

SUMMARY OF THE THIRD MEETING OF THE PERSISTENT ORGANIC POLLUTANTS REVIEW COMMITTEE OF THE STOCKHOLM CONVENTION: 19-23 NOVEMBER 2007

The third meeting of the Persistent Organic Pollutants Review Committee (POPRC-3) of the Stockholm Convention on Persistent Organic Pollutants (POPs) took place from 19-23 November 2007, in Geneva, Switzerland. Over 100 participants attended the meeting, including all 31 Committee members, 39 government and party observers and representatives from 24 non-governmental organizations. POPRC-3 considered several operational issues, including the naming of commercial products and mixtures and the listing of precursors. The Committee approved the risk management evaluation for five chemicals, and recommended that COP-4 consider listing under Annex A, B, or C: lindane; chlordecone; hexabromobiphenyl (HBB); pentabromodiphenyl ether (pentaBDE); and perfluorooctane sulfonate (PFOS), its salts and PFOS fluoride (PFOSF). Risk profiles were approved for four chemicals, and POPRC-3 adopted a draft work programme to prepare draft risk management evaluations for those chemicals, namely on: commercial octabromodiphenyl ether, pentachlorobenzene, and alpha and beta hexachlorocyclohexane.

Five chemicals were slated to reach the final and third step of the review process, a further five entered the second phase, and one new chemical was nominated. As such, POPRC-3 was an opportunity for the Committee to draw on experience gained during the previous two meetings and make recommendations to the COP. POPRC-3 however encountered significant hurdles as its members disagreed over how to address several of the "high-stakes" chemicals on the agenda, in particular short-chained chlorinated paraffins (SCCPs) and PFOS. While consensus was reached on recommending listing PFOS acid, its salts, and PFOSF in Annex A or B of the Convention, a decision on the SCCPs risk profile was postponed until POPRC-4, as was the consideration of the newly nominated chemical, endosulfan. Nevertheless, POPRC-3 successfully moved decisions on nine chemicals to the next stage of the listing process.

A BRIEF HISTORY OF THE STOCKHOLM CONVENTION

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

IN THIS ISSUE

A Brief History of the Stockholm Convention	1
POPRC-3 Report	3
Review of COP-3 Outcomes	3
Operational Issues	3
Presentations on Socioeconomic Considerations	5
Consideration of Draft Risk Management Evaluations	5
Presentation on Environmental Transport and Modelling	10
Bioaccumulation Assessment	10
Consideration of Draft Risk Profiles	10
Consideration of Endosulfan	14
Other Matters	14
Dates and Venue of POPRC-4	14
Closing Plenary	15
A Brief Analysis of POPRC-3	15
Upcoming Meetings	17
Glossary	17

This issue of the *Earth Negotiations Bulletin* © <enb@iisd.org> is written and edited by Melanie Ashton, Pia Kohler, Ph.D., and Olivia Pasini. The Editor is Pamela S. Chasek, Ph.D. <pam@iisd.org>. The Director of IISD Reporting Services is Langston James "Kimo" Goree VI <kimo@iisd.org>. The Sustaining Donors of the *Bulletin* are the United Kingdom (through the Department for International Development – DFID), the Government of the United States of America (through the Department of State Bureau of Oceans and International Environmental and Scientific Affairs), the Government of Canada (through CIDA), the Danish Ministry of Foreign Affairs, the Government of Germany (through the German Federal Ministry of Environment - BMU, and the German Federal Ministry of Development Cooperation - BMZ), the Netherlands Ministry of Foreign Affairs, the European Commission (DG-ENV), the Italian Ministry for the Environment, Land and Sea, and the Swiss Federal Office for the Environment (FOEN). General Support for the *Bulletin* during 2007 is provided by the Norwegian Ministry of Foreign Affairs and the Ministry of Environment, the Government of Australia, the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management, the Ministry of Environment of Sweden, the New Zealand Ministry of Foreign Affairs and Trade, SWAN International, the Japanese Ministry of Environment (through the Institute for Global Environmental Strategies - IGES) and the Japanese Ministry of Economy, Trade and Industry (through the Global Industrial and Social Progress Research Institute - GISPRI). Funding for translation of the *Earth Negotiations Bulletin* into French has been provided by the International Organization of the Francophonie (IOF) and the French Ministry of Foreign Affairs. Funding for the translation of the *Earth Negotiations Bulletin* into Spanish has been provided by the Ministry of Environment of Spain. The opinions expressed in the *Earth Negotiations Bulletin* are those of the authors and do not necessarily reflect the views of IISD or other donors. Excerpts from the *Earth Negotiations Bulletin* may be used in non-commercial publications with appropriate academic citation. For information on the *Bulletin*, including requests to provide reporting services, contact the Director of IISD Reporting Services at <kimo@iisd.org>, +1-646-536-7556 or 300 East 56th St. Apt 11A, New York, NY 10022, USA.

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 (IOMC), 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. In response, the IFCS convened an *Ad Hoc* Working Group on POPs, which developed a workplan for assessing available information on the chemistry, sources, toxicity, environmental dispersion and socioeconomic impacts of the 12 POPs.

In June 1996, the *Ad Hoc* Working Group convened a meeting of experts in Manila, the Philippines, and 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 to minimize risks from them. The meeting forwarded a recommendation to the UNEP GC and the World Health Assembly (WHA) that immediate international action be taken on the 12 POPs.

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 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. Also in February 1997, the second meeting of the IFCS decided that the *Ad Hoc* Working Group would continue to assist in the preparations for the negotiations. In May 1997, the WHA endorsed the recommendations of the IFCS and requested that the World Health Organization (WHO) participate actively in the negotiations.

NEGOTIATION OF THE CONVENTION: The first session of the Intergovernmental Negotiating Committee (INC-1) was held from 29 June to 3 July 1998, in Montreal, Canada. INC-1 requested that the Secretariat prepare a document containing material for possible inclusion in an international legally binding instrument. The second session of the INC was held from 25-29 January 1999, in Nairobi, Kenya, where participants discussed a Secretariat-prepared outline of a convention text. The third session of the INC met from 6-11 September 1999, in Geneva, Switzerland, with delegates considering the revised draft text. They adopted a procedure establishing a review committee to apply screening criteria and to prepare a risk profile and risk management evaluation for proposed substances as a basis for further negotiation. The fourth session of the INC met from 20-25 March 2000, in Bonn, Germany. Delegates drafted articles on technical assistance and on financial resources and mechanisms, addressed control measures, and made some progress on language on unintentionally-produced POPs. The fifth session of the INC met from 4-10 December 2000, in Johannesburg, South Africa, where delegates concluded negotiations.

CONFERENCE OF PLENIPOTENTIARIES ON THE STOCKHOLM CONVENTION: The Conference of the Plenipotentiaries convened from 22-23 May 2001, in Stockholm, Sweden. During the Diplomatic Conference, delegates adopted: the Stockholm Convention; resolutions adopted by INC-4 and INC-5 addressing interim financial arrangements and issues

related to the Basel Convention on the Control of Transboundary Movement of Hazardous Waste and their Disposal; resolutions forwarded by the Preparatory Meeting; and the Final Act.

The Stockholm Convention calls for international action on 12 POPs grouped into three categories: 1) pesticides: aldrin, chlordane, DDT, dieldrin, endrin, heptachlor, mirex and toxaphene; 2) industrial chemicals: hexachlorobenzene (HCB) and polychlorinated biphenyls (PCBs); and 3) unintentionally produced POPs: dioxins and furans. Governments are to promote best available techniques (BAT) and best environmental practices (BEP) for replacing existing POPs while preventing the development of new POPs. Provision was also made for a procedure to identify additional POPs and the criteria to be considered in doing so.

Key elements of the treaty include: the requirement that developed countries provide new and additional financial resources; measures 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; and substitution involving the use of safer chemicals and processes to prevent unintentionally produced POPs. Precaution is exercised throughout the Stockholm Convention, with specific references in the preamble, the objective and the provision on identifying new POPs.

INC-6: INC-6 met from 17-21 June 2002, in Geneva, Switzerland. Delegates adopted decisions on: DDT and the register of specific exemptions; the Persistent Organic Pollutants Review Committee (POPRC); a clearing-house mechanism; technical assistance; financial resources and mechanisms and the interim financial mechanism; regional and subregional centers for capacity building and technology transfer; effectiveness evaluation; and non-compliance. INC-6 also established an Expert Group on BAT and BEP.

INC-7: INC-7 was held from 14-18 July 2003, in Geneva, Switzerland. Delegates addressed various "housekeeping" issues in preparation for the first COP. Decisions were adopted on, *inter alia*: offers to host the permanent Secretariat; technical assistance; national implementation plans; exempted use; party reporting; specific exemptions; DDT; interim financial arrangements; a standardized toolkit for the identification and quantification of dioxin and furan releases; measures to reduce or eliminate releases from stockpiles and wastes; effectiveness evaluation; the budget; and the financial mechanism.

The Stockholm Convention entered into force on 17 May 2004, and currently has 152 signatories and 150 parties, including the European Community.

COP-1: The first Conference of the Parties (COP-1) to the Stockholm Convention was held from 2-6 May 2005, in Punta del Este, Uruguay. To set the Convention's implementation in motion, delegates adopted a broad range of decisions related to: providing for the evaluation of the continued need for DDT use for disease vector control; establishing a review process for entries in the register of specific exemptions; adopting guidance for the financial mechanism; establishing a schedule for reporting; establishing arrangements for monitoring data on POPs; adopting rules of procedure and financial rules; adopting the budget for the Secretariat; and establishing the membership of the POPRC.

POPRC-1: The first meeting of the POPRC (POPRC-1) was held in Geneva, Switzerland, from 7-11 November 2005. The POPRC was established to regularly consider additional candidates for the annexes to the Convention. The Committee's membership comprises 31 experts nominated by parties from the five regional groups. It reviews chemicals nominated by parties in three stages. The Committee first determines whether the substance is a POP, as defined by the Convention in terms of its persistence, bioaccumulation, potential of long-range environmental transport (LRET), and toxicity. If a substance is deemed to fulfill these requirements, the Committee then drafts a risk profile to evaluate whether the substance is likely, as a result of its LRET, to lead to significant adverse human health and/or environmental effects. Finally, if POPRC finds that global action is warranted, it then develops a risk management evaluation reflecting socioeconomic considerations and, based on this, the POPRC decides to recommend the COP list the substance under one of the annexes to the Convention.

POPRC-1 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 the Committee at its second meeting. 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.

COP-2: Stockholm Convention COP-2 took place from 1-5 May 2006, in Geneva, Switzerland. COP-2 considered several reports on activities within the Convention's mandate, and adopted 18 decisions on, *inter alia*: DDT, exemptions, financial resources and mechanisms, information exchange, BAT/BEP, identification and quantification of releases, measures to reduce or eliminate releases from wastes, implementation plans, listing chemicals in Annexes A, B and/or C of the Convention, reporting, technical assistance, synergies, effectiveness evaluation, and non-compliance.

POPRC-2: POPRC-2 was held in Geneva, Switzerland, from 6-10 November 2006. The Committee adopted the risk profiles for pentabromodiphenyl ether (pentaBDE), chlordecone, hexabromobiphenyl (HBB), lindane, and perfluorooctane sulfonate (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, beta hexachlorocyclohexane, pentachlorobenzene (PeCB), octabromodiphenyl ether and short-chained chlorinated paraffins, and agreed that intersessional working groups would develop risk profiles on these chemicals to be assessed by the Committee at its third meeting.

