

## SUMMARY OF THE EIGHTH MEETING OF THE PERSISTENT ORGANIC POLLUTANTS REVIEW COMMITTEE OF THE STOCKHOLM CONVENTION: 15-19 OCTOBER 2012

The eighth meeting of the Persistent Organic Pollutants Review Committee (POPRC-8) of the Stockholm Convention on Persistent Organic Pollutants (POPs) took place from 15-19 October 2012 in Geneva, Switzerland. Over 125 participants attended the meeting, including 26 of 31 Committee members, 46 government and party observers, 36 representatives of nongovernmental organizations, seven intergovernmental organizations, one invited expert and nine observers from other organizations.

POPRC-8 adopted 12 decisions, including on: advancing pentachlorophenol (PCP) and its salts and esters to the risk profile stage; advancing chlorinated naphthalenes (CNs) and hexachlorobutadiene (HCBD) to the risk management evaluation stage; amending POPRC-7's decision on hexabromocyclododecane (HBCD) to recommend that parties consider listing it in Annex A with exemptions for production and use in expanded and extruded polystyrene in buildings; assessment of alternatives to endosulfan and DDT; the impact of climate change on the Committee's work; the work programme on brominated diphenyl ethers (BDEs) and perfluorooctane sulfonic acid (PFOS), its salts and perfluorooctane sulfonyl fluoride (PFOSF), and evaluation of the implementation of the Stockholm Convention for those chemicals; issues and common practices in the application of the Annex E criteria; assessment of PFOS alternatives in open applications; revision of the guidance on alternatives to PFOS, its salts and PFOSF; and effective participation of parties in the POPRC's work.

POPRC-8 also 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. These working groups will report back at POPRC-9, which is scheduled to take place in October 2013. The Committee also established an intersessional working group to continue revising the draft risk profile for short-chained chlorinated paraffins (SCCPs). This group will begin its work after POPRC-9.

## 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 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.

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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 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 meeting forwarded a recommendation to the UNEP GC and the World Health Assembly (WHA) that immediate international action be taken on these substances.

In February 1997, the UNEP GC adopted Decision 19/13C endorsing the conclusions and recommendations of the IFCS. The GC requested that UNEP, together with relevant international organizations, convene an intergovernmental negotiating committee (INC) with a mandate to develop, by the end of 2000, an international legally-binding instrument for implementing international action, beginning with the list of 12 POPs. In May 1997, the WHA endorsed the recommendations of the IFCS and requested that the World Health Organization participate actively in the negotiations.

The INC met five times between June 1998 and December 2000 to elaborate the convention, and delegates adopted the Stockholm Convention on POPs at the Conference of the Plenipotentiaries, which convened from 22-23 May 2001 in Stockholm, Sweden.

Key elements of the treaty include the provision of new and additional financial resources and measures by developed countries to eliminate production and use of intentionally produced POPs, eliminate unintentionally produced POPs where feasible, and manage and dispose of POPs wastes in an environmentally-sound manner. Precaution is cited throughout the Stockholm Convention, with specific references in the preamble, the objective and the provision on identifying new POPs.

The Stockholm Convention entered into force on 17 May 2004 and currently has 178 parties.

The Convention can list chemicals in three annexes: Annex A contains chemicals to be eliminated; Annex B contains chemicals to be restricted; and Annex C calls for the minimization of unintentional releases of listed chemicals. When adopted in 2001, 12 POPs were listed in these annexes. These POPs include 1) pesticides: aldrin, chlordane, DDT, dieldrin, endrin, heptachlor, mirex and toxaphene; 2) industrial chemicals: hexachlorobenzene and polychlorinated biphenyls (PCBs); and 3) unintentionally produced POPs: dioxins and furans.

When adopting the Convention, provision was made for a procedure to identify additional POPs and the criteria to be considered in doing so. At the first meeting of the Conference of the Parties (COP-1), held in Punta del Este, Uruguay from 2-6 May 2005, the POPRC was established to consider additional candidates nominated for listing under the Convention.

The Committee is comprised of 31 experts nominated by parties from the five United Nations regional groups and reviews nominated chemicals in three stages. The Committee first determines whether the substance fulfills POP screening criteria

detailed in Annex D of the Convention, relating to its persistence, bioaccumulation, potential for LRET, and toxicity. If a substance is deemed to fulfill these requirements, the Committee then drafts a risk profile according to Annex E to evaluate whether the substance is likely, as a result of its LRET, to lead to significant adverse human health and/or environmental effects and therefore warrants global action. Finally, if the POPRC finds that global action is warranted, it develops a risk management evaluation, according to Annex F, reflecting socioeconomic considerations associated with possible control measures. Based on this, the POPRC decides to recommend that the COP list the substance under Annex A, B and/or C to the Convention. The POPRC has met annually in Geneva, Switzerland since its establishment.

**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 by POPRC-2. POPRC-1 also reviewed its 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 by 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 PFOS 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, and 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 by 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 PFOF. The amendment to list additional POPs under Annexes A, B and/or C entered into force on 26 August 2010. This amendment does not apply to those 18 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.

**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-COP:** The simultaneous extraordinary Conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions 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. Jim Willis was appointed as the Joint Head of the Basel and Stockholm Convention Secretariats and UNEP-part of the Rotterdam Convention Secretariat in April 2011.

**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 on SCCPs, agreeing to convene an intersessional working group to revise the draft risk profile on the basis of an intersessional discussion of the application of the Annex E criteria to SCCPs and of information arising from a proposed study on

chlorinated paraffins by the intersessional working group on toxic interactions, and to consider the revised draft risk profile at POPRC-8.

**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 on, *inter alia*: listing 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 centers, in Algeria, Senegal, Kenya, South Africa, Iran, India and the Russian Federation. COP-5 also requested the POPRC 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 to assess alternatives to DDT.

**POPRC-7:** POPRC-7 met from 10-14 October 2011 and addressed several issues, including: advancing chlorinated naphthalenes and hexachlorobutadiene (HCBd) to the risk profile stage; recommending parties consider listing HBCD 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 HBCD, HCBd, chlorinated naphthalenes, pentachlorophenol 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 the Committee's work.

## POPRC-8 REPORT

On Monday, 15 October 2012, Jim Willis, Executive Secretary of the Basel, Rotterdam and Stockholm conventions, opened POPRC-8, stressing that more than any other multilateral environment agreement, the Stockholm Convention is underpinned by science, meaning that the POPRC "is the engine that makes the Convention work." Willis urged the Committee to work closely with the Secretariat so that they could help advance the Committee's work on chemicals in the successive steps in the Convention process. He also discussed the Secretariat's efforts to promote greater synergies between the POPRC and the Rotterdam Convention's Chemical Review Committee (CRC), including a planned back-to-back meeting in 2013.

POPRC Chair Reiner Arndt (Germany) welcomed participants and thanked those involved in intersessional work, noting that better intersessional papers mean easier work for the POPRC. He reviewed the rules of procedure, noting that technical issues and procedural matters should be discussed separately, emphasizing that members do not need procedural guidance from observers during the decision stage. Noting that Vice Chair and Rapporteur Kyunghye Choi (Republic of Korea) was unable to attend due to a chemical emergency in her country, Chair Arndt proposed, and the Committee agreed, that Floria Roa Gutiérrez (Costa Rica) serve as Acting Vice Chair and Acting Rapporteur.

Turning to the draft provisional agenda (UNEP/POPS/POPRC.8/1), Chair Arndt proposed that a briefing from the Global Monitoring Plan Coordination Group be included

under “other matters.” Willis noted that the item on a guidance document on review and updating of national implementation plans (NIPs) had been removed from the draft agenda. The Committee noted these changes and adopted the agenda.

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. Two items were also addressed in Friends of the Chair groups, which were open to members and observers. The current members of the POPRC are Argentina, Brazil, Cameroon, Canada, China, Colombia, Costa Rica, Cuba, Czech Republic, Egypt, Finland, the Former Yugoslav Republic of Macedonia, France, Germany, India, Indonesia, Japan, Jordan, Kenya, Kuwait, Madagascar, the Netherlands, New Zealand, Nigeria, Norway, the Republic of Korea, Sudan, Tanzania, Thailand, Ukraine and Zambia. The members from Cuba, the Former Yugoslav Republic of Macedonia, India, Republic of Korea and Kuwait were unable to attend POPRC-8.

This summary is organized according to the agenda.

### **OPERATIONAL ISSUES**

**ROTATION OF MEMBERSHIP:** On Monday, the Secretariat reported on the parties whose terms began in May 2012, namely: Brazil, Cameroon, Cuba, France, India, Indonesia, Kenya, the Republic of Korea, Kuwait, the Former Yugoslav Republic of Macedonia, Madagascar, Norway, the Netherlands and Sudan. She noted that India had nominated a new expert since POPRC-7. She also explained that the terms of 17 members, including Chair Arndt, would expire in 2014, and said regional groups should be prepared to offer nominations for replacements at the sixth Conference of Parties (COP-6) in May 2013.

