be identified by labelling or other means throughout their lifecycle.
**Guidance on alternatives to PFOS, its salts, PFOSF and their related chemicals:** On Tuesday, the Secretariat introduced the guidance on alternatives to PFOS, its salts, PFOSF and their related chemicals (UNEP/POPS/POPRC.10/6) noting the Committee could decide to establish an intersessional working group to revise the guidance endorsed by POPRC-9 (UNEP/POPS/POPRC.9/INF/11/Rev.1), taking into account the assessment of alternatives (UNEP/POPS/POPRC.10/INF/7) and the technical paper on the identification and assessment of alternatives to the use of PFOS, its salts, PFOSF and their related chemicals in open applications (UNEP/POPS/POPRC.8/INF/17/Rev.1).

An observer from the US welcomed the idea of preparing a single document that combines the information available but suggested postponing this work for one year. IPEN noted the need for moving forward and suggested that the intersessional working group report to COP-7, and, with the Global Silicones Council and an observer from South Africa, supported establishing an intersessional working group. The Secretariat, responding to the Netherlands on the timeline for the work of intersessional group, clarified that the group would develop a proposal for consideration at POPRC-11 with a view of submitting the revised guidance to COP-8.

France, supported by Sweden, suggested the POPRC decision on this item should explicitly refer to merging the information contained in the various documents.

POPRC Chair Moreira suggested, and the Committee agreed, to ask the Secretariat to re-word the draft decision to reflect the discussion.

On Wednesday afternoon, the Secretariat introduced the revised draft decision on the guidance on alternatives to PFOS, its salts and PFOSF and their related chemicals.

Noting no comments were made by members, POPRC Chair Moreira opened the floor to observers. An observer from the US suggested the decision should include asking COP-7 for guidance on the next evaluation of PFOS alternatives.

The Global Silicones Council inquired whether the intersessional working group would consider information from newer sources in addition to those in the draft decision. France supported this point and noted that the draft decision should be clear about including new information in the revision.

The Netherlands asked whether information submitted by parties in their national reporting could be included. Kenya queried whether the revision would also include the issue of labelling of articles containing these chemicals. The Secretariat responded that the introduction to the draft decision refers to “any other pertinent information,” and that the scope of the revision is limited to the guidance of alternatives and therefore labelling is not included.

The Committee adopted the draft decision as presented.

**Final Decision:** In its decision (UNEP/POPS/POPRC.10/CRP.2), the POPRC, *inter alia:*

- concludes that the guidance on alternatives to PFOS, its salts, PFOSF and their related chemicals should be revised to incorporate pertinent information contained in the report on the assessment of alternatives to PFOS, its salts and PFOSF, in addition to the information contained in the technical paper on the identification and assessment of alternatives to the use of PFOS, its salts, PFOSF and their related chemicals in open applications and should be submitted to COP-8;
- decides to establish an intersessional working group to prepare, for consideration and adoption by POPRC-11, a proposal for preparing a revision of the guidance on alternatives to PFOS, its salts, PFOSF and their related chemicals that consolidates the information on alternatives to these chemicals for consideration by POPRC-12; and
- 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 decision.

**COORDINATION AND COLLABORATION WITH OTHER SCIENTIFIC SUBSIDIARY BODIES**

On Tuesday, the Secretariat introduced its notes on coordination and collaboration with other scientific subsidiary bodies (UNEP/POPS/POPRC.10/7); draft guidance to assist parties to the Rotterdam Convention and CRC when a chemical under consideration is a POP listed under the Stockholm Convention and related comments and responses (UNEP/POPS/POPRC.10/INF/11 and 12); and responses to the questionnaire on the experience in the organization and benefits of the back-to-back meetings and the first joint meeting of POPRC and CRC (UNEP/POPS/POPRC.10/INF/13). The Secretariat highlighted that the draft guidance was adopted at CRC-10 and that a revised draft guidance will be presented to COP-7.