COP-3: Stockholm Convention COP-3 was held from 30 April - 4 May 2007, in Dakar, Senegal. COP-3 considered several reports on activities within the Convention's mandate and adopted 22 decisions on, *inter alia*: a revised process for the review of entries in the register of specific exemptions; DDT; measures to reduce or eliminate releases from wastes; guidelines on the standardized toolkit for identification and quantification of releases; guidelines on BAT and draft guidance on BEP; regional centers; listing chemicals in Annexes A, B or C of

the Convention; reporting; effectiveness evaluation; national implementation plans; budget; financial resources; technical assistance; synergies; and non-compliance.

POPRC-3 REPORT

On Monday, 19 November 2007, Donald Cooper, Executive Secretary of the Stockholm Convention, greeted participants and welcomed those observers who will become members of the Persistent Organic Pollutants Review Committee (POPRC) in May 2008. He underscored that POPRC-3's work will determine the shape the Convention will take over the next five years and will set the stage for its future operation. He explained the next meeting of the POPRC was scheduled earlier than planned, in October 2008, to allow any information on potential amendments to the Convention to be circulated to parties six months prior to COP-4 in May 2009.

Chair Reiner Arndt (Germany) thanked the Secretariat, POPRC members and the intersessional working groups for their work, as well as those who took part in preliminary meetings held on Sunday, 18 November 2007. He noted that drafting groups might convene over the course of the week and report back to plenary.

Participants then adopted the meeting's provisional agenda (UNEP/POPS/POPRC.3/1/Rev.2) without amendment. Chair Arndt outlined the proposed organization of work (UNEP/POPS/POPRC.3/INF/2), and suggested that the standard work plan for the preparation of draft risk profiles and draft risk management evaluations (RMEs) be considered prior to the draft RMEs themselves. China proposed that the support of the effective participation in the work of the Committee be discussed prior to the draft risk profiles. Participants agreed on the organization of work, as amended.

The Committee met in plenary throughout the week. Contact groups were established and convened in the evenings and early mornings to further develop and evaluate risk profiles and RMEs. Late in the week the contact groups became drafting groups to work on decision texts, which were presented to plenary for consideration. This summary of the meeting is organized according to the order of the agenda.

The current members of the POPRC are Armenia, Australia, Brazil, Burkina Faso, Canada, Chad, China, Côte d'Ivoire, Czech Republic, Ecuador, Ethiopia, Fiji, Germany, Japan, Jordan, Mauritius, Mexico, Morocco, Norway, Philippines, Qatar, Sierra Leone, Slovenia, South Africa, Spain, Sweden, Thailand, Trinidad and Tobago, the United Kingdom, Uruguay and Yemen.

REVIEW OF COP-3 OUTCOMES

On Monday, the Secretariat presented the outcomes of the third meeting of the Conference of the Parties relevant to the work of the POPRC (UNEP/POPS/POPRC.3/INF/3). She drew attention to the listing of isomers, confidentiality, the workplan of the review committee, and the nomination of new committee members whose terms will commence on 5 May 2008.

OPERATIONAL ISSUES

NAMING OF COMMERCIAL PRODUCTS AND MIXTURES: On Monday, the Secretariat presented on the naming of commercial products and mixtures for the purpose of listing substances under the Convention (UNEP/POPS/POPRC.3/3). He explained four options offered by the

Secretariat subsequent to consultation with experts, based on commercial pentabromodiphenyl ether (c-pentaBDE). These included: naming the commercial mixture, allowing the name of the substance to cover mixtures with a range of compositions (option B); naming a specific substance in the mixture and/or all its isomers with the same degree of substitution (option C); naming specific components of concern in a mixture or all components with a specified degree of substitution (option D); and more comprehensively naming all the chemicals in a class within a specified substitution range (option E).

Chair Arndt stressed the naming process should be transparent, practical, based on science and explanatory, and for the COP to be presented with the reasoning, background and consequences of the agreed option.

Japan, the UK and others favored option D, and Norway suggested option E also be kept open. China noted the value of option C, but Spain highlighted that many studies had been carried out on full mixtures and not specific substances. Drawing attention to short-chained chlorinated paraffins (SCCPs), Canada said that pentaBDE was being used as an example and that option B might be appropriate for other substances. The UK, supported by Qatar, underscored the need to be comprehensive. Sierra Leone said it is the composition of a commercial mixture that gives it a specific identity and urged for mixtures per se to be dealt with. Chair Arndt proposed a chemical-by-chemical approach. Australia suggested adding appendixes listing isomers or congeners with Chemical Abstract Service (CAS) numbers. An observer from the US called for clarity in the initial proposal, noting that naming chemicals not originally listed calls into question the POPRC process.

This discussion was continued under the consideration of the recommendation to list c-pentaBDE.

LISTING OF PRECURSORS: On Monday, the Secretariat introduced the document on how perfluorooctanate sulfonate (PFOS) precursors might be listed under the Convention (UNEP/POPS/POPRC.3/4), which details five possible approaches: listing each known precursor, which might require an evaluation of each precursor by the Committee; listing groups of precursors by their uses that lead to losses into the environment; listing any PFOS precursors with an exception for those used only for non-dispersive purposes; listing precursors based on patent specifications according to a formula; and listing precursors based on the potential for all substances containing the PFOS chemical moiety to transform to PFOS and to list PFOS according to the chemical formula.

Qatar supported grouping precursors according to their uses and warned against evaluating thousands of precursors not currently in use. Japan and China endorsed the first approach, under which precursors should be nominated as POPs only when they present similar properties to PFOS. The UK noted a similar situation arises in the case of chlordecone and stressed that precursors cannot be evaluated as POPs since they transform to POPs only after their release in the environment. Spain supported including a technical document that describes the characteristics of substances that are expected to produce PFOS upon their release and listing known precursors.

This discussion was continued under the consideration of the recommendation to list PFOS.

QUESTIONS RAISED DURING THE INTERSESSIONAL PERIOD: The Committee addressed this agenda item throughout most of the week.

Revision to the outline for risk management evaluations: On Monday, the Secretariat presented a draft RME outline (UNEP/POPS/POPRC.3/6) and a revised outline. Discussions revolved around: information on sustainability, as highlighted by Chair Arndt and Ecuador; production and use data, as raised by the UK; the differences between developing and developed countries, as stressed by China and Sierra Leone; and a footnote noting that information on alternatives did not include unintentionally produced POP candidates, as noted by the Environmental Health Fund.

Chair Arndt recapped that sustainability information could be included under “the summary of information on impacts on society of implementing possible control measures” as well as in the concluding statement should no information be provided under the summary section. He suggested adding in a footnote text from Annex F (Information on socioeconomic considerations) pertaining to differences between parties, and, with Norway, deleting the footnote on unintentionally produced POPs.

Communication of the POPRC’s recommendations to the COP for it to consider listing a chemical in Annex A, B or C of the Convention, thereby amending Annex A, B or C: On Thursday, the Secretariat presented UNEP/POPS/POPRC.3/INF/25, a draft communication on the POPRC’s recommendations to the COP for it to consider listing a chemical in Annex A (Elimination), Annex B (Restriction) or Annex C (Unintentional production) of the Convention, which contains draft elements of a letter to parties. Underscoring that there would be an explanation for listing each chemical substance, Chair Arndt requested that delegates review the letter and consider if parties would understand it.

Sweden suggested adding wording from the Convention text regarding the timing for proposing amendments to the Convention. Uruguay asked how new information, including on exemptions and socioeconomic aspects, would be added. She suggested asking the COP to set up a procedure for the Committee, but Chair Arndt responded that a chemical-by-chemical approach should be followed, noting that the Committee had set its own policy. The UK suggested the Secretariat collect information before COP-4 and make it available to the COP as an information document. Ecuador and the UK asked for the letters to be made available on the internet. Drawing on Articles 21 and 22 of the Convention (Amendments and Adoption and amendment of annexes), Ecuador said guidance was available on how to make amendments to listings, and cautioned against overstepping the POPRC’s mandate.

On Friday, the Secretariat introduced draft letters on chlordecone and HBB as models. POPRC-3 agreed the Secretariat would distribute the letters, make them available on the website, and include any chemical-specific information arising from the RMEs.

Translation costs and document length: On Wednesday, the Secretariat informed the Committee of the 20-page limit set for all Stockholm Convention documents, based on translation costs (UNEP/POPS/POPRC.3/19). He suggested key information

be condensed within that limit and that additional references be provided in a separate information document that would not be translated.

INTRODUCTION OF NEW MEMBERS AND ARRANGEMENT FOR THE TRANSITION BETWEEN OUTGOING AND INCOMING MEMBERS: Explaining the rotation of POPRC members, the Secretariat introduced on Wednesday the 14 country-nominated members that will become members of the POPRC in May 2008 (UNEP/POPS/POPRC.3/INF/4). The new countries represented on the POPRC will be Ghana, Togo, Cambodia, India, Syrian Arab Republic, Bulgaria, Chile, Honduras, France, Switzerland and Portugal. Mauritius and Chad will continue serving on the Committee for the next four years. He also noted that Fiji, Brazil and Jordan had nominated new representatives.

PRESENTATIONS ON SOCIOECONOMIC CONSIDERATIONS

On Monday, Chair Arndt introduced several presentations on socioeconomic considerations of potential control measures: the first on South Africa and lindane; the second on China and PFOS.

Hanna-Andrea Rother, University of Cape Town, South Africa, provided an overview of the socioeconomic impacts of control measures on lindane in South Africa. She explained that lindane is currently being used: as an insecticide for wood preservation; as part of commercial pest control; and as a pharmaceutical in humans and animals. She outlined how these four sectors would be impacted by control measures, said alternatives were available and concluded that listing lindane under Annex A would have a positive socioeconomic impact on South Africa.

Xiaoling Yang, China's State Environmental Protection Administration, outlined the sectors, including the garment, fire fighting, petroleum and semi-conductor industries, using PFOS in China and noted the recent national increase in PFOS production, due in part to substituting the use of halons with PFOS. She explained that, while China is not facing any serious environmental impacts arising from PFOS use, China would face significant socioeconomic impacts from PFOS control measures. She highlighted that PFOS is more energy efficient than its alternatives and its continued use would help to reduce greenhouse gas emissions. She noted PFOS has only recently been controlled in developed countries, and said it would be impossible for developing countries to eliminate PFOS in the near future.

In the ensuing discussion, Sierra Leone noted that the South African reality is not representative of Africa and noted shortcomings in registering pesticides in Africa. Mexico requested information on alternatives to lindane and asked if cost-benefit analyses had been carried out. Spain drew attention to toxicity in aquatic environments. The International POPs Elimination Network (IPEN) drew attention to coastal contamination and traces of PFOS in shellfish in China and asked whether China had plans to further research the presence of PFOS in human blood. Yang said recent studies did not indicate health or environmental impacts. She noted that subsequent to increased production after the 1980's, China had become an exporter of PFOS and underscored

difficulties in obtaining further information, with industry not knowing if PFOS was contained in agents used and with no indication provided on the labels. She noted that socioeconomic considerations should include not only the potential closure of factories, but also the impact on the end users.

CONSIDERATION OF DRAFT RISK MANAGEMENT EVALUATIONS

POPRC-3 considered draft RMEs for five substances: pentaBDE, chlordecone, hexabromobiphenyl (HBB), lindane, and PFOS. The RME is the final stage of the POPRC's work in assessing a substance, and leads to a recommendation by the COP to list the substance in Annexes A, B or C of the Convention.