### **WORKPLAN FOR THE INTERSESSIONAL PERIOD:**

On Wednesday, the Secretariat introduced the document outlining the workplan for the intersessional period between POPRC’s eighth and ninth meetings (UNEP/POPS/POPRC.8/15). The draft work plan was adopted with minor amendments (UNEP/POPS/POPRC.8/CRP.7).

### **CONSIDERATION OF DRAFT RISK PROFILES**

**CHLORINATED NAPHTHALENES:** On Monday, the Secretariat introduced the draft risk profile on chlorinated naphthalenes (CNs) (UNEP/POPS/POPRC.8/2) and comments received (UNEP/POPS/POPRC.8/INF/4). Svitlana Sukhorebra (Ukraine), Chair of the intersessional working group that prepared the draft risk profile, reminded the Committee that POPRC-7 had agreed that di- to octa-CNs meet Annex D criteria. She explained that estimates for total CN production vary, but said it appears that volume has decreased since 1970, although some products containing CNs are still available. Sukhorebra noted that the most prevalent sources of CN releases are waste incineration and product disposal. She cited evidence confirming that tri- to octa-CNs meet the criteria for persistence, and said that di- to octa-CNs meet the criteria for bioaccumulation and long-range environmental transport (LRET). Sukhorebra concluded that the intersessional working group agreed that CNs are likely, as a result of LRET, to lead to significant adverse human health and environmental effects such that global action is warranted. Japan stated that di-CNs might meet the criteria for

persistence. Colombia and Tanzania noted the draft risk profile included information on unintentional releases, not emissions resulting from production, and asked for the draft risk profile to explicitly state whether production is ongoing. Chair Arndt recalled that in the past the Committee had addressed chemicals on the agenda where it was unclear whether production was ongoing, and explained that listing provides protection against future use. He underscored that the Committee’s task is to agree to a risk profile, and to decide especially which congeners to include and possible sources from unknown production and unintentional release. A drafting group convened on Monday night to revise the draft risk profile.

On Tuesday, Sukhorebra noted disagreement within the drafting group about whether to reference polychlorinated naphthalenes rather than specific congeners of CNs, and the Committee suggested a few drafting corrections to the risk profile. Chair Arndt instructed the drafting group to finish its work and report back on Wednesday.

On Wednesday, Sukhorebra introduced the draft decision, highlighting that the decision includes an invitation for Annex E review of sources of emissions from production and/or unintentional release. The Committee adopted the decision without amendment.

**Final Decision:** In its final decision (UNEP/POPS/POPRC.8/CRP.3), the POPRC adopts the risk profile for chlorinated naphthalenes (UNEP/POPS/POPRC.8/CRP.4) and decides that di-, tri-, tetra-, penta-, hexa-, hepta-, and octa-CNs are likely, as a result of LRET, to lead to significant adverse human health and environmental effects such that global action is warranted. The Committee also decides to establish an *ad hoc* working group to prepare a risk management evaluation that includes an analysis of possible control measures for CNs, in accordance with Annex F of the Convention.

The Committee invites parties and observers to submit to the Secretariat the information specified in Annex F before 11 January 2013, as well as additional information relevant to Annex E, including data on sources of emissions, such as production and/or unintentional releases of CNs.

**HEXACHLOROBUTADIENE:** On Monday, Floria Roa Gutiérrez (Costa Rica), Chair of the intersessional working group on HCBd, introduced the draft risk profile on HCBd (UNEP/POPS/POPRC.8/3). She stressed that there is no known intentional production, industrial releases are low, and most exposures come from local sources such as landfills. She reported that evidence shows HCBd is subject to atmospheric LRET and meets the persistence and bioaccumulation criteria, and said the working group concluded that global action is warranted.

Roa Gutiérrez also responded to the most recent criticisms of the draft risk profile raised by industry observers, namely that: the group ignored the Society of Environmental Toxicology and Chemistry (SETAC) paper submitted by industry, which she said is actually more of an extended abstract than study, and the underlying information raised has been discussed by the group; the conclusions imply more certainty than the data presented warrants, to which she responded that the bioaccumulation conclusion is based on bioconcentration factor (BCF) values in fish, whereas industry used a BCF of 17,000 for their critical

body burden calculation, while the conclusion on persistence reflects actual findings from the Boethling et al. study; and correct qualifiers of uncertainty have been removed from the executive summary in the final version, to which she responded that it referred to two minor changes that did not change the meaning in the final version.

Canada suggested the text be modified to remove any impression that the bioaccumulation criteria in Annex D have not been met. The World Chlorine Council noted uncertainty qualifiers had been removed from the draft risk profile, and asked that the SETAC paper be referenced. The Netherlands said including a lot of qualifiers was unnecessary. Japan noted that the bioaccumulation factor was usually larger than the BCF because additional routes of exposure were taken into account.

Chair Arndt asked the Committee whether a contact group or small drafting group was more appropriate. France, supported by Norway and Argentina, said that only a drafting group was necessary, as industry comments had already been taken into account, and said there was no need to reopen discussion on persistence or bioaccumulation. Chair Arndt proposed, and the Committee agreed, to create a drafting group, and industry observers were invited to suggest specific sentences for inclusion in the draft risk profile.

On Tuesday afternoon, Roa Gutiérrez updated the Committee on the group's work. The Committee discussed what information the Committee should seek from member states and observers, and decided to request information relevant for Annex E regarding production and use, as well as unintentional releases. An observer from the World Chlorine Council expressed disappointment that none of the information submitted by his association had been accepted by the drafting group.

On Wednesday afternoon Roa Gutiérrez presented the draft decision and revised risk profile, which were adopted by the Committee without amendment.

**Final Decision:** In its decision (UNEP/POPS/POPRC.8/CRP.6), the POPRC adopts the risk profile for HCBd (UNEP/POPS/POPRC.8/CRP.5) and decides that HCBd is likely, as a result of LRET, to lead to significant adverse human health and environmental effects such that global action is warranted. The Committee also decides to establish an *ad hoc* working group to prepare a draft risk management evaluation that includes an analysis of possible control measures for HCBd in accordance with Annex F of the Convention.

The Committee invites parties and observers to submit to the Secretariat the information specified in Annex F before 11 January 2013, as well as additional information relevant to Annex E, and in particular data on sources of emissions such as the production of HCBd and/or unintentional releases.

#### TECHNICAL WORK

**INTERSESSIONAL WORK ON HBCD:** On Monday, the Secretariat introduced the additional information gathered intersessionally on HBCD (UNEP/POPS/POPRC.8/4). Peter Dawson (New Zealand), Chair of the intersessional expert group, explained that the purpose of the information on alternatives to HBCD in expanded polystyrene (EPS) and extruded polystyrene (XPS) foam applications is to help the Committee decide whether to specify an annex in its recommendation to the COP. Dawson reported that production occurs in China,

the Netherlands, Japan and the US. He reported that chemical alternatives are available for EPS and XPS and said alternatives will be produced in sufficient quantities to replace HBCD in 3-5 years. He described industry information for a brominated styrene/butadiene polymer that indicates there would be no significant impact on costs or threat to the environment or health, noting there is currently no independent evaluation of the information provided by industry. Dawson also underscored that waste management is a significant challenge.

Chair Arndt stated that the Committee's decision should address disposal challenges and, if possible, specify Annex A, with or without exemptions, or Annex B. China queried the definition of allowable uses under Annex B, and Chair Arndt explained that DDT has an allowable use for malaria vector control and PFOS has an allowable use because there are no alternative products for some applications. China agreed with Chair Arndt that HBCD is different from DDT and PFOS. China also underscored the differences between developed and developing countries' abilities to shift to alternative chemicals, and noted that the Stockholm Convention lacks the principle of shared but differentiated responsibilities. He stated that many developing countries are beginning to use HBCD, raising the cost of switching to alternatives, and suggested leaving the COP to decide in which annex HBCD should be listed.

Norway stated that exemptions might be unnecessary, due to the expected availability of alternatives in 3-5 years, and, with Tanzania, said that listing HBCD in Annex A without exemptions would provide the incentive to industry to develop feasible alternatives more quickly.

New Zealand specified that chemical alternatives to EPS and XPS would need to pass national systems regulating the construction of new buildings to certify their use. He suggested listing HBCD in Annex A with exemptions for EPS and XPS foam applications. This suggestion was supported by Egypt, Japan, Jordan, the Netherlands, Sudan and Thailand. Indonesia stated that alternatives for EPS and XPS could become available at different times, and noted the lack of an independent evaluation of the EPS alternative.

Chair Arndt clarified that Annex A provides flexibility regarding the end date of exemptions, noting that exemptions last five years and can be extended for an additional five years. He cited as an example the flexibility within Annex A for PCB elimination.