Azhari Abdelbagi (Sudan), Co-Chair of the joint intersessional working group, reported that the draft guidance is structured along the standard sequence of the process of the Rotterdam Convention, including the: notification of a final regulatory action; review of notifications by the CRC; development of a draft decision guidance document; and submission of import responses for a chemical listed in Annex III to the Rotterdam Convention. Abdelbagi highlighted that POPRC risk profiles or risk management evaluations could provide important input as “bridging information” to the CRC’s work, and that, for chemicals listed in the Rotterdam Convention that are also POPs listed in the Stockholm Convention, the national decisions on POPs could help countries establish their import responses under the Rotterdam Convention. He noted this could be particularly useful for developing countries.

Saying that there is more overlap between the work of the Open-ended Working Group under the Basel Convention and POPRC, France queried on the possibility of a joint meeting. The Secretariat clarified that no request for a joint meeting has been received and noted the informal invitation to POPRC members to participate in the Open-ended Working Group.

Noting the general agreement on the draft guidance, POPRC Chair Moreira encouraged the Committee to adopt the draft decision (UNEP/POPS/POPRC.10/7). Sweden, with Gabon, suggested that the negative impacts of the back-to-back and joint meetings should also be reported to COP-7. With that amendment, the Committee adopted the draft decision.

**Final Decision:** In the decision (UNEP/POPS/POPRC.10/7), the POPRC: requests the joint intersessional working group to finalize the draft guidance, taking into account the comments provided by POPRC and CRC, and submit it to the COP-7 for
its consideration; and requests the Secretariat to report to COP-7 on the benefits gained and negative impacts of the back-to-back meetings of the two committees and the joint meeting, on the basis of the information gathered and comments provided by the committees.

EFFECTIVE PARTICIPATION

On Tuesday, the Secretariat introduced the reports on activities for effective participation in the work of the Committee (UNEP/POPS/POPRC.10/8) and on capacity-building and training activities organized by the Secretariat to enhance effective participation in the work of the Committee (UNEP/POPS/POPRC.10/INF/14). Highlighting the training manual for chairs of the various committees and the related training session as particularly useful, POPRC Chair Moreira asked for members’ input and suggestions for future work to support effective participation in the Committee.

Senegal, Pakistan, Oman and Gabon suggested training sessions for new members.

Kenya and Gabon observed that it is difficult to attend the webinars at the times scheduled and POPRC Chair Moreira reminded members that the webinars are available on the website for download, with a “Frequently Asked Questions” document that shows all the questions and answers asked during the webinar. Sweden queried if there is feedback collected on members’ experiences with the webinars and reminded members of the handbook on effective participation that is useful for new members.

The Secretariat explained that the practice is to invite newly designated members to attend a POPRC meeting as an observer the year before they become members. She relayed the Chair’s suggestion that newly designated members that are attending as observers could have an orientation session during the meeting. The Secretariat also offered, in line with CRC practice, to provide a “welcome package” of relevant documents to new members.

On the draft decision (UNEP/POPS/POPRC.10/8), Sweden suggested adding “when possible” when referring to the support of Committee members in the organization of capacity-building activities, and France suggested also including former Committee members. Pakistan suggested adding industries to the stakeholders to be involved in the work of the Committee.

The Committee adopted the decision as orally amended. Final Decision: In its decision (UNEP/POPS/POPRC.10/8), the POPRC:

- invites the Secretariat to continue activities related to supporting effective participation in the work of the Committee, including: organization of webinars and online meetings; organization of workshops and other face-to-face activities, with the support of former and current Committee members when possible, regional centres, and the regional offices of UNEP and FAO; facilitation of the development of pilot projects to stimulate the involvement of different stakeholders, such as the academic community, research institutes and universitiess, and industries;

- invites regional centres to play an active role and in facilitating the effective participation in the work of the Committee; and

WORKPLAN FOR THE INTERSESSIONAL PERIOD

On Thursday afternoon, the Secretariat presented the draft workplan for the preparation of the draft risk profile and draft RMEs during the intersessional period between POPRC-10 and POPRC-11 (UNEP/POPS/POPRC.10/9), highlighting that three intersessional working groups had been established to: develop a draft RME for decaBDE; develop a draft risk profile for dicofol; and to revise the PFOS alternatives guidance. She noted that the intersessional working group temporarily suspended at POPRC-8 on the revision of the draft risk profile for short-chanined chlorinated paraffins would restart work in the period between POPRC-10 and POPRC 11.