Each of these substances had undergone, at POPRC-1, an evaluation of whether they fulfill the requirements under Annex D (Information requirements and screening criteria). Draft risk profiles were then prepared according to Annex E (Information requirements for risk profile). As a result of their risk profiles, POPRC-2 decided that each substance is likely, as a result of its LRET, to lead to significant adverse human health and/or environmental effects and that global action is warranted.

The draft RMEs take into account socioeconomic considerations as described under Annex F (Information on socioeconomic considerations), and were prepared by intersessional *Ad Hoc* Working Groups on each substance. These RMEs were used as the basis for the POPRC to decide under which annex to recommend listing and on whether exemptions should also be recommended.

PENTABROMODIPHENYL ETHER: The RME for pentaBDE was addressed in plenary on Monday, Wednesday, Thursday and Friday and in a contact group in the evenings.

On Monday, Ian Rae (Australia) presented the draft RME for pentaBDE (UNEP/POPS/POPRC.3/9). He explained the chemical is essentially "dead" in that its use is banned in most developed countries, but that due to its presence in electrical appliances, plastics, upholstery, mattresses and polyurethane foam, much contaminated material remains in circulation. Rae outlined possible control measures including: voluntary reduction by manufacturers, eco-labeling, ban or restriction measures, or emission controls at waste handling facilities; and highlighted the need to consider the efficacy and effectiveness of control measures.

Explaining that many alternatives to pentaBDE are available, he said listing under Annex A would be most appropriate. Rae noted the difficulties in listing the commercial mixture pentaBDE and that the decision on "what to list" was unresolved. He explained specifying BDE-47 and BDE-99 specifically was the simplest option, and that listing the commercial mixture, or listing all BDEs with 4 or 5 bromines were other options.

In the ensuing discussion, the UK highlighted concerns about non-regulatory actions being listed as potential control measures and said voluntary commitments were not appropriate to address a POP. Mexico noted the lack of knowledge in developing countries about the specific nature of commercial mixtures containing pentaBDE. The World Chlorine Council (WCC) noted there are 80 BDEs with bromines, many of which are not present

in the commercial substance. An observer from Japan concurred with the WCC and supported listing the BDE-47 and BDE-99 specifically.

On Wednesday, Rae presented the outcome of the contact group, which he explained morphed into a drafting group and prepared the draft decision for the Committee's consideration. Rae noted that the revised draft RME discussed the components of commercial pentaBDE (c-pentaBDE) throughout the document and had moved beyond considering only the commercial product. He explained language had been added on the potential growth of the brominated flame retardants market. Rae highlighted that text on control measures involving voluntary activities had been removed and said the term "cost-benefit analysis" had been replaced with a qualitative discussion on the costs and benefits of phase out.

Rae outlined that the concluding statement: explains the need to go beyond BDE-47 and BDE-99; and recommends the COP list in their draft decision the two compounds as well as their families.

In the ensuing debate, the UK highlighted the need to specify any exemptions in the draft decision and urged the Committee to carefully review the rationale for the recommendation. Trinidad and Tobago sought clarification on the meaning of "BDE with four or five bromines," with Rae amending the language to "BDEs with 4 bromines and BDEs with 5 bromines."

On Thursday, the Secretariat introduced the modified draft decision and the draft RME and Chair Arndt stressed that although the decision on whether to list pentaBDE would be taken by the COP, the Committee must make a specific recommendation on "what to list." Jordan explained his country has a young industry and it is impossible to know the consequences of listing so many substances as opposed to only BDE-47 and BDE-99. Australia explained the burden of regulating the broader listing and China suggested more information was required to understand whether the additional congeners are POPs. Norway asked that the meeting report reflect that the lack of data was less of a problem than the administrative burden.

Chair Arndt noted the large majority of the Committee supported expanding the scope of the recommendation, but some were in favor of listing only BDE-47 and BDE-49. He said the Committee should strive for consensus, but if this was not reached, a vote would be held or the issue would be deferred until POPRC-4.

On Friday, Chair Arndt introduced a compromise proposal recommending that the COP consider listing BDE-47 and BDE-99 and other tetra and pentaBDEs present in the commercial mixture in Annex A. He said the decision should also note that BDE-47 and BDE-99 should be used as markers for enforcement purposes. Japan noted it would be useful for implementation to have further information on the commercial mixture and the Bromine Science and Environmental Forum (BSEF) agreed to provide an information paper to COP-4. Norway highlighted details of the commercial mixture were also included in the RME. Delegates agreed with the compromise and the decision was adopted.

Final Decision: In its decision on the pentaBDE RME, the POPRC:

- adopts the RME on pentaBDE; and

- decides to recommend to the COP that it consider listing BDE-47 and BDE-99 and other tetra and pentaBDEs present in the commercial mixture in Annex A.

CHLORDECONE: The draft RME was discussed by the Committee on Tuesday, Wednesday and Thursday and by a drafting group on Tuesday evening.

Hala Sultan Saif Al-Easa (Qatar) presented the draft RME on chlordecone (UNEP/POPS/POPRC.3/10 and INF/12). She explained that chlordecone was first produced in 1951, is present in technical grade mirex, but has no remaining uses or production. Al-Easa said it was used extensively for the control of banana root borer, as a fly larvicide, as a fungicide and in household products including ant traps. She explained that, although information on chlordecone is scarce, alternatives are readily available and control actions are in place in numerous countries. She concluded that the draft RME recommends listing chlordecone in Annex A.

In the ensuing discussion, Qatar highlighted the polluter-pays principle, as raised by IPEN, could be included in all RMEs. Chair Arndt responded that the POPRC is a scientific committee and the issue of "who pays" is implicit in the Convention. He recalled the request for further information on the LRET of chlordecone, with the UK confirming that no further explicit information had been received.

On Wednesday Leena Ylä-Mononen (UK) announced that the chlordecone drafting group had finished its work. In the discussion, Ylä-Mononen, in response to the presentation on long-range transport, introduced and delegates agreed to a corrigendum to the risk profile on chlordecone adopted at POPRC-2 to better reflect the scope of Schering's LRET model as presented to plenary on Tuesday (see page 10).

The UK also introduced an amendment to the final concluding statement of the draft RME. The concluding statement clarifies that no new information was received by POPRC-3 and it explains that, although chlordecone is not known to be currently produced or used, it is important to prevent its re-introduction. It also includes a recommendation focusing the implementation efforts on identifying and managing obsolete stockpiles and wastes containing chlordecone and setting measures for avoiding its future reintroduction. Sweden suggested explaining in the concluding statement that POPRC-2 requested additional information on chlordecone.

On Thursday, the Secretariat outlined the conference room papers (CRPs) relating to chlordecone. Introducing the draft decision on chlordecone, she noted the text had been revised to reflect that the "Committee recommends listing without exemptions." The Committee adopted the RME, with a minor amendment for clarity from the UK "for preventing future production and use" of chlordecone, and the draft decision without amendment. On the accompanying letter to parties, the Committee agreed to include text from the RME's concluding statement.

Final Decision: In its decision on the chlordecone RME, the POPRC:

- adopts the RME on chlordecone; and
- decides to recommend to the COP that it consider listing chlordecone in Annex A of the Convention without specific exemptions.

HEXABROMOBIPHENYL: The Committee addressed HBB on Tuesday and Thursday and by a drafting group on Tuesday evening. On Tuesday, Leena Ylä-Mononen (UK) introduced the draft RME (UNEP/POPS/POPRC.3/11 and INF/13). She explained that HBB is an intentionally-produced chemical used as a flame retardant, that it has 42 possible isomeric forms and is no longer produced. She noted that, as alternatives are already in use, no significant costs are expected to result from listing HBB, but cautioned additional costs may be related to the identification and disposal of existing products containing HBB. She highlighted the need to consider the administrative costs as well as the benefits of listing a “dead” chemical. She said the best control action for HBB would be listing under Annex A, with no exemptions. Delegates agreed that the UK would work on drafting the decision.

On Thursday, the UK introduced documents on HBB including an added rationale for the “class approach,” amendments to the RME and the draft decision on HBB. She said the added rationale provided an explanation for proposing the listing of 42 congeners of the same group of chemicals. On the RME, she highlighted a minor change in the concluding statement. The Committee adopted the RME with those amendments and the rationale as an annex to the RME.

With regard to the decision, China requested clarification from the Stockholm Convention Legal Adviser on preambular text to the decision, stating HBB was a “dead” chemical. Chair Arndt highlighted that this information was contained in the RME and in the letter to parties, but the Committee agreed the Secretariat could add the preambular text and adopted the decision.

Final Decision: In its decision on the risk profile on HBB, the POPRC:

- adopts the RME on HBB; and
- decides to recommend to the COP that it consider listing HBB in Annex A without specific exemptions.

LINDANE: The RME for lindane was discussed on Tuesday, Wednesday, Thursday and Friday. A contact group met on Tuesday evening.

On Tuesday morning, Mario Yarto (Mexico) presented the draft RME (UNEP/POPS/POPRC.3/12 and INF/14). In the presentation, he: drew attention to the outcomes of POPRC-2 and documents pertinent to lindane; expanded on the various types of information gathered, such as country-specific control measures, data on efficacy and efficiency of such measures for different uses; discussed alternatives and reported on their use in different countries; and raised issues of concern, including waste and contaminated sites. He explained that lindane was historically used extensively in the control of lice and scabies in humans and animals.

In the ensuing discussion, Morocco, Uruguay, Thailand, China, Brazil, observers from India and the US and others provided national information on lindane. Sweden and the UK called for considering success stories in the use of alternatives. Chair Arndt drew parallels with DDT, and noted that the Convention allows for differences between countries and that exemptions exist for Annex A listings. Alaska Community Action on Toxics stressed that a wide exemption standard should not be permitted for the pharmaceutical use of lindane. Yarto concluded

that the document would be reinforced with the information provided in the discussion. A contact group on lindane was established and met on Tuesday evening.

On Wednesday, Henk Bouwman (South Africa) said the lindane contact group had finished its work and sent the RME to translation. On Thursday, Chair Arndt explained that the contact group on lindane had completed the draft RME, transformed into a drafting group and drafted a decision for the Committee’s consideration. On the RME, Chair Arndt noted the concluding statement recommends that the COP list lindane in Annex A and allow “time-limited exemptions for the production and use of lindane for pharmaceutical purposes only,” and stressed the need to clarify “time-limited.”

In the ensuing discussion, South Africa outlined, in the example of DDT, the requirement to register use and production, and the need to reapply for exemption after five years. An observer from India requested justification on the recommendation for listing in Annex A as opposed to Annex B. South Africa clarified there are available alternatives to lindane and no written suggestions for an Annex B listing were received.

Sweden, supported by Ecuador, reminded members that under paragraph 9 of Article 8 (Listing of chemicals in Annexes A, B and C), the POPRC recommends whether the chemical should be considered for listing, but that it is the COP that specifies control measures, and cautioned against straying into political discussions.

China requested the inclusion in the RME of his country’s use of lindane in agriculture, but did not request the recommendation extend the exemption to agricultural use. The Philippines noted lindane has been used in his country for soil treatment in sugar cane plantations but said it could be phased out. Norway, supported by Slovenia, suggested including specific recommendations for control measures to aid the COP in its decision.

Sierra Leone suggested further specifying the pharmaceutical uses for exemption and Spain preferred referring to human health purposes only. Chair Arndt suggested defining pharmaceutical uses specifically “for head lice and scabies control.” An observer from the US noted that specifying human health uses reflected the contact group’s consensus that an exemption should not include veterinary scabies.