China reiterated that the annex decision could be left to the COP, noting that developing countries are already phasing out hydrochlorofluorocarbons (HCFCs) for insulation by 2015 under the Montreal Protocol. He stated it would be costly to phase out HCFCs, then have a deadline soon after for HBCD. Colombia supported considering the different capacities of developed and developing countries to phase out HBCD. Chair Arndt noted that the Committee seemed to agree that HBCD use should not last indefinitely.

On Tuesday afternoon, Dawson updated the Committee on the work of the contact group, saying that there was agreement to recommend to the COP that HBCD be listed in Annex A, but disagreement regarding the inclusion and scope of exemptions. Dawson also reported that the contact group agreed to add paragraphs regarding the desirability of identifying HBCD-

containing products for waste management and on providing more time for developing countries to eliminate HBCD. Colombia stated that such an exemption should not be limited to the building sector because insulation may have other uses, such as in vehicles.

On Wednesday afternoon, Dawson introduced the draft decision on HBCD, highlighting there are brackets in the decision indicating disagreement about whether HBCD should be listed in Annex A without exemptions, or with specific exemptions for “production and use for EPS and XPS in the construction, other than road construction, and building sectors.”

Kenya requested the addition of text to reflect that articles containing HBCD should not be exported to developing countries. Chair Arndt responded that the “articles in use” provision within Article 6 of the Convention may address this concern. He explained that a country cannot export an article in use containing POPs to a country that has not registered use of that POP. Norway suggested that the draft decision text could include reference to the export of articles in use, because Article 6 is intended to primarily address waste and stockpiles.

Japan and France asked if the term “construction” could be clarified in the text, and Dawson responded that the intent is to include building construction. Chair Arndt asked the drafting group to look at the wording of the exemption to be as clear and specific as possible.

On Thursday, the Secretariat introduced the revised draft decision (UNEP/POPS/POPRC.8/CRP.8/Rev.1). After the Committee discussed and agreed to minor amendments in the preamble, Chair Arndt invited comments on the bracketed text. New Zealand restated that, based on the information gathered, it is clear that the alternatives will not be available soon because of production and regulatory issues. Norway asked that the report of the meeting reflect her concern that the decision exempts 80-90% of current HBCD use.

An observer from the Netherlands, with Norway, underscored that the COP will have to deal with the considerable issue of the recycling of materials containing HBCD. Chair Arndt said he shared those concerns, but emphasized that it is a big step forward to specify the annex and to limit the scope and time exemptions for specific uses. The Committee incorporated the minor amendments in the preamble, removed brackets around the specific exemption, deleted the statement “without exemption” and adopted the draft decision as orally amended.

**Final Decision:** In its decision (UNEP/POPS/POPRC.8/CRP.8/Rev.1), the POPRC decides, in accordance with paragraph 9 of Article 8 of the Convention, to recommend to the COP that it consider listing HBCD in Annex A to the Convention with specific exemptions for production and use in EPS and XPS in buildings. The Committee adopts as an addendum to the risk management evaluation for HBCD the information on alternatives to HBCD and use in EPS and XPS in accordance with paragraph 3 of Decision POPRC-7/1.

**INTERSESSIONAL WORK ON PENTACHLOROPHENOL AND ITS SALTS AND ESTERS:**

On Monday, the Secretariat introduced the documents summarizing work conducted since POPRC-7 on pentachlorophenol (PCP) and its salts and esters (UNEP/POPS/POPRC.8/5) and additional information (UNEP/POPS/POPRC.8/

INF/7), noting that the Committee had deferred its decision and established an intersessional working group to gather more information about the environmental transformation of pentachlorophenol into its metabolite pentachloroanisole (PCA).

Estefânia Gastaldello Moreira (Brazil), Chair of the intersessional working group, reviewed the history of the POPRC discussions and the uncertainty about whether PCP is a major source of PCA. She noted that Japan had submitted a review of literature, as described in Annex 1 to document INF/7, reported the group’s conclusions that PCP/PCA met Annex D criteria, and suggested that interested parties collect monitoring data and conduct laboratory experiments on forest soil and activated sludge. She also noted that Canada, Mexico, Norway, the International POPs Elimination Network (IPEN) and Alaska Community Action on Toxics had submitted additional information.

Invited expert Asako Kamizono (Chemicals Evaluation and Research Institute, Japan) reported the details of the literature review, which finds that PCA can be generated from PCP, and described the subsequent tests underway in Japan on the transformation from PCP to PCA under general environmental conditions in both forest soil and activated sludge.

Chair Arndt noted that the tests being undertaken by Japan would develop helpful information for Committee use during the Annex E deliberations. He asked the Committee whether it supported Japan’s conclusions and would be willing to remove the brackets in the draft decision on PCP and its salts and esters, thereby concluding that PCP and its salts and esters meet the screening criteria specified in Annex D.

An observer from the US stated that the US government does not believe that persistence is evident in soil and water, and that PCA found in distant areas may have multiple sources. An observer from the Indian Chemical Council raised concerns about the decision-making process, and Chair Arndt referred him to an opinion from the Convention’s legal advisor in a prior POPRC session answering those same concerns.

The Committee agreed to remove the brackets in the draft decision from POPRC-7, contained in the annex to UNEP/POPS/POPRC.8/5 and adopt it as orally amended.

**Final Decision:** In its decision, the Committee decides that PCP and its salts and esters meet the screening criteria specified in Annex D, and creates an *ad hoc* working group to review the proposal further and prepare a draft risk profile in accordance with Annex E. The POPRC invites parties and observers to submit to the Secretariat the information specified in Annex E before 9 January 2013.

**INTERSESSIONAL WORK ON SHORT-CHAINED CHLORINATED PARAFFINS:**

On Monday, the Secretariat introduced the draft risk profile for SCCPs (UNEP/POPS/POPRC.8/6), related comments and responses (UNEP/POPS/POPRC.8/INF/8) and the associated discussion paper on issues and common practices in the application of Annex E criteria (UNEP/POPS/POPRC.8/INF/9). Robert Chénier (Canada), Chair of the intersessional working group, briefly discussed the history of SCCPs, stating that the latest update focused on information on toxic interactions.

On Monday, Chair Arndt outlined three possible options for addressing SCCPs: to advance SCCPs to Annex F; to informally

defer further review to a future meeting; or to formally set the chemical aside. He suggested that parties write a rationale explaining their preference. He further noted that Article 8, paragraph 7(b) states that members must reach agreement to set chemicals aside, and reminded members that the Committee takes decisions by consensus. He explained that once a proposal is set aside, under Article 8, paragraph 8, a party must request the COP to agree, by consensus, to instruct the Committee to consider additional information, for a period not to exceed one year, and after that period, on the basis of any information received, the Committee shall reconsider the proposal pursuant with a priority to be decided by the COP.

On Wednesday, the Secretariat introduced as conference room papers (CRPs) the statements supporting either setting SCCPs aside (UNEP/POPS/POPRC.8/CRP.12) or advancing SCCPs to the Annex F stage of review (UNEP/POPS/POPRC.8/CRP.13). The authors outlined the papers. At the close of Wednesday's discussion, Chair Arndt expressed concern that indecision may harm the Committee's working environment and expressed frustration trying to find a solution. However, an extensive discussion continued in plenary Thursday morning after Committee members stated that they wished to reach a decision.

Advocating formally setting SCCPs aside, China, with Japan, stated that SCCPs do not meet Annex E criteria because a comparison of exposure and effects in remote regions does not indicate significant adverse toxic effects, and added that despite increased global production, monitoring levels are low. China suggested that setting SCCPs aside would demonstrate the Committee's ability to reach decisions for or against a chemical. Argentina agreed with China that there is no new information on LRET or persistence and stated that, due to differing evidence, the Committee should decide there is insufficient data. Nigeria cited the continued lack of information. Indonesia supported formally setting aside SCCPs, observed that the information presented on the two sides of the debate represent different scientific opinions, and expressed concern that new data may not become available.

Advocating moving SCCPs to Annex F, Canada, supported by France and the Netherlands, cited evidence including high levels of aquatic toxicity and exposure in aquatic biota similar to other POPs. He noted that several jurisdictions have ceased or restricted production and yet there are still high concentrations. Norway supported the proposal, stating that current low concentrations should not lead the Committee to conclude global action is unwarranted. She observed that the current data is mostly from the Canadian Arctic and said her experience with other POPs is that levels in the Canadian Arctic are often lower than in the Norwegian Arctic. Canada reminded the Committee they previously agreed that SCCPs meet Annex D criteria and, guided by the precautionary principle, have approved other chemicals on the basis of less information. He asked that discussions focus on what makes SCCPs different from previous chemicals and that the POPRC identify areas of insufficient information. Thailand urged members to consider the benefits of action, stating they have the information they need.

The Inuit Circumpolar Conference (ICC) stated they support moving SCCPs to Annex F, citing their presence in the Arctic, including in traditional Inuit foods. She stated that the ICC's

Third Contaminant Assessment Report will be available next year and will include SCCPs. An observer from the Swiss Federal Institute of Technology stated the POPRC's lack of consensus on this issue stimulated new research and said he expects results next year. A representative of Alaska Community Action on Toxics and IPEN cited the presence of SCCPs in the breast milk of northern Canadian women, and said that while several countries restrict or ban SCCPs, the health of indigenous peoples will be adversely affected if use continues elsewhere.

