


Stockholm Convention on Persistent Organic Pollutants 

Candidate POPs

Chemicals recommended for listing by the POPs Review Committee



Regional workshop on fostering implementation
of the Stockholm Convention
in the Pacific
Nadi, Fiji, 06-08 April 2009







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Listing of new chemicals under the Convention

- **9 chemicals** screened for possible listing:
 - ✓ Proposal stage
 - ✓ Risk Profiles
 - ✓ Risk Management Evaluations
 - ✓ Recommendations by the POPRC to the COP
- **Parties were informed** on 29 October 2008
 - 6 months before meeting
- **COP** takes decision on listing in Annex(es), eventual risk reduction measures, exemptions, acceptable purposes, etc.

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Chemicals recommended to COP for listing		
Chemical	Proposed by	Annex
Commercial pentabromodiphenyl ether (c-pentaBDE)	Norway	A
Commercial octabromodiphenyl ether (c-octaBDE)	EU	A
Hexabromobiphenyl (HBB)	EU	A
Chlordecone	EU	A
Lindane	Mexico	A
Alpha-hexachlorocyclohexane (α -HCH)	Mexico	A
Beta-hexachlorocyclohexane (β -HCH)	Mexico	A
Pentachlorobenzene (PeCB)	EU	A and C
Perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride (PFOS)	Sweden	A or B

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Commercial pentabromodiphenyl ether (c-pentaBDE)	
<ul style="list-style-type: none"> • Flame retardant applied mainly in polyurethane foam (bedding) • No current production reported; alternatives are available (\rightarrow POPRC guidance document) • Concentrations found in humans in all regions 	
\rightarrow To be listed in Annex A	
<ul style="list-style-type: none"> \triangleright Including all commercial mixtures containing 4 and 5 bromines (tetrabromodiphenyl ether and pentabromodiphenyl ether) \triangleright Possible exemption: military airplanes \triangleright Challenge: identification and handling of equipment and wastes containing c-PentaBDE 	

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Commercial octabromodiphenyl ether (c-octaBDE)

- Flame retardant
- Around 180,000 tonnes were produced since 1970s
- No current production reported; alternatives are available

→ To be listed in **Annex A**

- Including all commercial mixtures containing 6 and 7 bromines (Hexabromodiphenyl ether and heptabromodiphenyl ether)
- Challenge: identify and dispose articles in use and wastes

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Chlordecone

- Pesticide with similar properties than mirex
- No longer produced
- Banned in most countries
- Alternatives available

→ To be listed in **Annex A** without exemptions

- Challenge: identify and manage obsolete stockpiles and wastes

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Hexabromobiphenyl (HBB)

- Bromination of the biphenyl molecule
- Flame retardant in thermo plastics, etc.
- 5.4 million kg produced in the 70s
- No longer produced, used or contained in articles
- Prohibited in most countries
- Alternatives can be introduced without major cost implications

→ To be listed in **Annex A** without exemptions

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Lindane

- Gamma isomer of HCH
- Agricultural and human health pesticide
- ~600,000 tons used globally from 1950-2000
- Banned in many countries
- Romania and India are remaining producers
- Use continues for specific purposes

→ To be listed in **Annex A** with a possible exemption for control of head lice and scabies

➤ Challenge: Large stockpiles and many contaminated sites; still in use

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Alpha- and beta-hexachlorocyclohexane (alpha- and beta HCH)

- By-product of lindane production
- Considered as waste
- Between 1.6 to 4.8 million tonnes produced
- Stockpiles remain across the globe

→ To be listed in **Annex A** with exemptions related to the listing of lindane

➤ Challenge: To contain releases from stockpiles and contaminated sites; to manage and destroy stockpiles

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Perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride (PFOS)

- Most common salt produced is PFOS
- PFOSF precursor for other PFOS related chemicals
- Lots of industrial (and agricultural) uses
- Still produced in Japan, Brazil and China and used in many other countries
- Intersessional working group developing document on alternatives to PFOS

→ To be listed in **Annex A and/or B** with possible exemptions / acceptable purpose

➤ Challenge: alternatives are not available or phased in for all uses; not all uses are known



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Difference between Annex A and B

Annex A – Elimination	Annex B - Restriction
<ul style="list-style-type: none"> • Specific exemptions • Parties have to register (PCBs an exception) • Exemptions for 5 years with single extension possible • When all registrations have expired, no new registrations possible for a given exemption 	<ul style="list-style-type: none"> • For specific exemptions - similar as Annex A • Acceptable purpose: register but no deadline • Currently only DDT listed with 'acceptable purpose' control measures • Listing with specific exemptions and acceptable purpose possible

→ All specific exemptions in Annex A and B come with deadlines for expiry; all acceptable purposes in Annex B depend on COP decision for expiry based on available alternatives.


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Listing of PFOS in Annex A or B

- 3 types of uses for PFOS identified by the POPRC
 - Uses for which **no alternatives** are available
 - Uses for which alternatives would **need to be phased in**
 - Uses for which alternatives are **available in developed countries**
- Possibilities for COP
 - List PFOS in **Annex A** with specific exemptions
 - List PFOS in **Annex B**
 - With acceptable purposes and/or
 - With specific exemptions


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Pentachlorobenzene (PeCB)

- Industrial use as a pesticide and fungicide e.g. as an intermediate in the production of quintozene
- Unintentional production: produced during combustion, thermal and industrial processes
- No longer produced since 1980s in main producer countries
- Cost-effective and efficient alternatives available
- Introduction of BAT/BEP could significantly reduce unintentional production

→ To be listed in **Annex A and C**

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What should Parties do in relations to listing?

- **Analyse** recommendations and impacts
- Identify **exemption requirement**
 - Use and production information
 - Availability of alternatives
 - Particular conditions preventing use of alternatives (accessibility)
 - Important socio-economic impact

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What should Parties do in relations to listing?

- Composition of **national delegations**
 - Be ready to take part in contact groups
 - Be ready to vote if required (credentials)
- Get organized in **regional groups**

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At COP

- **Review** of recommendations
- Consideration of **consequences** of listing: alternatives, exemption requests, socio-economic impacts
- Decision on **listing in Annex(es)** and eventual risk reduction measures
- **Agreement on committee membership** (discussed in regional groups)

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UNEP

Thank you!

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The slide features a dark blue background with a light blue grid pattern on the right side. The text 'Thank you!' is centered in a bold, yellow font. The top header includes the Stockholm Convention logo (a stylized 'S' in blue and orange) and the text 'Stockholm Convention on Persistent Organic Pollutants'. To the right of the text are the United Nations logo and the UNEP logo. The number '17' is located in the bottom right corner of the slide area.