On the draft decision, the Secretariat highlighted bracketed references drawing the COP’s attention to the POPRC’s findings on alpha hexachlorocyclohexane (alpha-HCH) and beta hexachlorocyclohexane (beta-HCH). The Philippines called for specifying that the exempted production of lindane should not result in the formation of alpha- and beta-HCH. Sweden expressed concern that the decision would then prejudice the outcome of a decision to be taken by POPRC-4. Chad asked that the references to alpha- and beta-HCH be deleted from this decision.

On Friday morning, the Secretariat introduced the draft RME and the draft decision on lindane. Bouwman discussed the changes made in the RME, notably, the inclusion of: additional information from Morocco, China, India, South Africa; reference to UNEP/POPS/POPRC.3/INF/27 for socioeconomic factors and to agricultural uses in the synthesis; and considerations on specific exemptions both in the concluding statement and executive summary. Spain suggested, and delegates agreed,

to clarify that a specific exemption “for control of head lice and scabies as human health only” pertains to health “pharmaceuticals” only.

An observer from India asked that an indication on the exemptions be included in the decision. Chair Arndt underscored that such information would be provided in the RME, in the letter to parties and in an information document forwarded to the COP. The RME on lindane was adopted as amended.

On the draft decision on lindane, an observer from the US noted, in line with a comment from an observer from India, that other decisions stated that the Committee recommends to the COP that it consider listing “without specific exemptions” and suggested that in this instance, the decision state “with specific exemptions.” Ecuador and Uruguay disagreed, saying “without specific exemptions” was clear whereas “with specific exemptions” would call for a lengthy explanation. The draft decision on lindane was adopted without amendment.

Final Decision: In its decision on lindane, the POPRC:

- adopts the RME for lindane; and
- decides to recommend to the COP that it consider listing lindane in Annex A.

PERFLUOROCTANE SULFONATE: Participants considered the PFOS RME in plenary on Monday, Thursday and Friday, a contact group on the issue met on Monday, Tuesday and Wednesday evening and a drafting group met on Thursday.

On Monday afternoon, Robert Chénier (Canada) presented the draft risk management evaluation for PFOS (UNEP/POPS/POPRC.3/13 and /INF/15). He that PFOS is a “live” chemical, and is used primarily in water, oil, soil and grease repellents, for paper and packaging, rugs and carpets, fabrics, and in fire-fighting foams used to fight fuel-based fires. He explained that the Group agreed on the appropriateness of listing PFOS but there were numerous unresolved issues, including: the definition of PFOS and its precursors; uses with no reported technically feasible alternatives; uses for which alternative substances or technologies may be available; and listing options and whether they should include details on use exemptions.

Participants discussed the feasibility of listing PFOS under Annex C. The UK requested legal interpretation of whether release via precursors could be understood as “anthropogenic sources” under Article 5 (Measures to reduce or eliminate releases from unintentional production).

The UK underscored difficulties in distinguishing between the socioeconomic impact of listing a chemical under the Stockholm Convention and the impact of other regulations, especially in countries importing Chinese goods. Several Committee members underscored the importance of outlining historical uses, especially as such uses may still be in place in developing countries. Norway noted that production and use information serves a different purpose in the risk profile and in the RME.

Sierra Leone suggested the POPRC ask the COP to set up a mechanism to encourage research into alternatives to POPs.

Norway and Uruguay supported listing PFOS under Annex A to ensure greater control over its production, while the latter recommended using the EU’s list of exemptions for PFOS uses as a starting point. An observer from Japan cautioned that the EU regulation uses a threshold approach and is not applicable to the Stockholm Convention. Alaska Community Action on Toxics

underscored the impact of POPs on indigenous people of the Arctic, and called on the POPRC to consider severely limiting exemptions on PFOS and listing the chemical under Annex A.

The Philippines underscored the need to examine the recovery and disposal of PFOS and supported listing it under Annex B. Spain highlighted that PFOS does not degrade, suggested considering both the intentional and unintentional production of PFOS, and supported examining the possibility of listing PFOS under Annex C. On the use of PFOS for ant bait, Pesticide Action Network International noted the need for an independent assessment of alternatives prior to discussing exemptions.

On Thursday, Bo Wahlström (Sweden) introduced the draft RME and draft decision on PFOS. He explained that as a result of contact group deliberations the draft RME had undergone substantial changes, highlighting that perfluorooctane sulfonyl fluoride (PFOSF), one of the substances that plays a major role in creating many other PFOS precursors, is described in greater detail. He noted that historical uses had been added for clarity, references to potential listing under Annex C had been deleted, and the RME now includes elements of a risk reduction strategy that lists uses and outlines potential exemptions. He said the draft RME recommends that the COP decide whether to list PFOS in Annex A or B.

He recalled that POPRC-1 had agreed to consider PFOS acid and its salts, and explained that during the discussions on PFOS it appeared that PFOSF, one of the 96 precursors included in Sweden’s original nomination, is the starting material for many substances that have a high probability to degrade to PFOS. He said the contact group supported recommending the listing of PFOS acid, its salts and PFOSF. With respect to the addition of PFOSF to the listing recommendation, China sought legal advice regarding its addition late in the review process. A party observer from Japan cautioned that including PFOSF at the RME stage raised concerns over process.

China stressed that it is likely that there are uses that have not yet been identified. Australia asked that the RME executive summary specify the scale of the uses listed. The UK suggested clearly distinguishing dispersive and closed uses. IPEN queried whether the Annex A exemption for closed system site-limited intermediates would apply. An industry observer from Japan explained that PFOS cannot be produced in a closed system. A drafting group met to continue revisions.

On Thursday, the Legal Adviser confirmed that the Committee could proceed with recommending the listing of PFOSF and Chair Arndt clarified that PFOSF could be listed if the Committee determined that PFOSF fulfilled the Annex D screening criteria. The UK, supported by Norway, noted that, as the chapeau of Annex D refers to transformation products, there is no need for the Committee to go through an elaborate screening process for PFOSF and proposed the draft decision on PFOS specify that PFOSF meets the screening criteria. Chair Arndt suggested the Committee explicitly amend its screening decision, as the same logic used by POPRC-1 to consider PFOS’ salts would apply to PFOSF. Ecuador suggested including this rationale in the report of the meeting instead of going through the exercise of examining whether PFOSF meets the Annex D screening criteria.

India expressed surprise that a decision of such magnitude was being taken so lightly, cautioning on compounds being added at this late stage of review. Sweden responded that PFOSF was one of the 96 substances listed with PFOS in its original nomination, and Chair Arndt clarified that the Committee has the authority to take a decision on PFOSF. Australia explained that PFOS salts had been included in the scope of the POPRC-1 Decision as they were clearly precursors of PFOS and convert to PFOS acid in seconds. He noted PFOSF was the first on Sweden's list of other precursors and that it converts to PFOS acid in minutes.

An observer from the US suggested including a paragraph in the meeting report that explains why PFOSF has not undergone the Annex E screening process. An observer from Japan suggested the Committee explicitly adopt a decision stating that PFOSF fulfills each of the screening criteria. Australia highlighted that PFOSF had been discussed under the Annex E screening process.

The Committee then discussed whether it should recommend listing under Annex A or B. The Legal Adviser said the POPRC could recommend listing to "Annex A or B" and could suggest which exemptions to allow under each scenario. Norway asked that the RME make more explicit, in its concluding statement and in the elements of a risk reduction strategy, the consequences of listing the substances in either annex, especially in relation to the number of exemptions that might be granted. On whether exemptions would be granted for a closed system, the Legal Adviser noted that under Annex A, parties could decide that exemption would not apply to a chemical by placing an asterisk after its name, but explained that the option does not currently exist under Annex B.

On Friday morning, Chénier introduced a revised draft decision on PFOS and a draft decision on PFOSF. On the draft decision on PFOSF, he explained it would: recognize that PFOSF was included as the first substance in the list of 96 nominated by Sweden; note that PFOSF was recognized as a starting material for PFOS in the risk profile; include an annex that evaluates PFOSF against the criteria in Annex D; decide that PFOSF is likely, through its transformation to PFOS and as a result of the LRET of PFOS, to lead to significant adverse human health and environmental effects such that global action is warranted.

On the draft decision on PFOS, Chénier explained it would also include a reference to the POPRC conclusion on PFOSF and would recommend listing PFOS acid, its salts and PFOSF in Annex A or B.

Wahlström then introduced the revised RME for PFOS, explaining that it clearly specifies uses for which there are alternatives available, and that the elements of the risk strategy have been redrafted to spell out critical uses and other uses.

On Friday evening, Chair Arndt opened discussions on the draft decision on PFOSF, noting an amendment proposed by Japan to clarify in the annex to the decision that information prepared for PFOS applies to PFOSF. China expressed concern over the process of considering PFOSF without clearly communicating to parties that it was a chemical of interest. Ecuador explained adopting the decision on PFOSF would address process concerns. An observer from the US suggested

the Committee also adopt the risk profile for PFOSF and for the PFOS salts. POPRC-3 adopted the draft decision on PFOSF, as amended.

On the revised RME, Sweden outlined the further changes to the document. China suggested that the RME clearly reflect that alternatives to some PFOS uses were only available in developed countries; noted that the RME still required further work, and; opposed by Ecuador, the UK and many others, supported postponing the listing decision until POPRC-4. Compromise was reached to adopt the RME yet allow additional information to be added to the RME as an annex by POPRC-4. POPRC-3 adopted the RME with amendments that would reflect some of China's textual concerns.

On the draft decision on PFOS, Ecuador, supported by many, emphasized that sufficient information was available to recommend listing, and that the POPRC should recommend listing under Annex A as PFOS does not warrant the status granted to DDT by listing in Annex B. Japan disagreed, advocating listing under Annex B as there are uses for which there are no alternatives.

Chair Arndt suggested, and Committee members agreed, to solicit additional information that could be annexed to the RME at POPRC-4. He then suggested recommending listing under Annex A for those uses for which alternatives are available, and listing under Annex B for those uses for which alternatives are not available. Ecuador, Norway, the UK and others opposed this proposal, explained that they lacked the political mandate to agree on this, and preferred recommending listing in "Annex A or B." POPRC-3 agreed that the decision of listing PFOS, its salts and PFOSF under Annex A and/or B should be taken by the COP. The Committee adopted the decision, as amended.

Final Decisions: In the decision on PFOSF, POPRC-3 recalls that:

- PFOSF was included in the submission by Sweden to list PFOS;
- it has been found that PFOSF is a starting material for the synthesis of PFOS and PFOS-related substances; and
- the POPRC has evaluated PFOSF against the Annex D criteria as described in the annex to the decision.

The POPRC-3 also decides:

- that PFOSF fulfills the screening criteria in Annex D;
- to adopt the PFOS risk profile for PFOSF and PFOS salts; and
- that PFOSF and PFOS salts are likely, through their rapid transformation to PFOS and as a result of PFOS' LRET, to lead to significant adverse human health and environmental effects such that global action is warranted.

In the decision on PFOS, POPRC-3:

- adopts the RME for PFOS;
- invites parties and observers to submit information according to Annex F that could complement the current RME and decides to compile that information in an annex to the RME; and
- decides to recommend the COP consider listing PFOS acid, its salts and PFOSF in Annex A or B of the Convention.

PRESENTATION ON ENVIRONMENTAL TRANSPORT AND MODELLING

On Tuesday, Chair Arndt introduced a presentation on environmental transport and modeling, explaining that it was being included in response to a call by POPRC-2 for further information on the long-range environmental transport (LRET) of chlordecone.