The Netherlands, with Norway and Ukraine, noted that the two CRPs did not agree on a number of facts and underscored the need for clarity on what information is necessary.

Japan responded that the issue is not a lack of information and said the available information does not indicate that SCCPs pose a significant risk to environmental or human health resulting from LRET. China agreed, saying that SCCPs do not meet Annex E criteria.

Jordan, initially supported by Brazil, Egypt, France and Sudan, proposed deferring consideration of SCCPs until POPRC-10, when more information may be available. Nigeria, with Zambia, supported informally setting the issue aside, observing that many of the parameters are met and, after waiting six years, one more year will do no harm. Finland, supported by Costa Rica, noted that the POPRC has signaled to the scientific community that more research is required and he called for time to complete that work. The Czech Republic agreed, noting that involving the COP could consume time and resources. Norway expressed concern that involving the COP may introduce political issues and could preclude the POPRC from revisiting the issue. She said she could support informally setting SCCPs aside.

Chair Arndt outlined a proposal to informally set SCCPs aside for three years, until POPRC-11. Explaining that work at POPRC-10 would not be considered until COP-8, he said that deferring further consideration of SCCPs to POPRC-11 would allow more time for information gathering and still enable the Committee to meet COP-8 deadlines.

Argentina, Japan, New Zealand, Norway, the Netherlands, France and Zambia expressed support for the Chair's proposal. France asked if there was flexibility to address new information before POPRC-11, and Chair Arndt clarified that such flexibility would come from agreement among Committee members, not in a formal text.

On Thursday afternoon, the Secretariat introduced the proposal for next steps on SCCPs (UNEP/POPS/POPRC.8/CRP.21). Canada queried whether there would be a formal request for information regarding SCCPs, and Chair Arndt responded that he could ask parties to submit information to the Committee when he presents the POPRC's work to the COP. With that clarification, the Committee adopted the proposal for next steps on SCCPs.

**Final Outcome:** With minor editorial amendment, the Committee adopts the proposal on next steps for SCCPs (UNEP/POPS/POPRC.8/CRP.21) to establish an intersessional working group to: discuss the application of Annex E criteria to SCCPs; consider any new information that may be submitted to the Committee; and revise the relevant parts of the draft risk profile

intersessionally on the basis of those activities. The Committee further agreed that the draft risk profile will be presented at POPRC-11.

**Issues and Common Practices in Applying Annex E:** On Tuesday, Chair Arndt outlined the discussion paper on issues and common practices in applying Annex E (UNEP/POPS/POPRC.8/INF/9), suggesting that the first section, discussing past practices, could become a “living” guidance document that could be updated frequently. France, China and Norway supported further discussion and intersessional work on the document to include the Committee’s experience applying Annex E for all the chemicals, not only SCCPs.

On Friday, the Secretariat introduced a draft decision on issues and common practices in the application of Annex E criteria. Chair Arndt clarified that the intersessional working group established in this decision would be for one year only, and the Committee could decide how to link this work to the intersessional work on SCCPs that will begin after POPRC-9.

**Final Decision:** In its decision (UNEP/POPS/POPRC.8/CRP.22), the POPRC decides to establish an *ad hoc* working group to revise the discussion paper on issues and common practices in the application of Annex E criteria and to work in accordance with the workplan set out in the annex to the decision.

#### INTERSESSIONAL WORK ON TOXIC

**INTERACTIONS:** On Tuesday, the Secretariat introduced a summary of intersessional work on toxic interactions (UNEP/POPS/POPRC.8/7), background information regarding the draft approach for consideration of toxicological interactions when evaluating chemicals proposed for listing (UNEP/POPS/POPRC.8/INF/10), and comments on and responses to the draft approach (UNEP/POPS/POPRC.8/INF/11). She noted that after its discussion of INF/10, the intersessional working group had decided to extract part of it to propose as a draft approach in the annex to document UNEP/POPS/POPRC.8/7.

Ivan Holoubek, Chair of the intersessional working group, outlined the conclusions from the working group’s paper and described a proposal for the basic elements of a draft approach for considering toxicological interactions when evaluating chemicals proposed for listing under the Stockholm Convention. He explained that the effects of real environmental mixtures are very complex, and said that for validating toxic interactions such as additivity, synergisms or antagonism, evidence using data from experimental studies is needed. He said additivity appears to be the most probable and “common” effect of interaction, and suggested guidelines for when to assume additivity.

Chair Arndt said that the Committee did not have the resources to work on a textbook on environmental interactions, so the draft’s approach was the best way to proceed with this task. The Committee asked Holoubek to formalize his presentation as a CRP so that members could review it and offer comments.

On Wednesday afternoon, Holoubek presented the written version of his presentation on the basic elements for an approach for the consideration of toxicological interactions when evaluating chemicals proposed for listing (UNEP/POPS/POPRC.8/CRP.11). He briefly reviewed the issue, then summarized the information to consider and methodologies for

evaluating toxicological interactions, and outlined a four-step process for the basic scheme, namely: collection of relevant information; choice of approach; integration of the relevant information into a risk profile; and application of the information on toxicological interactions in decision-making.

Japan asked at what point toxic interactions should be considered, and Holoubek suggested consideration whenever there is evidence suggesting the presence of chemicals known to interact with POPs in the body of organisms. He said that when a draft risk profile is being prepared for a candidate chemical, all relevant information should be included, so if chemicals are present and known to interact with the suspected POP, this data should be assessed and included. Norway queried what would be considered evidence of additivity, and suggested that references to Annex D be removed from the CRP. Brazil and Sudan debated whether measurements should be taken according to different endpoints. France, supported by Argentina, Finland and the Netherlands, expressed concern that if it became common practice to assess toxic interactions with all known chemicals each time a draft risk profile is prepared, profile preparers would be overburdened.

Finland suggested, and the Committee agreed, that the CRP should be considered internal guidance to be applied voluntarily by drafters of risk profiles, and that the POPRC would return to the issue later once lessons had been learned from the actual application of the scheme.

On Thursday, Holoubek presented a revised draft approach (UNEP/POPS/POPRC.8/CRP.11/Rev.1), taking into account suggestions such as eliminating references to Annex D and noting endpoints under information collection. He stressed that the paper would be considered a “living guidance.” After the question of how to finalize the title for the guidance was raised by the Secretariat, it was agreed to call it “Guidance for Drafters of Risk Profiles for the Consideration of Toxicological Interactions when Evaluating Chemicals Proposed for Listing.” Norway suggested adding the subtitle “A Qualitative Literature-Based Approach for Assessing Mixture Toxicity under Annex E,” and the Committee agreed.

**Final Outcome:** On Thursday, UNEP/POPS/POPRC.8/CRP.11/Rev.1 was finalized as an internal guidance document, taking into account oral amendments offered in plenary. Chair Arndt said it would be reflected as an annex to the report of POPRC-8.

**ASSESSMENT OF ALTERNATIVES TO ENDOSULFAN:** On Tuesday, the Secretariat introduced its note on the assessment of alternatives to endosulfan (UNEP/POPS/POPRC.8/8), the report on the assessment of chemical alternatives to endosulfan and DDT (UNEP/POPS/POPRC.8/INF/12), comments and responses to the assessment report (UNEP/POPS/POPRC.8/INF/16), a note on fact sheets regarding chemical alternatives to endosulfan and DDT (UNEP/POPS/POPRC.8/INF/13), a note on the evaluation of non-chemical alternatives to endosulfan (UNEP/POPS/POPRC.8/INF/14), and a summary of information regarding chemical and non-chemical alternatives to endosulfan submitted by parties and observers (UNEP/POPS/POPRC.8/INF/15). She noted that the outcome of the POPRC discussions on this issue would be forwarded to COP-6.

Martien Janssen (the Netherlands), Chair of the intersessional working group, outlined the two-step screening process and reported that of 110 substances assessed, only one, dicofol, was found to be likely to meet all Annex D criteria. He said that there was equivocal or insufficient information to determine whether nine substances, including bifenthrin, chlorpyrifos, flufenoxuron, lufenuron, pyridalyl, pyridaben, chlorfluazuron, tolfenpyrad and prothiofos, fulfill Annex D screening criteria, and 100 alternative chemicals were considered unlikely to be POPs. Janssen stressed that the screening only focused on POPs characteristics, and that national authorities should consider other hazardous characteristics when authorizing these substances. He concluded by suggesting that the POPRC may wish to continue assessing the nine substances identified as equivocal and to instruct the Secretariat to collect information on them.

Argentina thanked the working group for providing a long list of non-POP chemical alternatives to assess, and said the main problem for her country in assessing alternatives to endosulfan is to determine both the efficacy and impact on beneficial insects such as bees. Chair Arndt urged that any research Argentina or others might generate on impacts on beneficial insects be shared with the POPRC. Janssen noted that some of the documents submitted on alternatives include information on honeybee toxicity, which could be used as a starting point for national screening.