The Committee adopted the workplan without amendments.

VENUE AND DATE OF THE NEXT MEETING

On Thursday, the Committee agreed the next meeting will be held 19-23 October 2015 in Rome, Italy, at FAO headquarters, recognizing that the duration of the meeting could be decided during the intersessional period, taking into account the number of chemicals the Committee has to consider. The Secretariat noted that CRC will hold its meeting the week following POPRC.

OTHER MATTERS

On Tuesday, POPRC Chair Moreira introduced the two issues under this agenda item: a discussion of a compilation of suggestions for including the quality of information in draft risk profiles and RMEs, and the Science Fair to be held on the margins of the 2015 COPs to the Basel, Rotterdam and Stockholm Conventions.

On the quality of information in draft RMEs and draft risk profiles, the Secretariat introduced the compilation of suggestions (UNEP/POPS/POPRC.10/INF/15).

Saying the robustness of POPRC’s process relies on the information provided by members and observers, Canada suggested exploring ways to encourage the provision of information.

ICCA suggested, inter alia: reinforcing mandatory requirements for information under paragraph 2 of Annex D (a statement of the reasons of concern); developing further guidance on transformation and degradation of products; and, encouraging more information where it is lacking, cautioned against making “quick decisions.”

Noting that several substances under evaluation have endocrine disruption properties, IPEN suggested a side event on the UNEP and WHO report on the state of the science.

Reiner Arndt drew the Committee’s attention to previous POPRC discussions and guidance documents on Annex D and Annex E, in which he said there are some “open questions” that could only be based on experience, not “theoretical thinking.” He opposed allowing some groups to directly work with the Secretariat to alter these documents.

Norway supported this statement, highlighting the Committee’s previous decision on the Annex E guidance.
for observers to try to have their views taken into account at the POPRC, rather than waiting for the COP.

Noting the heightened interest in POPRC-10’s work, a long-time observer underlined that “no matter what your view, at POPRC it’s important to be a participant, to bring your information and engage.” Many observers indeed brought their information, particularly for the draft risk profile for decabromodiphenyl ether (decaBDE) and the draft risk management evaluation for pentachlorophenol (PCP), yet two members stated that other observers seemed somewhat “more concerned with lobbying than providing information.” Whether this view held more widely, it was also evident that a few of the participants were quicker to question the data, including calling the information “equivocal,” which is not traditionally a term used lightly at POPRC meetings.

POPRC members also had to assess information that could lead the conclusions in multiple directions. For perhaps the first time, industry observers representing both the producers of the chemicals and the alternatives were present, in addition to government observers with strong views against moving chemicals forward in the POPRC’s process. The interventions of a producer of an alternative to using PCP-treated wood poles provoked discussion of how newer observers engaged in the process. Some felt that the “tone of the interventions” were off, undermining rather than engaging with the views of observers that use PCP-treated wood poles. Others, however, welcomed a growing voice for those seeking to profit from removing POPs from current use and production.

It did not escape the notice of many observers that a lot of POPRC-10’s work occurred in drafting groups. For decaBDE, the drafting group met three times as much as the contact group. Several observers, including from countries, questioned the use of closed door meetings. The members, however, pointed to the needed efficiency borne by drafting groups. Given the substantial amount of information provided for decaBDE and PCP, members felt it was necessary to use drafting groups to consider all the information and make changes to the documents accordingly.

MORE, YET SOMETIMES CONFIDENTIAL, INFORMATION

The provision of information on live chemicals is a double-edged sword. On one hand, these chemicals may be of particular interest to research and industrial communities, thereby generating more information for the Committee to consider. On the other hand, some information could be confidential, hidden from the POPRC’s view.