Martin Scheringer, Swiss Federal Institute of Technology Zurich, presented the OECD Screening Tool for Overall Persistence and Long-Range Transport Potential. He explained that the Tool is a free, harmonized, and simple "consensus" model that estimates the long-range transport potential (LRTP) and the overall persistence of chemicals based on five chemical characteristics and can be used as a hazard screening indicator. He then illustrated its use, demonstrating how the LRTP and overall persistence of the eleven chemicals being discussed at POPRC-3 compare to those for scheduled POPs.

He emphasized that the model relies on the availability of reliable data of physico-chemical properties for the substances being reviewed and underscored the importance of initiating measurement of these properties for chemicals without reliable data.

The Czech Republic and Mexico noted the Tool could be useful in evaluating the effectiveness of the Convention. Trinidad and Tobago asked whether the Tool accounts for regional differences, and Norway asked whether it takes into account aerosols and the grasshopper effect. Scheringer explained the Tool only included generic information but that the user could adapt the data on chemical properties to reflect different environmental conditions. He confirmed that partitioning to aerosols and revolitization is included in the model.

An observer from Switzerland noted that the information presented by Scheringer was included in the risk profile for chlordecone. Chair Arndt said the Committee needed to see whether the presentation contained information that may lead to new conclusions on chlordecone.

BIOACCUMULATION ASSESSMENT

Approaches to assessing bioaccumulation were discussed on Tuesday, Wednesday, Thursday and Friday, with a drafting group convening on Wednesday evening.

On Tuesday, Masaru Kitano (Japan) discussed approaches to assessing bioaccumulation under Annex D when the quantitative criteria listed in subparagraph 1(c)(i) of Annex D are not fully met (UNEP/POPS/POPRC/INF/8). He noted that although Kow values are important they can only be used for non-ionic organic compounds and therefore cannot be used for PFOS. In evaluating the bioaccumulation property of those chemicals that do not fulfill the quantitative (i) criterion, Kitano explained information is required as evidence they fulfill the qualitative (ii) or (iii) criteria. Kitano concluded that for chemicals that do not meet the quantitative (i) criterion careful consideration should be given to: bioconcentration factor level; evidence of a long half-life; the reasons why (i) is not applicable; concentration differences between trophic levels; high toxicity/high ecotoxicity; and detections in biota/human body, or exposure in the developmental stage.

Chair Arndt said the paper provides an explanation of what the POPRC has done in the past and will allow the Committee to apply a more systematic approach in the future. Norway noted it was a good working document, but cautioned it was more restrictive than Annex D. She also noted the Convention places more importance on toxicity and LRET than on bioaccumulation. South Africa noted much of the research is on species in colder climates and suggested also looking at warmer environments. Canada noted that the Koa approach is likely to be applicable when considering endosulfan.

On Wednesday, Kitano called for further comments on bioaccumulation and announced a drafting group would convene in the evening. On Thursday, Japan introduced a document on additional information related to assessment of bioaccumulation data under Annex D, saying it would be the starting point for future discussions on bioaccumulation.

On Friday morning, the Committee resumed discussion and Sweden underscored the quality of the document and, opposed by Spain and Japan, suggested deleting references to "comparison of concentration found in biota with toxicity levels." The UK, backed by Spain and Norway, proposed retaining text on "high toxicity and high ecotoxicity detection in biota" that had been deleted. Canada stressed that the document is not exhaustive and is a work in progress. Delegates agreed to retain references to ecotoxicity and comparisons, with an additional sentence from Sweden noting the uncertainty of such methods. The document was adopted, as amended.

CONSIDERATION OF DRAFT RISK PROFILES

POPRC-3 considered draft risk profiles for five substances: commercial octabromodiphenyl (c-octaBDE), pentachlorobenzene (PeCB), short-chained chlorinated paraffins (SCCPs), and alpha and beta hexachlorocyclohexane (alpha- and beta-HCH). The risk profile is the second stage of the POPRC's work in assessing a substance. Each of these substances had undergone, at POPRC-2, an evaluation of whether they fulfill the requirements under Annex D. The draft risk profiles are prepared according to Annex E by intersessional *Ad Hoc* Working Groups on each substance.

Based on these risk profiles, POPRC-3 had to decide whether each substance is likely, as a result of its LRET, to lead to significant adverse human health and/or environmental effects and whether global action is warranted. The POPRC-3 also was supposed to establish working groups to prepare RMEs for these chemicals.

OCTABROMODIPHENYL ETHER: This issue was discussed on Tuesday and Friday, in a contact group on Tuesday evening and then in a drafting group.

On Tuesday, José V. Tarazona (Spain) introduced the draft risk profile for commercial octabromodiphenyl ether (c-octaBDE) (UNEP/POPS/POPRC.3/14 and INF/16). He underscored the main issues in the draft, including chemical identity, the potential for bioaccumulation and ecotoxicity.

On the chemical identity, he noted the risk profile is based on hexa-, hepta-, octa- and nona- congeners and that the information it contains refers to the commercial mixture or the individual congeners when appropriate. On the potential for bioaccumulation, Tarazona underscored the importance of recent data on debromination in biota, which may explain the lack of

biomagnification observed in octa- and nona- congeners and the biomagnification observed for hexa- and hepta- congeners. On ecotoxicity, he explained that while for single congeners the doses observed to produce effects in laboratories are well above exposure levels in remote areas, there is insufficient information on the potential additive or synergistic effects of groups of congeners.

Tarazona added that the Committee will have to decide whether to retain a reference to Article 8.7(a) of the Convention which specifies that “lack of full scientific certainty shall not prevent the proposal from proceeding,” while the UK suggested specifying which congeners might require a reference to Article 8.7(a). The BSEF emphasized the need to clarify that the information in the draft risk profile only covers some of the congeners named in the profile.

A contact group was established to continue discussions and met on Tuesday evening. On Wednesday morning, Tarazona noted the working group on octaBDE had transformed into a drafting group and would complete its work by Friday.

On Friday, Tarazona introduced the revised draft risk profile on octaBDE noting that an extra paragraph had been added as Canada and Australia had reported quantitative risk assessments for health and for environment based on risk quotients and margins of safety suggesting potential risk. He highlighted an obsolete paragraph on octa- and nonaBDE assessments had been deleted. He drew attention to the concluding statement that says that “it is concluded that hexa- and heptaBDE are likely, as a result of LRET, to lead to significant adverse human health and/or environmental effects, such that global action is warranted.”

Jordan and an observer from India called for further information on octa- and nonaBDE before proceeding. Spain, supported by the UK, explained that the drafting and working groups favored moving to the next step and also requesting more information for octa- and nonaBDE. Chair Arndt drew parallels to pentaBDE where reference was made to those congeners in a commercial mixture, and Jordan agreed to include text to clarify the profile refers to commercial octaBDE. BSEF provided background on specific isomers and their potential to become POPs or to de-brominate. An observer from the US noted that the specific congeners had not been initially proposed, calling into question procedural issues. Spain responded that the octa- and nona- proposal reflected the decision taken by POPRC on bioaccumulation. Chair Arndt confirmed that “commercial” would be added to octaBDE throughout the document. The document was agreed, as amended.

On the draft decision, Chair Arndt noted that “components of the c-octaBDE” would be added after “hexa- and heptaBDE” and after “octa and nonaBDE” and the decision was adopted, as amended.

Final Decision: In its decision on the risk profile on c-octaBDE, the POPRC:

- adopts the risk profile on c-octaBDE;
- invites the intersessional Working Group on c-octaBDE to explore any further information on including octaBDE and nonaBDE, related to risk estimations and bioaccumulation, including the environmental and health relevance of de-bromination, and, if appropriate, to revise the risk profile for consideration by POPRC-4;

- decides that hexa- and heptaBDE components of the c-octaBDE are likely, as a result of their LRET, to lead to significant adverse human health and environmental effects such that global action is warranted;
- decides, taking into account that a lack of full scientific certainty should not prevent a proposal for proceeding, that octa- and nonaBDE components of the c-octaBDE are likely, as a result of their LRET, to lead to significant adverse human health and/or environmental effects such that global action is warranted; and
- invites parties and observers to submit to the Secretariat the information specified in Annex F for c-octaBDE before 5 February 2008.

PENTACHLOROBENZENE: PeCB was considered in plenary on Wednesday and Friday, in a contact group on Wednesday evening and in a drafting group on Thursday.

On Wednesday, Dario C. Sabularse (the Philippines) presented the draft risk profile for pentachlorobenzene (PeCB) (UNEP/POPS/POPRC.3/15, INF/17, and INF/21). Sabularse explained the process followed by the working group, drawing on Annex E data submitted by ten parties. He expanded on: the status of PeCB; the lack of intentional production as reported by Canada, Czech Republic, Germany, Lithuania, Mauritius, Turkey and the US; its past uses, including as dyestuff carriers, herbicides, pesticides and fungicides; its unintentional production and releases; and total releases. On exposure, he noted the substance is reported to spread globally and has been measured in biotic and abiotic media in both remote and unremote areas. He reported on toxicity and ecotoxicity, and on bioavailability and critical body burdens (CBB). He noted uncertainty on production and uses outside Europe and North America, but concluded that the working group recommends the Committee proceed with the nomination process and invite parties and observers to submit Annex F information so as to proceed in the preparation of a risk management evaluation.

Noting that PeCB had both intentional and unintentional sources, Spain asked for the inclusion of available quantitative information, and the WCC offered to provide further data. IPEN noted that measuring CBB may not be the most appropriate approach for PeCB or POPs in general. Observers from the US and India, opposed by IPEN, Sweden and Canada, said the risk profile did not contain sufficient information to be moved forward. A contact group met on Wednesday evening to strengthen the risk profile. On Thursday morning, Sabularse said discussions had focused on exposure to pentachlorobenzene and its effects, and requested more members join the group to enable drafting to commence.

On Friday afternoon, Sabularse presented a revised excerpt on the draft risk profile. Additions and changes to the risk profile sparked debate, specifically text provided by the WCC on two approaches comparing effect and exposure data: one focused on PeCB organic carbon concentrations in sediments from Canadian lakes being lower than “estimated no effect value” for benthic organisms; the other on comparisons between exposure estimations in a piscivorous predator and polar bears, where estimations of exposure were lower than the derived effect levels.

Spain proposed alternative text noting that the available information is not sufficient for confirming if the values represent real CBB or just expressions of internal dose or whole body residue levels. It also says that expressing toxicological effects as internal doses or CBB improves the effect assessment but only partially reduces its uncertainty. It concludes that monitoring levels above CBB or internal doses clearly indicate a risk; while just the fact that current measured concentrations are below these triggers should in no case be interpreted as a confirmation of the absence of risk, particularly in the assessments of POPs and POPs candidates. Many favored including both the WCC and the Spanish text, and Sweden and Norway concurred on condition that the report noted their objection both to the content of the WCC text and to including submissions from observers at this stage.

The UK proposed, and the Committee approved, alternative text for the synthesis of information and concluding statement. The text pertains to intentional and unintentional release, stating that “available information does not allow a distinction between the environmental burden caused by intentional use and the burden caused by unintentional production and releases of PeCB. As such distinction would help to prepare the RME and to formulate the final conclusions, additional data on this issue should be searched for.” Delegates also agreed to remove the brackets around critical in “estimated critical whole body residues.”

The risk profile on PeCB was accepted, as amended. The Secretariat introduced the draft decision on PeCB and Chair Arndt noted that the letter to parties would include the text from the UK to reflect calls for data on unintentional releases. The decision was adopted without amendment.