Tanzania urged any country with data to initiate a process to assess dicofol as a POP. Egypt, Nigeria and an observer from the US called for further work on the nine chemicals identified as requiring more information. Sudan suggested that continued work on the nine substances was unnecessary, since the screening had shown that 100 chemical alternatives are unlikely to be POPs, and said countries interested in alternatives to endosulfan could instead investigate these for other hazardous characteristics.

Regarding follow-up, Chair Arndt said the Committee is not expected to make recommendations to the COP. He said the Committee may wish to inform the COP that the POPRC is prepared to undertake further work on the nine chemicals if asked to do so, and that perhaps dicofol should be assessed for listing.

Croplife International expressed concern that some of the chemicals in the working group's document might be misinterpreted by outside bodies as being chemicals under suspicion, even though they have not yet been fully assessed.

Meriel Watts, acting as an independent consultant, presented on non-chemical alternatives to endosulfan. She outlined ecosystem approaches such as agroecology, organic agriculture, community managed sustainable agriculture, and the UN Food and Agriculture Organization's (FAO) Sustainable Crop Production Intensification. She highlighted that these had common features: replacing endosulfan with a suite of practices; using knowledge-intensive, location-specific farming systems based on managing agro-ecosystems to avoid the buildup of pests; focusing on building soil health to ensure crops are able to resist pests and diseases; and fostering biological interactions and using, wherever possible, cultural, biological and mechanical

methods of pest management instead of synthetic chemicals. She said that such steps must occur over several years and necessitate farmer training and institutional support.

Tanzania expressed support for the document on non-chemical alternatives, stating that it is useful to show that chemicals are not necessary to control some pests.

The Indian Chemical Council suggested that the data in the note on non-chemical alternatives be checked with the Indian government to ensure accuracy. An observer from India stated that a small portion of lands are currently managed by alternative farming practices and questioned whether alternative methods can meet rising demand for food production. Chair Arndt clarified that the Committee is only providing information on alternatives to the COP, not recommending alternatives.

A Friends of the Chair group on alternatives to endosulfan and DDT, to be led by Janssen, with participation by observers, was formed to draft a decision and to separate the report on alternatives to endosulfan from the report on alternatives to DDT.

On Thursday, Janssen introduced the draft decision (UNEP/POPS/POPRC.8/CRP.9) and the accompanying report on the assessment of chemical alternatives to endosulfan (UNEP/POPS/POPRC.8/CRP.18). Discussion focused on amendments to the summary of the report on chemical alternatives contained in an annex to the draft decision. After some discussion about how to revise the name for screening category 4, it was decided to change it to those "not likely to fulfill the criteria of persistence and bioaccumulation in Annex D." At the suggestion of Norway, the section on initial screening was renamed to note the method used, namely the quantitative structure-activity relationship (QSAR) approach, and at the suggestion of France, it was noted that some experimental data was used. At the suggestion of Indonesia, the paragraph on non-chemical alternatives was amended to note that these should be considered, bearing in mind any potential hazards to humans and the environment.

The Committee agreed to adopt the decision as orally amended.

**Final Decision:** In its decision (UNEP/POPS/POPRC.8/CRP.9), the POPRC forwarded the Secretariat's note on the assessment of alternatives to endosulfan (UNEP/POPS/POPRC.8/8), the report on the assessment of chemical alternatives to endosulfan and DDT (UNEP/POPS/POPRC.8/INF/12), comments and responses to the assessment report (UNEP/POPS/POPRC.8/INF/16), the note on fact sheets regarding chemical alternatives to endosulfan and DDT (UNEP/POPS/POPRC.8/INF/13), the note on the evaluation of non-chemical alternatives to endosulfan (UNEP/POPS/POPRC.8/INF/14), and the summary of information regarding chemical and non-chemical alternatives to endosulfan submitted by parties and observers (UNEP/POPS/POPRC.8/INF/15). The decision includes in an annex a summary report on assessment of chemical alternatives to endosulfan that notes that dicofol meets all Annex D criteria, and the following substances might meet all Annex D criteria "but remain undetermined due to equivocal or insufficient data in a preliminary screening assessment:" bifenthrin, chlorpyrifos, flufenoxuron, lufenuron, pyridalyl, pyridaben, chlorfluazuron, tolfenpyrad and prothiofos.

**ASSESSMENT OF ALTERNATIVES TO DDT:** On Tuesday, the Secretariat introduced an assessment of alternatives to DDT (UNEP/POPS/POPRC.8/9), the report on the assessment of alternatives to endosulfan and DDT (UNEP/POPS/POPRC.8/INF/12), fact sheets on chemical alternatives to endosulfan and DDT (UNEP/POPS/POPRC.8/INF/13), and comments and responses relating to the assessment of chemical alternatives to DDT (UNEP/POPS/POPRC.8/INF/16).

Marten Janssen, Chair of the intersessional working group, explained that the World Health Organization had suggested 11 substances for screening, and the working group had prepared a factsheet for each. Janssen grouped the alternatives into three classes, noting there were no chemicals in class 1 (substances that are likely to meet all Annex D criteria); one chemical, bifenthrin, in class 2 (substances that may meet all Annex D criteria but have equivocal or insufficient data); and 10 alternatives in class 3 (substances that are not likely to meet all Annex D criteria). He said only one substance, bifenthrin, may meet the criteria, but noted that the data were equivocal. He said that the remaining ten substances were unlikely to meet Annex D criteria. Chair Arndt noted that the results of this assessment would be transmitted to the Stockholm Convention DDT Expert Group.

An observer from India remarked that the Committee had only assessed the POPs criteria of the DDT alternatives, although the COP had asked for the assessment to include other factors. Chair Arndt responded that it is up to the COP to determine whether the Committee has fulfilled its mandate.

On Thursday afternoon, the Secretariat introduced the draft decision on the assessment of alternatives to DDT, drafted by the Friends of the Chair group that had been charged with separating the report on alternatives to endosulfan from the report on alternatives to DDT. The Committee agreed to incorporate minor amendments clarifying that they only assessed the POPs characteristics of the alternatives.

**Final Decision:** In its decision (UNEP/POPS/POPRC.8/CRP.10), the POPRC decides to forward the assessment of alternatives to DDT and the fact sheets on chemical alternatives to DDT to the COP for its information, and to submit the summary report on the assessment of alternatives to DDT set out in the annex of the decision to COP-6 for consideration.

**ASSESSMENT OF ALTERNATIVES TO PFOS IN OPEN APPLICATIONS:** On Tuesday, the Secretariat introduced the assessment of alternatives to PFOS in open applications (UNEP/POPS/POPRC.8/10), the technical paper on the identification and assessment of alternatives to PFOS in open applications (UNEP/POPS/POPRC.8/INF/17) and comments and responses to the technical paper (UNEP/POPS/POPRC.8/INF/18).

Stefan Posner (Swerea IVF), the consultant who authored the technical paper, noted the significant scientific challenge of the project. He underlined that there is little information publicly available, particularly relating to quantity of use and to the toxicological and ecotoxicological characteristics of alternatives.

Samuel Banda (Zambia), Chair of the intersessional working group, relayed the recommendations of the working group, which fell into two categories: general recommendations and recommendations for specific applications. He said that the general recommendations include that the COP: consider

revising the list of acceptable purposes and specific exemptions; encourage parties to make use of the information; and encourage environmentally sound management of waste and stockpiles. On specific applications, Banda presented several recommendations regarding aviation hydraulic fluids, insecticides, firefighting foams, decorative and hard metal plating, carpets, leather, textiles and paper and packaging, which included inviting further information provision, requesting pilot projects and removing exemptions. Banda noted that perfluorohexane sulfonic acid (PFHxS) used in paper and packaging could be a potential POP.

Norway agreed there is too little data on some alternatives, but stated that the report is a useful step to reducing PFOS use, particularly in firefighting foam. IPEN said this report is an important illustration of a positive function of the Committee and expressed concern that the lack of information could impede the Committee's work.

FluoroCouncil noted that there is information on new alternatives residing with national regulatory authorities and expressed concern that readers may think there is no information available. Posner clarified that the report stressed there is no publicly available information.

An observer from the US suggested including production of alternatives in the tabular summary of the technical paper in addition to use of alternatives. An observer from Brazil related his country's experience with pilot projects on PFOS alternatives, noting that the evidence thus far, particularly for leaf-cutting ants, shows that alternatives are not feasible or effective.

On Friday, the Secretariat introduced a draft decision on alternatives to PFOS in open applications (UNEP/POPS/POPRC.8/CRP.23). Banda recalled this draft decision comes from the request of the COP to establish a work programme for the identification and assessment of alternatives to the use of PFOS in open applications. He then reviewed the recommendations, noting where they applied to specific applications, including: encouraging parties to stop using PFOS for applications where information is available on the commercial availability and effectiveness; requesting parties and observers to provide information on whether PFOS or alternatives to it are used for some applications; and encouraging parties to collect information to fill the identified gaps.