The assessment of decaBDE faced an avalanche of information provided intersessionally and at the meeting. Given that decaBDE “squeaked” through the Annex D stage, this new information strengthened the case that decaBDE has POPs characteristics. The draft risk profile has one of the lengthier lists of references in recent memory and several commented on how much of the information is, particularly on bioaccumulation and debromination. While one observer questioned if the invited expert used bioaccumulation as the Convention defines it, which she said, undermined the conclusions of the presentation, others noted that the experts on the Committee could delineate these differences. This expert advice, including from a researcher
from the University of Manitoba, seemed to carry weight with the Committee, as it reinforced the conclusions of the draft risk profile.

For some, POPRC’s consideration of such a large volume of new data in addition to the views of the expert, was a positive sign that POPRC experts are able to nimbly consider and synthesize new information provided by other experts and observers. For others, it was moving too fast, too soon. They cautioned that new research is not necessarily complete or confirmed research. Just as old scientific conclusions are overturned, new ones can be found wanting in the future. Instead, many observers provided written comments to the drafting group that supported their view to wait before moving decaBDE to the next stage. After considering observers’ information, the POPRC concluded that decaBDE is likely, due to its long-range environmental transport, to lead to significant adverse human health and environmental effects such that global action is warranted.

In contrast to the decaBDE case, the assessment of perfluorooctane sulfonic acid (PFOS), its salts and perfluorooctane sulfonyl fluoride (PFOSF), faced a dearth of information. The decision to list PFOS in Annex B with acceptable purposes and specific exemptions rather than in Annex A was the result of a compromise at COP-4. One observer recalled a “mess of a track-changes document, where everyone added their favorite use.” In total, there are 20 acceptable purposes and specific exemptions for PFOS ranging from photo-imaging to fire-fighting foam, and from metal plating to apparel and paper and packaging. This “mess” was thrust back on the Committee, as it was tasked with evaluating the continued need for PFOS to inform COP-7’s decision whether or not to continue enlisting PCP for sustainable development. Some observers provided written comments to the technical group working on the listing of PFOS, the POPRC concluded that decaBDE is listed in Annex B with acceptable purposes and specific exemptions rather than in Annex A. The decision to list PFOS in Annex B with acceptable purposes and specific exemptions rather than in Annex A was the result of a compromise at COP-4. One observer recalled a “mess of a track-changes document, where everyone added their favorite use.” In total, there are 20 acceptable purposes and specific exemptions for PFOS ranging from photo-imaging to fire-fighting foam, and from metal plating to apparel and paper and packaging. This “mess” was thrust back on the Committee, as it was tasked with evaluating the continued need for PFOS.

As they did for the assessment of alternatives to endosulfan, the Committee drew upon publicly-available information on the properties of the various alternatives to the pesticide. In contrast, the alternatives to PFOS are mostly industrial chemicals for which much of the information is classified as confidential. POPRC experts have the capacity to assess considerable quantities of data, but primary data collection from a number of producers and users spanning several economic sectors to identify and characterize the properties of alternatives for 20 applications of PFOS is a daunting task for any group. Given the large number of observers providing considerable information to the drafting groups working on the listing of new chemicals, the relative lack of information provided on PFOS alternatives was rather stark and, for some members, frustrating.

The lack of data may influence COP-7’s assessment of the continued need for the specific exemptions and allowable purposes of PFOS. It was also unclear if there is ongoing production to meet the various exemptions of PFOS because when countries indicated they still used PFOS, it was not clear if they were using stockpiles, importing PFOS, or producing PFOS themselves. Such information will likely be important to the COP as it seeks to ascertain the global use, production and trade of the live chemical. There were hopes from some members that PFOS could be moved to Annex A, with a small handful of specific and time-limited exemptions, but the COP may be more cautious in lieu of the information gaps. Parties may decide that it is easier to maintain the status quo, and continue an exemption or allowable purpose, than make a change that could negatively impact their production or use of PFOS.