Final Decision: In its decision on PeCB, the POPRC:

- adopts the risk profile for PeCB;
- decides that PeCB is likely, as a result of its LRET, to lead to significant adverse human health and environmental effects such that global action is warranted;
- decides to establish an *Ad Hoc* Working Group to prepare a RME that includes an analysis of possible control measures for PeCB; and
- invites parties and observers to submit to the Secretariat the information specified in Annex F before 5 February 2008.

SHORT-CHAINED CHLORINATED PARAFFINS: The Committee addressed SCCPs on Wednesday and Friday in plenary, and in a contact group throughout the week.

On Wednesday, Mohammad Aslam Yadallee (Mauritius) presented the draft risk profile for SCCPs (UNEP/POPS/POPRC.3/16 and INF/22). He explained SCCPs are addressed under various conventions, including the Aarhus Protocol on POPs under the Convention on Long-Range Transboundary Air Pollution, and highlighted that most developed countries have ceased production. Yadallee said the uses of SCCPs include lubricants, paints, adhesives, plastics and rubber and flame retardants. He highlighted the relative persistence in air. On the LRTP, he said that SCCPs had been detected in air, sediment and mammals in the Arctic. Describing the bioaccumulative nature of SCCPs, Yadallee noted SCCPs are possibly carcinogenic. He concluded that despite the increasing regulation of SCCPs, there are still significant amounts in use and, because of the

LRTP, SCCPs are likely to lead to adverse human health and or environmental impacts. He recommended that SCCPs be moved to the RME stage.

In the ensuing discussion, Sierra Leone highlighted the need to provide information on the conditions under which measurements are undertaken, and the observer from India offered further data on SCCPs. The Chlorinated Paraffin Industry Association said the environmental levels do not pose a significant risk and an observer from the US, supported by China, questioned if it met Annex E criteria. Spain and Norway supported the conclusion of the working group, with the former calling for further information to be added to the document. An observer from Japan questioned the data on toxicity, noting that after LRT it would decrease and was unlikely to have significant effects. China suggested the profile required strengthening and expressed concern that his comments were not sufficiently reflected, and called on the POPRC to take a fair, impartial and objective decision.

On Friday, Yadallee introduced the SCCPs draft risk profile and he explained that the profile had been synthesized and revised. He said revisions by the contact group included revision of the identity to reflect the original nominating substance and the incorporation of information received from India. Stating that the drafting group had reached a general consensus on the persistence, bioaccumulation and LRET of SCCPs, Yadallee highlighted that there was no consensus regarding the adverse effects on human health.

He explained that the contact group had concluded that, as a result of the LRET, SCCPs were likely to lead to adverse environmental effects, such that global action is warranted and the text was submitted to the Committee for approval.

In the ensuing discussion, Japan presented, and the Committee agreed to take note of, a proposal to enhance accessibility to referenced studies. Japan also stated that it considered adverse environmental effects from SCCPs to be “not likely” and suggested the decision be changed to reflect this. China agreed and stated the information in the risk profile was incomplete and imprecise, and underscored that SCCPs could not meet Annex E requirements.

Canada explained that all references and additional information were available in the associated information document (UNEP/POPS/POPRC.3/INF.22). Japan, supported by Ecuador and Sierra Leone, suggested the proposal be “brushed up” during the intersessional period and reconsidered at POPRC-4.

During an extensive discussion, Japan, China, Ecuador, Sierra Leone and the Philippines expressed support for postponing the decision on developing a RME until POPRC-4. Norway, the UK, Czech Republic, Sweden, Trinidad and Tobago, South Africa and Ethiopia preferred to launch the preparation of an RME. Chair Arndt stressed the need to reach consensus and deferred the discussion until the evening session to allow time for informal consultations. The Committee reconvened in the evening and agreed to Chair Arndt’s proposal that the Committee makes every effort to adopt decisions by consensus and therefore postpones the decision on moving the SCCPs risk profile forward until POPRC-4. Norway highlighted that the kind of

additional information required is on toxicity and LRET. Chair Arndt requested, and the Committee agreed, that the SCCPs *Ad Hoc* Working Group would continue intersessionally.

ALPHA AND BETA HEXACHLOROCYCLOHEXANE: The Committee considered the draft risk profiles for alpha- and beta-HCH on Wednesday and Thursday in plenary.

On Wednesday, Ivan Holoubek (Czech Republic) introduced the draft risk profiles for alpha-HCH (UNEP/POPS/POPRC.3/17 and INF/19) and for beta-HCH (UNEP/POPS/POPRC.3/18 and INF/20).

He explained that alpha-HCH and beta-HCH are two of the five stable isomers of technical HCH, a pesticide formerly used in agriculture. Noting that the chemical is banned or restricted in many countries, he said most countries had replaced its use with lindane and underscored the production process of lindane creates large volumes of HCH as waste. Holoubek emphasized that stockpiles of alpha-HCH and beta-HCH are an important source of environmental release.

In his explanation of their basic physico-chemical properties, Holoubek said they were similar to lindane and underscored that alpha- and beta-HCH differ from many other POPs in that they are not just “flyers” but also “swimmers,” meaning they are more intensively transported than other chemicals. He highlighted that as a result, the Arctic region is a sink for alpha-HCH. He also detailed the health effects of alpha- and beta-HCH, which have been identified as having neurotoxic, hepatotoxic and immunosuppressant impacts and are possibly carcinogenic. He summarized that the *Ad Hoc* Working Group had concluded that, based on these findings and the estimated daily intake of Arctic indigenous people, global action on alpha- and beta-HCH is warranted.

In the ensuing discussion, Japan cautioned that, while not opposing the conclusions of the draft risk profile, the bioaccumulation of alpha- and beta-HCH was not significant compared to that of scheduled POPs. Spain called for evaluating all the available information when assessing biomagnification. On the conclusion that alpha-HCH is “in principle biodegradable,” Sweden asked for alternate wording to better reflect its persistence.

Australia highlighted the potential of turning alpha- and beta-HCH into trichlorobenzene, an industrial solvent, to address stockpile concerns. Germany noted that this could be applied to HCH generated as a result of exempted lindane production and underscored that the nomination of lindane and alpha- and beta-HCH by Mexico demonstrated that developing countries can participate fully in the POPRC process. Participants established a drafting group to finalize the risk profile.

On Thursday, the Committee considered the revised draft risk profiles and revised draft decisions on alpha- and beta-HCH. On the revised draft risk profile for alpha-HCH, Sweden proposed adding text on its persistence, pertaining to its half-life in sediments in different geographical regions. Australia highlighted reference to an invalid experiment on synergistic effects, and delegates agreed to delete it. An observer from Austria, opposed by IPEN, suggested removing a sentence on the POPs exposure of indigenous Arctic populations and wildlife. Debate ensued on the exposure’s “probably additive or possibly synergistic effects,

which are difficult to predict.” Delegates agreed to delete all reference to “synergistic effects,” with the observer from Austria noting that additive effects were not “difficult to predict.”

Delegates reviewed the revised draft risk profile on beta-HCH. An observer from Japan questioned its bioaccumulation potential, while Spain questioned references to Annex D paragraph 1(c)(i) of the Convention. Delegates agreed to Chair Arndt’s suggestion to include the full reference from the Convention text. Sweden asked for the same modification to be made for alpha-HCH’s risk profile and Spain suggested the inclusion of text on synergistic effects, found in the beta-HCH risk profile, to be replicated for consistency in the alpha-HCH profile. The draft risk profiles were adopted with amendments. The draft decisions recommending listing of alpha- and beta-HCH were adopted without amendment.

Final Decisions: In its decision on the alpha-HCH risk profile, the POPRC:

- adopts the alpha-HCH risk profile;
- decides that alpha-HCH is likely, as a result of its LRET, to lead to significant adverse human health and environmental effects such that global action is warranted;
- decides to establish an *Ad Hoc* Working Group to prepare a RME that includes an analysis of possible control measures for the chemical; and
- invites parties and observers to submit to the Secretariat the information specified in Annex F before 5 February 2008.

In its decision on the beta-HCH risk profile, the POPRC:

- adopts the beta-HCH risk profile;
- decides that beta-HCH is likely, as a result of its LRET, to lead to significant adverse human health and environmental effects such that global action is warranted;
- decides to establish an *Ad Hoc* Working Group to prepare a RME that includes an analysis of possible control measures for the chemical; and
- invites parties and observers to submit to the Secretariat the information specified in Annex F before 5 February 2008.

CONSIDERATION OF “TOXICANT INTERACTIONS”

UNDER ANNEX E(b): On Friday, South Africa introduced a submission by South Africa, Qatar, Spain and Mexico that requests the Secretariat to arrange an activity, similar to the activity under bioaccumulation, to inform and assist the Committee in its deliberations on the consideration of toxicant interactions, as specified under Annex E(b). Chair Arndt noted the accumulation report had been prepared based on experience, whereas little experience has been gained on toxicant interactions. The Committee agreed that an expert would be invited to give a presentation on the issue at POPRC-4.

HARMONIZATION OF CONCLUSIONS OF RISK PROFILES: On Wednesday, Chair Arndt proposed that an intersessional working group prepare a report on lessons learned from the concluding statements of the risk profiles prepared by the POPRC. Spain, the UK and Germany offered to participate in the drafting. On Friday, Chair Arndt explained that Germany would fund its preparation by the Secretariat.

CONSIDERATION OF ENDOSULFAN FOR INCLUSION IN ANNEXES A, B OR C

On Wednesday, Tarazona was scheduled to present consideration of the newly proposed chemical, endosulfan, for inclusion in Annexes A, B or C (UNEP/POPS/POPRC.3/5, INF/9 and INF/10). He suggested postponing discussions to POPRC-4. He explained a number of problems, internal to the EU (the nominating party), made it impossible to release information necessary to the discussion. Chair Arndt noted that the document currently lacked substantial data relevant to decision making and the UK supported delaying the discussion.

Thailand and Ecuador asked for clarification, and Ecuador requested a letter of justification from the proposing party and for the Stockholm Convention Legal Adviser to intervene. The Legal Adviser drew attention to the rules of procedure and the Convention text to underscore issues of timeframes for proposals to be made. South Africa suggested the proposing party note that it withdraws its submission. The UK highlighted that the proposal was made by the EU and its Member States, but the representatives of individual Member States lacked the mandate to withdraw the submission.

China drew attention to a proposal on endosulfan prepared with Sierra Leone and India, and asked for it to be considered at POPRC-4 if the discussion was postponed. Ecuador stressed that China, India and Sierra Leone's proposal concludes that endosulfan does not fulfill Annex D criteria – which is the opposite of the EU's conclusion. Chair Arndt proposed holding informal discussions on the issue.

On Thursday, Chair Arndt highlighted that on Wednesday delegates had noted that the EU submission on endosulfan lacked some data. The Legal Adviser read out text to be included in the meeting report, to the effect that: vital information was missing; the Committee agreed to suspend discussion and postpone consideration of the issue to the next meeting; and this should not set a precedent.

Further to a comment by an observer from India, Chair Arndt invited the notifying party and others to submit information to the Committee before POPRC-4. He further underscored that the proposal by China, Sierra Leone and India would be recorded.

OTHER MATTERS

SUPPORT FOR EFFECTIVE PARTICIPATION IN THE WORK OF THE COMMITTEE: On Tuesday, the Secretariat presented UNEP/POPS/POPRC.3/8 on support for effective participation in the work of the POPRC for developing countries or countries with economies in transition. She drew attention to proposed activities: the preparation of a handbook on the work of the Committee; assisting parties in compiling information; facilitating internet access; and holding workshops for current and incoming committee members to share experience.