The Committee made three editorial amendments: to reorder the list of recommendations; to highlight that the document pertains to PFOS and the related chemicals listed with it in the Convention; and to specify that the Committee encouraged parties to collect information on bioaccumulation, LRET and persistence.

An observer from Japan asked if the draft decision should specifically cite the chemicals PFHxS and certain siloxanes, which are identified in the technical paper as having potential to meet Annex D screening criteria. He noted that it might be interpreted that the Committee agreed these chemicals were POPs when a formal assessment was not completed. Canada, Japan and China supported this observation.

Banda reported that the contact group felt strongly about identifying the chemical alternatives that could be harmful to health or the environment. France supported identifying the chemicals, particularly given other proposals softening the language to read that the chemical might be of concern and

requires further evaluation. Norway, supported by Tanzania, noted that specific substances that potentially meet Annex D criteria were identified in the decision on alternatives to endosulfan, and said the same could be done for alternatives to PFOS. The Netherlands agreed with the need to flag for the COP that these substances need additional work, but stated that the alternatives to endosulfan underwent a more extensive evaluation than the PFOS paper. France observed that experimental data was used to evaluate PFHxS and certain siloxanes in the technical paper.

An observer from the US, supported by Norway, Canada and Japan, suggested citing the chemicals and replacing the reference to Annex D criteria with health and environmental effects to align with the mandate of the Stockholm Convention.

**Final Decision:** In its decision (UNEP/POPS/POPRC.8/CRP.23), the POPRC adopts the amended recommendations on alternatives to the use of PFOS, its salts and PFOSF in open applications, prepared on the basis of the technical paper and contained in the annex to the present decision, for consideration by COP-6.

**GUIDANCE ON ALTERNATIVES TO PFOS AND ITS DERIVATIVES:** On Wednesday, the Secretariat presented the notes on guidance on alternatives to PFOS and its derivatives (UNEP/POPS/POPRC.8/11) and a compilation of comments regarding the guidance document (UNEP/POPS/POPRC.8/INF/19), and briefly reviewed the history of the guidance.

Samuel Banda, Chair of the intersessional working group, stressed that the guidance is a living document that can be updated frequently to take into account new information received from parties. He noted that information from the assessment of alternatives to PFOS in open applications will be integrated into the guidance. Chair Arndt, noting that the document on alternatives in open applications will be presented to COP-6, suggested waiting to add information and preparing something for COP-7 based on the PFOS-related information COP-6 asks the POPRC to provide. The Committee requested the Secretariat to work with Banda to prepare a short draft decision on the guidance.

On Friday, Banda introduced the draft decision, calling for the establishment of an *ad hoc* working group to revise the guidance with a view to presenting the revised version to POPRC-9. Chair Arndt suggested changing the name of the guidance and the draft decision from “alternatives to PFOS and its derivatives” to “alternatives to PFOS, its salts and PFOSF.” The Committee agreed to this change. An observer from Sweden suggested that the Secretariat make the guidance publicly available on its website, and the Secretariat agreed.

**Final Decision:** In its decision (UNEP/POPS/POPRC.8/CRP.24), the POPRC decides to create an *ad hoc* working group to revise the guidance on the basis of comments submitted by parties and observers and any additional information made available to the working group. The group is to work in accordance with a workplan annexed to the decision. The decision also invites parties and observers in a position to do so to provide financial support for preparation of the revised guidance.

## INTERSESSIONAL WORK ON CLIMATE CHANGE

**AND POPS:** On Monday, the Secretariat presented its note on the intersessional work on climate change and POPs (UNEP/POPS/POPRC.8/12). Liselott Säll (Norway) delivered a presentation on the draft guidance, outlining ways to consider the possible impact of climate change on the work of the committee (UNEP/POPS/POPRC.8/INF/20), and the comments on and responses to the draft guidance (UNEP/POPS/POPRC.8/INF/21). She said the recommendations were to: revise Annex E and include multiple stressors and climate change in paragraphs (b) and (c); identify areas of uncertainty, gaps in information, knowledge and data at the global level and in particular among developing countries on climate change interactions with POPs; develop international and regional and national monitoring programmes; and evaluate the need for further guidance to enable developing countries to fully take part in the POPRC review process.

Timo Seppälä (Finland), Co-Chair of the intersessional working group, noted many draft risk profiles considered by the POPRC already address many climate change-related items. Jianxin Hu (China), working group Co-Chair, suggested that the recommendations would need further work during the next intersessional period. Chair Arndt recalled that the COP asked the POPRC to better account for climate change, and said that the guidance should focus on that issue rather than on revisions to Annex E.

Colombia asked whether the Intergovernmental Panel on Climate Change (IPCC) had been consulted in preparation of the guidance. Säll said it had not been formally consulted, but she said she had discussed the paper with some of the drafters of the next IPCC assessment. An observer from the US suggested that perhaps the guidance could undergo peer review by climate scientists, and Säll agreed that a peer review might improve the POPRC report and provide useful input to the IPCC process.

The Czech Republic suggested foregoing the recommendations on monitoring programmes, since there is no budget for such work. Säll responded that existing monitoring data could be exploited more fully.

Jordan, supported by Sudan, suggested striking the recommendation on revising Annex E. Japan advised against revising Annex E paragraphs (b) and (c), since doing so would require that all future proposals on candidate POPs would have to provide scientific data on impacts of climate change, which would be unrealistic given the current, limited scientific knowledge on possible change of environmental behavior of POPs.

Canada suggested focusing on the report’s conclusions, not the recommendations. IPEN strongly supported consideration of climate change under Annex E, supported further work on synergisms between POPs and climate change, and opposed peer review-related delay in consideration of climate change factors.

Chair Arndt summarized that while many members complimented the paper, some had reservations about its recommendations. He suggested a contact group look at its conclusions, but suggested that work on recommendations might have to occur during the intersessional period.

On Thursday morning, Azhari Omer Abdelbagi (Sudan) introduced the draft decision and attached workplan for revising the guidance on the possible impact of climate change on the work of the POPRC (UNEP/POPS/POPRC.8/CRP.14/Rev.1). After some editorial changes, a revised version was presented to the Committee, along with the draft conclusions of the guidance document (UNEP/POPS/POPRC.8/CRP.15). Chair Arndt reminded members that this decision is just a starting point for intersessional work, not an agreement on the conclusions.

**Final Decision:** In its decision (UNEP/POPS/POPRC.8/CRP.14/Rev.1), the POPRC decides to establish an *ad hoc* working group to revise the draft guidance on how to assess the possible impact of climate change on its work and, in doing so, to work in accordance with the workplan set out in the annex to this decision.

**WORK PROGRAMME ON BDES AND PFOS, ITS SALTS AND PFOSF AND EVALUATION OF THE IMPLEMENTATION OF THE STOCKHOLM CONVENTION FOR THOSE CHEMICALS:**

On Wednesday, the Secretariat presented its note on the work programme (UNEP/POPS/POPRC.8/13), submissions on BDEs and PFOS, its salts and PFOSF (UNEP/POPS/POPRC.8/INF/22), the format for the evaluation of BDEs pursuant to paragraph 2 of parts IV and V of Annex A to the Stockholm Convention and the work programme on BDEs and on PFOS, its salts and PFOSF (UNEP/POPS/POPRC.8/INF/23), and a draft national reporting format for BDEs and PFOS, its salts and PFOSF (UNEP/POPS/POPRC.8/INF/24).

Noting the low response rate regarding the request for information on BDEs and PFOS, its salts and PFOSF, an observer from IPEN said it might be useful to ponder why the response was so low, consider simplifying the questionnaire, and urge the COP to consider ways to improve the response rate. Zambia said the Committee needs to ask itself whether the questionnaire is user-friendly enough. Several members suggested extending the response time. Jordan said the questionnaire was fine and suggested providing guidance to countries on how to identify the substances, particularly in waste streams. Norway said many countries were focused on their NIPs instead of the questionnaire, that the format had only been formalized a few months ago, and the type of information requested takes time to collect. An observer from Zambia observed that most developing countries are facing challenges in updating their NIPs, and thus do not have the requested data yet. Thailand said that the questionnaire format was fine and that countries just needed more time to respond.

An observer from Canada suggested that the questionnaire should not be linked to national Article 15 reports. An observer from the Netherlands favored keeping the questionnaire linked to national reporting, suggesting governments are more likely to respond that way. Chair Arndt conceded that while the two instruments sought different types of information, it made sense to collect the BDE/PFOS information at same time as Article 15 matters.

Tanzania suggested that the Secretariat can offer meetings to clarify how to fill out the questionnaire. Executive Secretary Willis said the Secretariat would be happy to organize webinars,

but that country or regional workshops would probably need to be included in the formal work programme approved by the COP.