SALIENCE OF SOCIO-ECONOMIC CONSIDERATIONS

Yet, in the end, it was a barely-live chemical that proved the most controversial, perhaps because of the breadth of socio-economic considerations to be considered under Annex F. PCP is an organochlorine compound used primarily as a wood preservative in Canada and the US to treat wood utility poles and cross-arms, and is produced only in Mexico. The controversy at POPRC-10 was how, not whether, to list PCP with an exemption for use in wood utility poles. The choices were between a listing in Annex A with a specific exemption that would be for five years (renewable only for another five), or Annex B with an allowable purpose that does not have an expiry date but does need to undergo periodic review.

For the member and the few observers who preferred an Annex B listing, the socio-economic considerations arising from listing PCP brought to light the political stakes in deciding the continued need for an allowable purpose. In particular, they argued that given that PCP use is integral to supporting the utility infrastructure system, any action would have significant trade and employment implications, and would require bringing in dimensions which, as the Canadian member expressed, are “beyond her technical expertise.”

Many appreciated the open discussion of these political stakes, but were then left wondering which is the best setting to make such decisions. Who should determine the listing of chemicals when a country cites the socio-economic importance of continued use? While the COP may be better placed to deal with the policy issues at stake, such as weighing the benefits and costs to society, some POPRC-10 participants pointed out it lacks the expertise for an in-depth assessment of the availability and feasibility of alternatives. At POPRC-10, the technical assessment made it clear to most members that alternatives are available and that Canada, as a developed country, will be capable of implementing the alternatives in the future. Those arguing against an Annex B listing expressed concern that it could open the door for even more exemptions or allowable uses, which would lead to continued, and potentially even broader, use of a POP. Seasoned participants also drew parallels with the case of PFOS; the lack of technical expertise on exemptions when it was listed at COP-4 was clear, and had had lasting, although uncertain, effects. They recalled that Annex B was created to accommodate DDT, as a POP that protects human health and has few viable alternatives that are feasible for developing countries to implement.

The greater number of live chemicals now working through the POPRC’s review, including perhaps decaBDE next year, could mean that future meetings of the POPRC will continue this debate on how best to account for circumstances where a substance’s continued use has significant social and economic benefits, but yet still presents the risks to human health and the environment of those POPs that this Convention was designed to address. Annex B could be at risk of becoming an attractive...
option for countries and observers arguing that their use is “critical” and should be a longer-term allowable purpose and the POP should be only restricted, not, as in Annex A, eliminated. Some opined that the POPRC may need to evolve following the model of the Montreal Protocol where specialized committees are established to routinely assess whether exemptions are indeed critical or essential.

**LOOKING TO THE COP AND POPRC-11**

Thanks to the work of POPRC-9 and POPRC-10, COP-7 could decide to add three new POPs to the Convention’s scope, bringing the total to 26 POPs. POPRC-9 recommended listing chlorinated napthalenes and hexachlorobutadiene in Annexes A and C to the Convention; only chlorinated napthalenes are currently used and may be difficult for developing countries to phase out. Based on POPRC-10’s recommendation, COP-7 will also consider listing PCP in Annex A to the Convention with a specific exemption. COP-7 also faces the task of assessing the continued need for specific exemptions and allowable purposes for PFOS.

POPRC-11 also has much to look forward to, and may continue to conduct its work under greater scrutiny by observers and further calls to consider socio-economic issues. Short-chained chlorinated paraffins, a “zombie POP” that has been at the draft risk profile stage since POPRC-3, and keeps re-emerging, will be reconsidered. POPRC-11 will have a second draft risk profile, for dicofol, that is expected to generate considerable discussion. Commercial mixtures of decaBDE will be discussed at the draft risk management evaluation stage, which includes socio-economic issues, and the Committee will be tasked with recommending how to list the chemical in the Stockholm Convention. For these chemicals, POPRC will continue to face the challenges presented by live chemicals, and the science-based assessments of such chemicals raise the relevance of the Stockholm Convention’s role in protecting human health and the environment from POPs.