The Secretariat suggested establishing a small group to develop the handbook during the week and in the intersessional period, with Brazil drawing attention to novel virtual education tools. To collect regional information, Morocco suggested establishing a data collection system and Jordan proposed subregional and national meetings. IPEN underscored the role of civil society and NGOs in providing and disseminating information and called for increased participation. Chair Arndt discussed the possibility of a fund to ensure the equal

participation of industry and non-industry NGOs. On workshops, China suggested opening them to the private sector and other interested parties, whilst Ecuador favored a two-tier approach, first for committee members and then for other stakeholders. Mauritius and the UK proposed using other regional chemical fora such as the Strategic Approach to International Chemicals Management (SAICM) to promote the work of the POPRC.

Chair Arndt reminded delegates that no funding was available for activities beyond those listed in the document. He noted that proposals for additional activities and calls for sponsorship could be added to the meeting report. Delegates discussed using National Implementation Plans to work on new POPs and how the Global Environment Facility (GEF) may be a source of funding. Uruguay noted the GEF is not currently open to funding work on new POPs and that the Committee should request COP-4 to liaise with the GEF.

On Friday, Mario Yarto (Mexico), reporting on the week's informal consultations on the issue, outlined the scope of the document, noting it would include: information on the data requirements for the different annexes of the Convention; a review of the lessons learned over the past three years of the Committee's work; and a section on helping parties to compile information. He suggested developing a methodology on how to compile and gather the data. He said the handbook would also look into assisting in the provision of internet access, training, and regional workshops. On the timeline, a consultant will provide a preliminary draft by May 2008 and the POPRC will be asked to review it in July before its next meeting. At the end of Friday's evening session, Sweden announced the Government of Sweden could fund the preparation of the handbook.

ROSTER OF EXPERTS: On Wednesday, the Secretariat introduced, and the POPRC noted, the revised roster of experts contained in UNEP/POPS/POPRC.3/INF/5.

ELECTIONS: On Friday, Chair Arndt thanked POPRC Vice-Chair Jacqueline Alvarez (Uruguay) for her work as her term will be ending in May 2008. He suggested, and the Committee agreed, that in the intersessional period after May 2008 Alfredo Cueva (Ecuador) would act as Vice-Chair until a new Vice-Chair can be elected by POPRC-4.

INFORMATION ON POSSIBLE SYNERGIES: On Wednesday, the Secretariat discussed possible synergies between the Stockholm Convention, the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, and the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. He drew attention to an *Ad Hoc* Joint Working Group on enhancing cooperation and coordination, which identified a number of areas to enhance work such as: outreach and public awareness, the coordinated use of regional offices, national reporting, and compliance mechanisms.

Chair Arndt noted a paper on the cooperation of scientific panels and said the *Ad Hoc* Joint Working Group website <http://ahjwg.chem.unep.ch/> provided much information.

DATES AND VENUE OF POPRC-4

On Wednesday, Chair Arndt noted that POPRC-4 would be held from 13-17 October 2008, in Geneva, Switzerland.

CLOSING PLENARY

STANDARD WORK PLAN FOR THE PREPARATION OF DRAFT RISK PROFILES AND DRAFT RISK MANAGEMENT EVALUATIONS:

On Friday, delegates considered the intersessional workplan for the preparation of RMEs before POPRC-4. The Secretariat introduced the draft workplan and explained that because POPRC-4 is scheduled for October 2008, there was less time for intersessional work. She highlighted that, as consideration of endosulfan has been deferred, there was no need for intersessional work to develop a risk profile, but that proposals for RMEs would need to be prepared.

The Secretariat outlined that the timeframes for parties and observers to submit information had not been altered, but that the time available for the working groups to prepare drafts had been reduced from seven to four weeks. She said another key change was that the second draft would be prepared but not circulated and instead would be distributed directly to parties and observers for comments. Sweden supported the approach and suggested that the change be outlined in a letter to the working groups. Ecuador asked the report note the extraordinary situation and state the workplan was without prejudice to future activities. The Committee adopted the workplan without amendments.

Chair Arndt announced that: Mario Yarta (Mexico) would chair the *Ad Hoc* Working Group preparing the RMEs on alpha and beta-HCH; Jacqueline Alvarez (Uruguay) and Alfredo Cueva (Ecuador) would co-chair the *Ad Hoc* Working Group on c-octaBDE; Mohammad Aslam Yadallee (Mauritius) would chair the *Ad Hoc* Working Group on short-chained chlorinated paraffins (SCCPs); and Dario C. Sabularse (the Philippines) and Jarupong Boon-Long (Thailand) would co-chair the *Ad Hoc* Working Group on pentachlorobenzene (PeCB).

CLOSING SESSION: The closing session convened at 8:00 pm on Friday. The additional session was added to allow the Committee further time to consider the issues of PFOS and SCCPs. The Committee adopted the report of the meeting (UNEP/POPS/POPRC.3/L.1 and L1/Add.1) with some amendments, on the understanding that Vice-Chair Alvarez would oversee the preparation of the final report of the meeting with the Secretariat.

Suggesting that at POPRC-4 an expert give a presentation on alternatives, IPEN highlighted the challenge the issue of alternatives poses to the work of the Committee.

Chair Arndt underscored that POPRC had reached agreement on nine chemicals and outlined some of the issues on the agenda for POPRC-4. He thanked members for their hard work and bade farewell to those members whose terms would be ending prior to POPRC-4, noting that he hoped some would come back to future POPRC meetings as observers. He gavelled the meeting to a close at 10:59 pm.

A BRIEF ANALYSIS OF POPRC-3

Adopted in 2001, the Stockholm Convention on Persistent Organic Pollutants (POPs) included provisions for international action on twelve POPs while allowing parties to nominate additional chemicals according to a three-step review process. The review, undertaken by the 31-member POPs Review Committee (POPRC), ultimately leads to a recommendation to

the Conference of the Parties (COP) to list the chemical under Annex A (Elimination), Annex B (Restriction) and/or Annex C (Unintentional production) of the Convention.

At the third meeting of the POPRC (POPRC-3), five chemicals were slated to reach the final step of the review process, a further five entered the second phase, and one new chemical was nominated. As such, POPRC-3 was an opportunity for the Committee to draw on experience gained in the previous two meetings and advance to the third phase for the first time in the Convention's history. POPRC-3 however encountered significant hurdles as its members disagreed over how to address several of the "high-stakes" chemicals on the agenda. Debate focused on the scientific evidence at hand, but also on the process of decision-making and the ramifications of listing "live" chemicals that are still in wide use. This brief analysis examines the POPRC's review process and takes a closer look at the more contentious issues on the Committee's agenda.

STEP 1: IS IT A POP?

Once a chemical has been nominated by a party for listing under the Convention, it is forwarded to the POPRC to determine if it meets the criteria detailed under Annex D of the Convention (Information requirements and screening criteria).

POPRC-3 was scheduled to apply these screening criteria to endosulfan, an insecticide nominated by the EU. Yet, on Wednesday, Spain, who was expected to introduce the nomination on the EU's behalf, explained that the document was not yet ready for review and requested that determination of whether endosulfan meets Annex D criteria be deferred to POPRC-4. At the same time, China, Sierra Leone and a future Committee member from India submitted a proposal presenting evidence that concludes that endosulfan is not a POP. Many Committee members called attention to whether such a postponement jeopardized the process' legitimacy and sought advice from the Legal Adviser on the issue. Eventually, the Committee agreed to this deferral, but officially noted that this was not to set a precedent. Some noted that while the EU could have resubmitted its nomination at POPRC-4 if it was found not to meet the Annex D criteria at POPRC-3, the nomination would have then become "damaged goods."

STEP 2: IS GLOBAL ACTION WARRANTED?

POPRC-3 considered draft risk profiles for five candidate chemicals: commercial octabromodiphenyl (c-octaBDE), pentachlorobenzene (PeCB), short-chained chlorinated paraffins (SCCPs), and alpha and beta hexachlorocyclohexane (alpha- and beta-HCH).

At this stage, based on Annex E (Information requirements for the risk profile), the POPRC can conclude that the chemical is likely, as a result of its long-range environmental transport, to lead to significant adverse human health and/or environmental effects and decide that global action is warranted. At POPRC-2, when there had been concerns over uncertainty on long-range transport in the risk profile for chlordecone, members had decided to adopt the risk profile in a decision that also called for additional information to supplement the risk profile. At POPRC-3, considerations of the risk management evaluation for chlordecone made it clear that since POPRC-2 had agreed that global action on chlordecone was warranted, once a chemical

clears the risk profile phase, it is no longer a question of whether to list the chemical, but only a question of “where to list” the chemical.

This heightened awareness of the policy implications of the Committee’s second phase of review was all the more evident in the 11th hour debate over the risk profile for SCCPs. The stalemate over moving SCCPs forward to the risk management evaluation stage led to an evening session on the final night of the meeting. SCCPs are ubiquitous chemicals used in a broad range of industrial applications and are contained in many products available to individual consumers. Many members agreed that the risk profile presented a clear case that SCCPs warrant global action, while China, Japan and Ecuador flagged remaining uncertainties in the risk profile and preferred collecting additional information and postponing decision on the risk profile until POPRC-4.

Some saw this reticence not as a reflection of the scientific quality of the risk profile (they noted the precautionary approach is explicitly referenced in the Convention), but rather as a sign of increasing concern over long-term policy considerations. In their deliberations, Committee members referred often to SCCPs’ “live” nature, the uncertainty over alternatives and the difficulty of regulating them if they were to be listed under the Convention.

In the end, the Committee placed a premium on consensus decision-making and, rather than force the SCCPs issue to a vote, agreed to consider a revised draft risk profile at POPRC-4. This means that rather than potentially submitting a recommendation for listing at COP-4 in 2009, the soonest the COP might consider scheduling a phase-out of SCCPs would be at COP-5 in 2011.

STEP 3: HOW TO LIST?

The final step of the review process generated the most attention and occupied most of the Committee’s time, as it was the first time the POPRC has entered this third review stage. Draft risk management evaluations were prepared according to Annex F (Information on socioeconomic considerations) for five chemicals: pentabromodiphenyl ether (pentaBDE), chlordecone, hexabromobiphenyl (HBB), lindane, and perfluorooctane sulfonate (PFOS). These risk management evaluations include assessment of the chemicals’ uses and information on the availability and feasibility of alternatives. Based on this information and the projected socioeconomic impact of listing the substance, the POPRC decides under which annex(es) of the Convention to recommend listing.

Annex A (Elimination) currently lists nine POPs and includes specific exemptions for their production and use; Annex B (Reduction) only lists DDT and includes allowances for acceptable uses and exemptions; while Annex C (Unintentional production) applies to three POPs when they are formed and released unintentionally from anthropogenic sources.

Two of the chemicals being considered by POPRC-3, chlordecone and HBB, were widely acknowledged as being “dead” chemicals no longer in use, and members readily agreed to recommend listing them under Annex A with no exemptions. The “live” chemicals, in particular PFOS, prompted extensive debate. Many emphasizing that PFOS is the “ultimate POP” as it hasn’t been found to degrade in the environment. The matter was seen as urgent as PFOS is a common substitute for halons

in firefighting, a substance developing countries have to phase out by 2010 under the Montreal Protocol on ozone depleting substances. As a result, production of PFOS is accelerating in developing countries since halons have already been phased out in developed countries.