Noting her country's interest in experiences regarding wastes containing PFOS, an observer from the US offered to provide specific text to add to the questionnaire on that subject.

An observer from the Netherlands suggested that the COP could direct the POPRC to examine the number of questions in the questionnaire, and to examine what has been learned from the information collected, thereby smoothing the way for decision-making at the COP. Chair Arndt cautioned against volunteering the POPRC for more tasks and advised waiting to see what COP-6 decides.

The Secretariat then explained the process for national reporting on the evaluation of existing acceptable purposes and specific exemptions for PFOS, its salts and PFOSF, noting that the Secretariat is required to produce a report for the Committee to consider six weeks before the POPRC meets to review this question.

Norway asked if there was a link between this process and the one concerning alternatives to open applications of PFOS and the guidance on PFOS. Chair Arndt said perhaps the guidance, which will incorporate the information on PFOS in open applications, can be referenced. The Netherlands noted that the stated deadline for submitting the information is 31 August 2014, only seven weeks before the POPRC meets, meaning the Secretariat may not have sufficient time to prepare the report for the Committee.

The Committee agreed to request the Secretariat to revise the draft processes set out in Annexes I and II to document UNEP/POPS/POPRC.8/13, and to develop a draft decision on the work programme.

On Thursday, the Secretariat introduced the amended proposal on the work programme on BDEs and PFOS, its salts and PFOSF (UNEP/POPS/POPRC.8/CRP.16/Rev.1) incorporating slight editorial corrections, along with a new note from the Secretariat on the process for evaluation of PFOS, its salts and PFOSF pursuant to paragraphs 5 and 6 of Part III of Annex B (UNEP/POPS/POPRC.8/CRP.17), and a draft decision on the questionnaire and further revision of the process. She explained that work would be undertaken during the intersessional period with the help of a consultant, and the relevant work of the POPRC will be described in terms of reference to be prepared by the Committee at POPRC-9. She said the goal would be providing input to COP-7 in May 2015.

The Committee made a few editorial changes and approved the decision as orally amended.

**Final Decision:** In its decision (UNEP/POPS/POPRC.8/CRP.16/Rev.1), the POPRC requests the Secretariat to continue to use the questionnaire revised at POPRC-7 to collect information from parties to enable COP-6 to evaluate BDEs pursuant to paragraphs 2 of Parts IV and V of Annex A; and decides to request the Secretariat to further revise the processes, taking into consideration the Committee's comments and suggestions.

**WORK IN COLLABORATION AND COORDINATION WITH OTHER SCIENTIFIC BODIES: Work with the Basel Convention:** On Wednesday, the Secretariat introduced the document relating to work with the Basel Convention on the

Control of Transboundary Movements of Hazardous Wastes and Their Disposal (UNEP/POPS/POPRC.8/INF/25). The Secretariat cited decision BC-10/9, requesting a small intersessional working group established by the Basel Convention Open-Ended Working Group to assist the review and update of technical guidelines for POPs waste, and noted some POPRC members participate in the working group. Chair Arndt asked if the working group considered the whole family of PFOS substances listed in the Stockholm Convention.

IPEN requested clarification how the new technical guidelines would address waste with low POPs content. The Secretariat clarified that guidance on waste containing low POPs content will be part of the general technical guidelines, not those specific to a chemical.

An observer from Canada clarified that Canada has agreed to lead work on PFOS technical guidelines and overarching guidance for wastes with low POPs content. An observer from the Netherlands noted that no country had yet agreed to lead work on the technical guidelines for BDEs.

Executive Secretary Willis clarified that the working group included the same PFOS substances as listed in the Stockholm Convention. He reported that work on BDEs had started because the working group asked, and Norway provided resources, for the Secretariat to hire a consultant.

**Work with the Rotterdam Convention:** The Secretariat introduced a document outlining work with the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (UNEP/POPS/POPRC.8/INF/26). She noted the opportunity to hold back-to-back meetings of the POPRC and the CRC, including a joint session between the two committees, and reported that the bureaus of the POPRC and the CRC have approved the meetings from 14-18 October 2013 and 21-25 October 2013, respectively.

Jordan, with Sudan and Egypt, supported the idea of back-to-back meetings but expressed concern that the dates coincide with a public holiday in Muslim countries. Executive Secretary Willis clarified that this was the only possible two-week window in Rome, given limited venue availability.

### **EFFECTIVE PARTICIPATION OF PARTIES IN THE COMMITTEE'S WORK**

Discussion opened on Thursday with a Secretariat review of its activities to encourage effective participation of parties in the POPRC (UNEP/POPS/POPRC.8/14), noting webinars held on various topics and welcoming suggestions for future webinar topics.

Sudan, Tanzania and Zambia indicated that while webinars are valuable, in some developing countries there are difficulties in using them due to power and connectivity problems. Argentina suggested that video conferences might prompt greater participation.

Chair Arndt suggested that perhaps the Secretariat could facilitate cooperation among Committee members in intersessional work, such as online drafting. Executive Secretary Willis noted that there is no additional cost to the Secretariat to conduct webinars or facilitate online drafting.

Zambia, supported by Nigeria, suggested holding more workshops at the regional centers, perhaps facilitated by funding from regional commissions and regional organizations such as Economic Community of West African States (ECOWAS). Jordan suggested that regional centers could update countries on the work of the Committee and help collect data on chemicals under review by the Committee, while the Secretariat could support pilot projects in developing countries to strengthen the role of national research centers and laboratories in contributing to the Committee process. Sudan suggested that regional centers could hold workshops to orient new members of the POPRC. An observer from Egypt suggested that the Secretariat organize "training for trainers" on topics relevant to the Committee through the regional centers.

Noting that in the past her region had produced many of the substances under review by the POPRC, Ukraine suggested that they might provide useful data if the regional centers could help collect it through subregional seminars. She also noted that in the past the Secretariat has had a Small Grants Programme (SGP) that grants up to US\$50,000 to assist parties through the regional centers, and suggested the SGP could be reactivated.

Executive Secretary Willis said that the various suggestions for greater involvement of regional centers can only be realized if countries communicate the demand to the centers, with a copy to him, which he could use to approach donors for targeted assistance. He also stressed that if the Committee offered specific recommendations for technical assistance via the regional centers, he would incorporate them into the Executive Secretary's budget proposal for COP-6. Chair Arndt tasked Norma Ethel Sbarbati-Nudelman, working with the Secretariat and accepting written suggestions from Committee members, with drafting a decision outlining specifically what the Committee wants to see and why it is needed.

When the draft decision was presented by Sbarbati-Nudelman on Friday, the Committee agreed that draft decision reflected Thursday's discussion. Executive Secretary Willis announced that the Secretariat has received more funds for the SGP and would soon send requests for grant proposals to the regional centers, so he urged all parties to contact the centers about the specifics of what types of assistance they want the centers to target for such funds.

The draft decision was adopted without amendment.

**Final Decision:** In its decision (UNEP/POPS/POPRC.8/CRP.25), the POPRC invites the Secretariat to undertake activities to support effective participation in the Committee's work, subject to the availability of resources, including: webinars, training and online meetings; workshops; pilot projects that can stimulate active involvement of research institutes, universities and other stakeholders in the POPRC work; and the development of tools to facilitate sharing of information and resources, such as training modules and videos. The decision invites the regional centers to play an active role in providing assistance, including through the exchange of information and expertise. The decision also invites parties and observers in a position to do so to contribute to the Committee's work and provide financial support for the aforementioned activities.

## OTHER MATTERS

On Wednesday, the Secretariat introduced an overview of activities to facilitate information exchange on POPs alternatives under the “POPs free” initiative and POPs in articles (UNEP/POPS/POPRC.8/INF/6) and recalled that COP-5 requested the Secretariat to undertake these activities. The Secretariat outlined a planned publication on those POPs listed under the Convention in 2009. She requested that POPRC members interested in participating in an expert consultation contact the Secretariat.

On Friday, Ivan Holoubek updated members on the activities of the Global Monitoring Programme (GMP), stating that the key goal was the determination of temporal and spatial trends to evaluate the effectiveness of Convention, under Article 16, currently focused on ambient air and human health. He reported that there are regional groups and a global coordination group involved in the design and implementation of the GMP. He underscored the challenges posed by varied levels of systematic data collection across regions, but highlighted capacity-building efforts with the regional centers.

## DATES AND VENUE OF THE COMMITTEE'S NINTH MEETING

POPRC-9 will be held from 14-18 October 2013, at FAO headquarters in Rome, Italy.

## CLOSURE OF THE MEETING

On Friday, Committee members reviewed the draft report of the meeting (UNEP/POPS/POPRC.8/L.1 and L.1/Add.1). The Committee adopted the report with minor amendments.

Chair Arndt gavelled the meeting to a close at 1:11 pm.