**UPCOMING MEETINGS**

**Sixth Session of the Intergovernmental Negotiating Committee on Mercury (INC-6):** As mandated in the resolution on arrangements in the interim period adopted by the Conference of Plenipotentiaries on the Minamata Convention on Mercury, the intergovernmental negotiating committee on mercury will meet during the period between the date on which the Convention is opened for signature and the date of the opening of the first meeting of the Conference of the Parties to the Convention to facilitate the rapid entry into force of the Convention and its effective implementation upon its entry into force. **dates:** 3-7 November 2014 **location:** Bangkok, Thailand **contact:** Sheila Logan, Interim Secretariat **phone:** +66-22-917-8511 **fax:** +66-22-797-3460 **email:** mercury.chemicals@unep.org **www:** http://www.mercuryconvention.org/Negotiations/INC6/tabid/3563/Default.aspx

**Joint Meeting of the Bureaux of the Conferences to the Parties to the Basel, Rotterdam and Stockholm Conventions:** The Joint Bureaux of the Conferences of the Parties (COPs) to the Basel, Rotterdam and Stockholm Conventions is expected to agree to the organization of work of the upcoming Basel, Rotterdam and Stockholm COPs and other organizational matters related to the back-to-back meetings. **dates:** 11-12 November 2014 **location:** Geneva, Switzerland **contact:** Basel, Rotterdam and Stockholm Secretariats **phone:** +41-22-917-8729 **fax:** +41-22-917-8098 **email:** brs@brsmeas.org **www:** http://synergies.pops.int/

**Second Meeting of the SAICM OEWG:** The second meeting of the Strategic Approach to International Chemicals Management (SAICM) Open-Ended Working Group (OEWG) is expected to: review and prioritize proposals for emerging policy issues in preparation for the fourth session of the International Conference on Chemicals Management (ICCM4); consider proposals for the inclusion of new activities in the Global Plan of Action; consider the outcomes of regional meetings; and identify priority issues for consideration at ICCM4. **dates:** 15-17 December 2014 **location:** Geneva, Switzerland **contact:** SAICM Secretariat **phone:** +41-22-917-8532 **fax:** +41-22-797-3460 **email:** saicm.chemicals@unep.org **www:** http://www.saicm.org/

**Basel COP-12, Rotterdam COP-7 and Stockholm COP-7:** The 12th Meeting of the Conference of the Parties (COP) to the Basel Convention, seventh meeting of the COP to the Rotterdam Convention, and seventh meeting of the COP to the Stockholm Convention are expected to convene back-to-back in May 2015. **dates:** 3-14 May 2015 **location:** Geneva, Switzerland **contact:** Basel, Rotterdam and Stockholm Secretariats **phone:** +41-22-917-8729 **fax:** +41-22-917-8098 **email:** brs@brsmeas.org **www:** http://synergies.pops.int/

For additional meetings and updates, go to http://chemicals-l.iisd.org/

**GLOSSARY**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACAT</td>
<td>Alaska Community Action on Toxics</td>
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<td>COP</td>
<td>Conference of the Parties</td>
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<tr>
<td>CRC</td>
<td>Chemical Review Committee (Rotterdam Convention)</td>
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<tr>
<td>c-decaBDE</td>
<td>Commercial mixture of decabromodiphenyl ether</td>
</tr>
<tr>
<td>decaBDE</td>
<td>Decabromodiphenyl ether</td>
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<td>ICCA</td>
<td>International Council of Chemical Associations</td>
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<td>IPEN</td>
<td>International POPs Elimination Network</td>
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<tr>
<td>LRET</td>
<td>Long-range environmental transport</td>
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<tr>
<td>PAN</td>
<td>Pesticide Action Network</td>
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<tr>
<td>PCP</td>
<td>Pentachlorophenol</td>
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<tr>
<td>PFOS</td>
<td>Perfluorooctane sulfonic acid</td>
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<tr>
<td>PFOSF</td>
<td>Perfluorooctane sulfonyle fluoride</td>
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<tr>
<td>POPs</td>
<td>Persistent organic pollutants</td>
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<tr>
<td>POPRC</td>
<td>Persistent Organic Pollutants Review Committee</td>
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<tr>
<td>RME</td>
<td>Risk management evaluation</td>
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