In its nomination of PFOS in 2005, Sweden included 96 chemicals, most of which were precursors to PFOS and included in the nomination as they would eventually degrade to PFOS. These precursors, however, were not individually reviewed for their POP characteristics by POPRC-1. A contact group met throughout the week to find a way of capturing these precursors in the recommendation to the COP without placing an administrative burden on parties by forwarding an extensive list of substances, which might not even be exhaustive.

Late in the week, an industry observer in the contact group highlighted the key role played by PFOS fluoride (PFOSF) as a “bottleneck” chemical, as PFOSF is necessary for the production of the other PFOS precursors and, if listed, PFOSF would avoid the need for individual listing of precursors. Consensus rapidly emerged on recommending listing of “PFOS, its salts and PFOSF.” A few members however, were concerned that adding PFOSF at such a late stage equated to adding a chemical that hadn’t formally undergone Annex D and E screening. Some suggested it may weaken the recommendation’s legal and scientific legitimacy.

Compromise was reached when members adopted decisions confirming that PFOSF fulfills both those screening criteria, yet agreement remained elusive when it came to recommending under which annex to list PFOS. Many favored Annex A, with exemptions granted for uses where alternatives are not available or accessible. However, in light of the many uses for which there are no substitutes, a few preferred listing under Annex B. This was strongly opposed by those who felt that this would demean the special status granted to DDT, the sole substance under Annex B, for its use in preventing malaria. Some Committee members stressed the decision was political as opposed to scientific and required government approval. Eventually, as the Friday evening session drew to a close, the Committee agreed to leave the decision on listing under A or B to COP-4.

This discussion served to illustrate the fact that Committee members, after all, are nominated by governments and, as a result, do make references to their country’s policy concerns. Looking towards the chemicals in the pipeline of the POPRC process, it is clear that the POPRC will have to establish a balance between incorporating scientific and policy considerations in its recommendations to the COP. As a first step in flagging the complexity of these issues, a letter to parties will communicate the decision-making rationale and implications to be considered in greater detail.

LOOKING AHEAD

By Friday night, POPRC-3 successfully moved decisions on nine chemicals to the next stage of the listing process. POPRC-4, scheduled to meet in October 2008, will have four more chemicals to review at the risk management evaluation phase, one at the risk profile phase, and it remains to be seen how many new chemical nominations will be submitted in addition to EU’s resubmitted endosulfan proposal. With this potentially lighter workload, POPRC-4 will also be the first time the Committee

meets with new members. Fourteen of the 31 members will see their term end in May 2008 and some of the more vocal observers at POPRC-3 are scheduled to take their place. Some observers remarked this might well alter the dynamic and the momentum of the Committee.

As parties gear up for COP-4, scheduled for May 2009, they will have to prepare to examine the implications of listing as many as nine new chemicals. Developing countries have made it clear that they lack the financial resources necessary to fully phase-out the 12 already scheduled POPs, not to mention any new ones. With this in mind, some participants noted that at COP-4 parties will not only have to agree on the details of scheduling for these candidate POPs, they will also have to locate new and additional financial resources for the next phase of enabling activities under the Stockholm Convention.

UPCOMING MEETINGS

FOURTH MEETING OF THE CHEMICAL REVIEW COMMITTEE (CRC-4) TO THE ROTTERDAM CONVENTION:

The fourth meeting of the Chemical Review Committee will take place from 10-13 March 2008, in Geneva, Switzerland. It is scheduled to consider information on ongoing trade and use of Methyl-parathion, Mirex, chrysotile asbestos, carbaryl and alachlor. Chrysotile asbestos is also scheduled for review by the CRC-4. For more information, contact: Rotterdam Convention Secretariat; tel: +41-22-917- 8296; fax: +41-22-917-8082; e-mail: pic@pic.int; internet: <http://www.pic.int/home.php?type=t&id=195&sid=18>

NINTH MEETING OF THE CONFERENCE OF THE PARTIES TO THE BASEL CONVENTION:

The ninth meeting of the Conference of the Parties to the Basel Convention (COP9) on the Transboundary Movement of Hazardous Waste will convene in Bali, Indonesia, from 23-27 June 2008. COP9 will address, *inter alia*: the implementation of the Strategic Plan; Basel Convention Regional and Coordinating Centres; synergies and cooperation with other chemicals conventions; e-waste and end-of-life equipment; and ship dismantling. For more information, contact: Secretariat of the Basel Convention; tel: +41 22-917-8218; fax: +41-22-797-3454; e-mail: sbc@unep.ch; internet: <http://www.basel.int>

SIXTH SESSION OF THE INTERGOVERNMENTAL FORUM ON CHEMICAL SAFETY:

The sixth session of the Intergovernmental Forum on Chemical Safety (IFCS) will be hosted by the Government of Senegal in Dakar from 15-19 September 2008. The session will consider: the future of the IFCS; nanotechnology and nanomaterials; substitution and alternatives; the need for international action on lead and cadmium; and ecologically sound and integrated pest and vector management. Preparatory meetings will take place prior to the session, on 13-14 September. For more information, contact the IFCS Secretariat: tel: +41-22-791-3873; fax: +41-22-791-4875; e-mail: ifcs@who.int; internet: <http://www.who.int/ifcs>

SECOND MEETING OF THE AD HOC OPEN-ENDED WORKING GROUP ON MERCURY:

This meeting is tentatively scheduled to be held from 6-10 October 2008, in Nairobi, Kenya. For more information, contact: UNEP Chemicals

Branch, Division of Technology, Industry and Economics; tel: +41-22-917-8183; fax: +41-22-797-3460; e-mail: mercury@chemicals.unep.ch; internet: <http://www.chem.unep.ch/mercury/>

FOURTH MEETING OF THE PERSISTENT ORGANIC POLLUTANT REVIEW COMMITTEE:

POPRC-4 will meet in Geneva, Switzerland, from 13-17 October 2008. For more information, contact: the Stockholm Convention Secretariat; tel: +41-22-917-8191; fax: +41-22-917-8098; e-mail: ssc@pops.int; internet: <http://www.pops.int/>

FOURTH MEETING OF THE CONFERENCE OF THE PARTIES TO THE ROTTERDAM CONVENTION:

The fourth meeting of the Conference of the Parties to the Rotterdam Convention will take place in Rome, Italy, from 27-31 October 2008. For more information, contact: the Rotterdam Convention Secretariat; tel: +41-22-917-8296; fax: +41-22-917-8082; e-mail: pic@unep.ch; internet: <http://www.pic.int>

FOURTH MEETING OF THE CONFERENCE OF THE PARTIES TO THE STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS:

This meeting will convene from 4-8 May 2009, in Geneva, Switzerland. For more information, contact: the Stockholm Convention Secretariat; tel: +41-22-917-8191; fax: +41-22-917-8098; e-mail: ssc@pops.int; internet: <http://www.pops.int/>

GLOSSARY

alpha-HCH	Alpha hexachlorocyclohexane
BAT	Best available techniques
BEP	Best environmental practices
beta-HCH	Beta hexachlorocyclohexane
BSEF	Bromine Science and Environmental Forum
CBB	Critical body burden
c-octaBDE	Commercial octabromodiphenyl ether
c-pentaBDE	Commercial pentabromodiphenyl ether
GEF	Global Environment Facility
HBB	Hexabromobiphenyl
HCH	Hexachlorocyclohexane
IFCS	Intergovernmental Forum on Chemical Safety
IOMC	Inter-Organization Programme on the Sound Management of Chemicals
IPEN	International POPs Elimination Network
Koa	Octanol-air partition coefficient
Kow	Octanol-water partition coefficient
LRT	Long-range transport
LRTP	Long-range transport potential
LRET	Long-range environmental transport
PCBs	Polychlorinated biphenyls
PeCB	Pentachlorobenzene
pentaBDE	Pentabromodiphenyl ether
PFOS	Perfluorooctane sulfonate
PFOSF	Perfluorooctane sulfonate fluoride
POPs	Persistent organic pollutants
POPRC	Persistent Organic Pollutants Review Committee
RME	Risk management evaluation
SAICM	Strategic Approach to International Chemicals Management
SCCPs	Short-chained chlorinated paraffins
WCC	World Chlorine Council

“Your Meeting” Bulletin

IISD REPORTING SERVICES now at your meeting



RENEWABLES 2004 BULLETIN

A Daily Report from the International Conference for Renewable Energies

Published by the International Institute for Sustainable Development (IISD)

DAILY REPORTS AND WEB COVERAGE AT [HTTP://WWW.IISD.CA/SD/REN2004/](http://www.iisd.ca/sd/ren2004/)
VOLUME 95, No. 5, MONDAY, 7 JUNE 2004

SUMMARY REPORT OF THE INTERNATIONAL CONFERENCE FOR RENEWABLE ENERGIES - RENEWABLES 2004: 1-4 JUNE 2004

The International Conference for Renewable Energies (*renewables 2004*) took place from 1-4 June 2004, in Bonn, Germany. Approximately 3600 participants from 154 countries attended the Conference, including several Heads of State, 121 Ministers and representatives from governments, intergovernmental organizations (IGOs), non-governmental organizations (NGOs), the scientific community and the private sector.

The *renewables 2004* programme consisted of nine Plenary Sessions, including a Multi-Stakeholder Dialogue and a Ministerial Segment. The Multi-Stakeholder Dialogue addressed: the value of, and opportunities for, renewable energy - policy frameworks and regulatory certainty; and promoting renewable energy - finance and capacity for the future. Other Plenary Sessions addressed best-practice examples and success stories.

The Ministerial Segment included three Ministerial Roundtables that considered policies for renewable energy market development, financing options, and strengthening capacities, research and policy



Members of major groups and delegations in the main plenary room.

developing countries, and the mobilization of financial resources for new and renewable sources of energy. However, it was only following the 1992 UN Conference on Environment and Development (UNCED) that renewable energy issues began to feature more promi-

"IISD proved to be as professional as their reputation is. The group covered all events taking place at the conference venue itself as well as many side events which were located in the vicinity of the conference hall.

IISD produced a well-designed bulletin including informative text and pictures of all important meetings, discussions and results of the main conference events. This bulletin was very useful for participants to follow events they could not attend or were also interested in.

IISD also published plenty of information and photos on their web site. This service was a real added value to our own conference coverage. The services of IISD, being an independent organization, were especially appreciated by the conveners of the conference, ie the Federal Ministry for Economic Cooperation and Development and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety"

Dr. Heinrich Schneider
Conference Secretariat
International Conference for
Renewable Energies, Bonn 2004

This product was developed in 2003 **specifically for large conferences that include both substantive discussions and side events.** Building on the success of the *Earth Negotiations Bulletin* and *ENB on the Side*, “Your Meeting” Bulletin was created as a conference daily report. **IISD Reporting Services** was hired to publish in this format at the World Forestry Congress, Renewables 2004 and the IUCN World Conservation Congress. “Your Meeting” Bulletin is a 4-6 page daily report and summary issue that includes coverage of policy discussions and/or negotiations, and extensive reporting from side events and special events during the conference.

For further information or to make arrangements for IISD Reporting Services to cover your meeting conference or workshop, contact the Managing Director:

Langston James “Kimo” Goree VI
300 East 56th Street #11A, New York
NY 10022 USA
Phone: +1 646-536-7556
Fax: +1 646-219-0955
kimo@iisd.org



Visit our website at www.iisd.ca to find all of the information you need.
Subscribe free-of-charge to our publications at: www.iisd.ca/email/subscribe.htm
To view the IISD Reporting Services archives go to: www.iisd.ca