## UPCOMING MEETINGS

**Biennium Conference of the Global Partnership on Waste Management (GPWM):** The conference provides an opportunity for all stakeholders in waste management to discuss challenges, opportunities and new trends in waste management. **dates:** 5-6 November 2012 **location:** Osaka, Japan **contact:** GPWM Secretariat **phone:** +81-669-154-581 **fax:** +81-669-150-304 **email:** gpwm@unep.org **www:** <http://www.unep.org/gpwm/>

**49th Meeting of the Implementation Committee under the Non-Compliance Procedure of the Montreal Protocol:** The meeting will discuss issues related to parties' compliance with the provisions of the Montreal Protocol on Substances that Deplete the Ozone Layer and produce a report for consideration at MOP 24. **dates:** 8-9 November 2012 **location:** Geneva, Switzerland **contact:** Ozone Secretariat **phone:** +254-20-762-3851 **fax:** +254-20-762-0335 **email:** [ozoneinfo@unep.org](mailto:ozoneinfo@unep.org) **www:** <http://ozone.unep.org/>

**24th Meeting of the Parties to the Montreal Protocol:** MOP 24 is scheduled to consider a number of issues, including nominations for critical- and essential-use exemptions, QPS uses of methyl bromide, and proposed amendments to the Montreal Protocol. **dates:** 12-16 November 2012 **location:** Geneva, Switzerland **contact:** Ozone Secretariat **phone:** +254-20-762-3851 **fax:** +254-20-762-0335 **email:** [ozoneinfo@unep.org](mailto:ozoneinfo@unep.org) **www:** <http://ozone.unep.org/>

**42nd Session of the UN Economic and Social Council (ECOSOC) Sub-Committee of Experts on the Transport of Dangerous Goods (TDR):** The Sub-Committee on TDR does work related to the UN Recommendations and Model Regulations on TDR, which include related issues on the classification, tests, marking/labeling and packing of hazardous substances for transport. This session will look at test and packing instructions for explosives, and listing, classification and packing for a number of articles, issues involving lithium batteries, and proposals for amendments to the Model Regulations, as well as global harmonization of TDR regulations with the Model Regulations. **dates:** 3-11 December 2012 **location:** Geneva, Switzerland **contact:** Rosa Garcia Couto, Transport Division, UNECE **phone:** +41-22- 917- 2435 **fax:** +41-22- 917- 0039 **www:** <http://www.unece.org/trans/main/dgdb/dgsubc3/c3age.html>

**24nd Session of the ECOSOC Sub-Committee of Experts on the Globally Harmonized System of Classification and Labeling of Chemicals (GHS):** The Sub-Committee will discuss the draft amendments to the GHS, hazard communication issues, GHS implementation, and the development of guidance on the application of GHS criteria. **dates:** 12-14 December 2012 **location:** Geneva, Switzerland **contact:** Rosa Garcia Couto, Transport Division, UNECE **phone:** +41-22- 917-2435 **fax:** +41-22-917-0039 **www:** <http://www.unece.org/trans/main/dgdb/dgsubc4/c4age.html>

**Joint Meeting of the Bureaux of the Conferences of the Parties (COPs) to the Basel, Rotterdam and Stockholm Conventions:** The Joint Meeting will review arrangements for the extraordinary meeting of the COPs to the three conventions, the proposal for the organization of their secretariats, joint activities for the 2014-2015 biennium, the budget and possible necessary amendments to the budgets of the three conventions for the 2014-2015 biennium, and information received from the UN Environment Programme's Executive Director on the outcome of the consultative process on financing options for chemicals and wastes. **dates:** 13-14 December 2012 **location:** Geneva, Switzerland **contact:** Secretariat of the Basel, Rotterdam and Stockholm Conventions **phone:** +41-22-917-8729 **fax:** +41-22-917-8098 **www:** <http://synergies.pops.int/>

**6th Session of the ECOSOC Committee of Experts on the Transport of Dangerous and on the Globally Harmonized System of Classification and Labeling of Chemicals:** The Committee will review the 2011-12 work of the Sub-Committee on GHS and the Sub-Committee on TDR, and decide on the programme of work for 2013-14. **date:** 14 December 2012 **location:** Geneva, Switzerland **contact:** Laurence Berthet, Transport Division, UNECE **phone:** +41-22- 917-2106 **fax:** +41-22-917-0039 **www:** <http://www.unece.org/trans/main/dgdb/dgcomm/ac10age.html>

**Fifth Session of the INC to Prepare a Legally Binding Instrument on Mercury:** This meeting is the last of five Intergovernmental Negotiating Committee (INC) meetings to negotiate a legally binding instrument on mercury. **dates:** 13-18 January 2013 **location:** Geneva, Switzerland **phone:** +41-22-917-8192 **fax:** +41-22-797-3460 **email:** [mercury@chemicals.org](mailto:mercury@chemicals.org)

unep.org **www:** <http://www.unep.org/hazardoussubstances/MercuryNot/MercuryNegotiations/tabid/3320/language/en-US/Default.aspx>

**Expert Meeting on POPS in Articles in Use and “POPS-Free” Initiative:** Experts will provide input for a publication on POPs in articles in use and the Stockholm Convention’s POPs-free initiative. **dates:** 4-6 February 2013 **location:** Geneva, Switzerland **contact:** Stockholm Convention Secretariat **phone:** +41-22-917-8729 **fax:** +41-22-917-8098 **email:** [ssc@pops.int](mailto:ssc@pops.int) **www:** <http://www.pops.int>

**Coordinated Ordinary and Extraordinary Meetings of the COPs to the Basel, Rotterdam and Stockholm Conventions:** The ordinary and extraordinary meetings of the Conferences of the Parties (COPs) to the Basel, Rotterdam and Stockholm Conventions will convene in Geneva, Switzerland. **dates:** 28 April - 10 May 2013 **location:** Geneva, Switzerland **phone:** +41-22-917-8729 **fax:** +41-22-917-8098 **email:** [synergies@unep.org](mailto:synergies@unep.org) **www:** <http://synergies.pops.int/Implementation/ExCOPs/ExCOPs2013/tabid/2747/language/en-US/Default.aspx>

**Eleventh International Conference on Mercury as a Global Pollutant:** Convened under the theme “Science informing global policy,” the conference will celebrate the official launch of the UNEP Global Legally Binding Treaty on Mercury, and consider how to put the treaty into practice. The meeting aims to exchange information on the science of mercury behavior and release, and its effect on ecosystems. **dates:** 28 July - 2 August 2013 **location:** Edinburgh, United Kingdom **contact:** Marcus Pattison **phone:** +44-1727-858840 **fax:** +44-1727-840310 **email:** [info@mercury2013.com](mailto:info@mercury2013.com) **www:** <http://www.mercury2013.com/>

**Ninth Meeting of the Persistent Organic Pollutants Review Committee (POPRC-9):** POPRC-9 will review chlorinated naphthalenes, hexachlorobutadiene, hexabromocyclododecane, and pentachlorophenol and its salts and esters, as well as discuss other technical work such as the impact of climate change on the POPRC’s work and common issues in applying Annex E criteria. A joint meeting with the Rotterdam Convention’s Chemical Review Committee (CRC) may be held on 19 October 2013, if approved by the joint Basel/Rotterdam/Stockholm COPs. **dates:** 14-18 October 2013 **location:** Rome, Italy **contact:** Stockholm Convention Secretariat **phone:** +41-22-917-8729 **fax:** +41-22-917-8098 **email:** [ssc@pops.int](mailto:ssc@pops.int) **www:** <http://www.pops.int>

**Ninth Meeting of the Rotterdam Convention CRC:** This subsidiary body of the Rotterdam Convention reviews chemicals and pesticide formulations according to the criteria set out by the Convention in Annexes II and IV, respectively, and makes recommendations to the COP for listing these chemicals in Annex III. A joint meeting with the POPRC may be held on 19 October 2012, if approved by the joint Basel/Rotterdam/Stockholm COPs. **dates:** 21-25 October 2013 **location:** Rome, Italy **contact:** Rotterdam Convention Secretariat **phone:** +41-22-917-8296 **fax:** +41-22-917-8082 **email:** [pic@pic.int](mailto:pic@pic.int) **www:** <http://www.pic.int/>

## GLOSSARY

BCF	Bioconcentration factor
BDE	Brominated diphenyl ether
CNs	Chlorinated naphthalenes
COP	Conference of the Parties
CRC	Chemical Review Committee
CRP	Conference room paper
EPS	Expanded polystyrene
FAO	UN Food and Agriculture Organization
HBCD	Hexabromocyclododecane
HCBD	Hexachlorobutadiene
IPCC	Intergovernmental Panel on Climate Change
IPEN	International POPs Elimination Network
LRET	Long-range environmental transport
NIP	National Implementation Plan
PCA	Pentachloroanisole
PCP	Pentachlorophenol
PFHxS	Perfluorohexane sulfonic acid
PFOS	Perfluorooctane sulfonic acid
PFOSF	PFOS fluoride
POP	Persistent organic pollutant
POPRC	POPs Review Committee
SCCPs	Short-chained chlorinated paraffins
XPS	Extruded polystyrene