



Stockholm Convention on Persistent Organic Pollutants

اتفاقية استكهولم بشأن الملوثات العضوية الثابتة - 关于持久性有机污染物的斯德哥尔摩公约 - Convention de Stockholm sur les polluants organiques persistants
Convenio de Estocolmo sobre Contaminantes Orgánicos Persistentes - Стокгольмская конвенция о стойких органических загрязнителях



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To: Stockholm Convention Official Contact Points
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Date: 1 November 2009

File: New POPs

From: Donald Cooper
Executive Secretary
Secretariat of the Stockholm Convention on
Persistent Organic Pollutants

Subject: Invitation to submit information on new POPs in accordance with decision
SC-4/19 adopted at the fourth meeting of the Conference of the Parties

The fourth meeting of the Conference of the Parties to the Stockholm Convention on Persistent Organic Pollutants took place on 4-8 May 2009, in Geneva. The Conference of the Parties decided to list nine new chemicals in Annexes A, B, or C of the Conventions. The text for amendment is contained in decisions SC-4/10-18 in the report of the meeting which is available at the Convention's website: <http://www.pops.int/>.

Having amended the Stockholm Convention to list new chemicals in Annexes A, B, or C of the Convention, the Conference of the Parties decided to undertake a work programme to provide guidance to Parties on how best to restrict and eliminate brominated diphenyl ethers, perfluorooctane sulfonic acid (PFOS) and its salts, perfluorooctane sulfonyl fluoride (PFOSF) and other chemicals listed in Annexes A or B of the Convention at the fourth meeting.

The first step in the work programme is to collect information from Parties and observers on the new chemicals in accordance with decision SC-4/19. Therefore, you are invited to submit the information according to the guidance provided in this letter.

What information is required?

Information is required for the following set of chemicals:

- 1) Brominated diphenyl ethers found in articles
- 2) Perfluorooctane sulfonic acid (PFOS), its salts and perfluorooctane sulfonyl fluoride (PFOSF)
- 3) Other chemicals listed in Annexes A or B of the Convention at the fourth meeting of the Conference of the Parties

More details on information required are provided in Annex I to the present letter.

How to submit information?

A questionnaire is contained in Annex II to this letter to facilitate the submission of information. The form is available on the Convention's website in English, French, and Spanish.

Where feasible, please complete the form and give precise references for the data sources. If the information is not readily available in the public literature, you may consider attaching the original source of the information to the submission.

Please complete the questionnaire and submit it to the Secretariat by **10 April 2010 (interim deadline)**. Please note that the final deadline for the submission of information as decided upon by the Conference of the Parties at its fourth meeting is 1 July 2010.

It would be greatly appreciated if you could submit the information by email: ssc@pops.int. Should this not be possible please forward hard copies or CD-ROM to:

Secretariat of the Stockholm Convention
Att: New POPs
United Nations Environment Programme
11-13 chemin des Anémones
CH-1219, Châtelaine, Geneva, Switzerland
Fax: (+41 22) 917 8098
E-mail: ssc@pops.int

Please return the questionnaire, even when no information is available.

If you have any questions regarding this request, please do not hesitate to contact Ms. Fatoumata Keita Ouane (e-mail: fouane@pops.int; telephone +41 22 917 8161) or Ms. Kei Ohno (e-mail: kohno@pops.int; telephone +41 22 917 8201).

Annex I

Background information and general guidance on submission

1. Decisions by the COP on listing nine new POPs (SC-4/10-18)

The Conference of the Parties at its fourth meeting decided to list nine new chemicals under Annexes A, B and C of the Convention as follows:

- 1) Alpha hexachlorocyclohexane (CAS No: 319-84-6) in Annex A of the Convention with no production or use exemptions.
- 2) Beta hexachlorocyclohexane (CAS No: 319-85-7) in Annex A of the Convention with no production or use exemptions.
- 3) Chlordecone (CAS No: 143-50-0) in Annex A of the Convention with no production or use exemptions.
- 4) Hexabromobiphenyl (CAS No: 36355-01-8) in Annex A of the Convention with no production or use exemptions.
- 5) Hexabromodiphenyl ether and heptabromodiphenyl ether meaning 2,2',4,4',5,5'-hexabromodiphenyl ether (BDE-153, CAS No: 68631-49-2), 2,2',4,4',5,6'-hexabromodiphenyl ether (BDE-154, CAS No: 207122-15-4), 2,2',3,3',4,5,6 heptabromodiphenyl ether (BDE-175, CAS No: 446255-22-7), 2,2',3,4,4',5',6-heptabromodiphenyl ether (BDE-183, CAS No: 207122-16-5) and other hexa- and heptabromodiphenyl ethers present in commercial octabromodiphenyl ether in Annex A of the Convention with specific use exemptions.
- 6) Lindane (CAS No: 58-89-9) in Annex A of the Convention with a specific use exemption of lindane as a human health pharmaceutical for control of head lice and scabies as second line treatment.
- 7) Pentachlorobenzene (CAS No: 608-93-5) in Annex A of the Convention with no production or use exemptions and in Annex C.
- 8) Perfluorooctane sulfonic acid (CAS No: 1763-23-1), its salts and perfluorooctane sulfonyl fluoride (CAS No: 307-35-7) in Annex B of the Convention with several acceptable purposes and specific exemptions for production and use of these chemicals.
- 9) Tetrabromodiphenyl ether and pentabromodiphenyl ether meaning 2,2',4,4'-tetrabromodiphenyl ether (BDE-47, CAS No: 40088-47-9) and 2,2',4,4',5-pentabromodiphenyl ether (BDE-99, CAS No: 32534-81-9) and other tetra- and pentabromodiphenyl ethers present in commercial pentabromodiphenyl ether in Annex A of the Convention with specific use exemptions.

2. Exemptions for certain chemicals

1) For the two groups of polybrominated diphenyl ethers, the Conference of the Parties included specific exemptions for use in Articles in accordance with the following provisions:

(1) A Party may allow recycling of articles that contain or may contain tetrabromodiphenyl ether and pentabromodiphenyl ether, and the use and final disposal of articles manufactured from recycled materials that contain or may contain tetrabromodiphenyl ether and pentabromodiphenyl ether, provided that:

- a) The recycling and final disposal is carried out in an environmentally sound manner and does not lead to recovery of tetrabromodiphenyl ether and pentabromodiphenyl ether for the purpose of their reuse;
- b) The Party does not allow this exemption to lead to the export of articles containing levels/concentrations of tetrabromodiphenyl ether and pentabromodiphenyl ether that exceed those permitted to be sold within the territory of the Party; and
- c) The Party has notified the Secretariat of its intention to make use of this exemption.

(2) At its sixth ordinary meeting and at every second ordinary meeting thereafter the Conference of the Parties shall evaluate the progress Parties made towards achieving their ultimate objective of elimination of tetrabromodiphenyl ether and pentabromodiphenyl ether contained in articles and review the continued need for this specific exemption. This specific exemption shall in any case expire at the latest in 2030.

2) For Perfluorooctane sulfonic (PFOS) acid, its salts and perfluorooctane sulfonyl fluoride (PFOSF), the Conference of the Parties included acceptable purposes and specific exemptions for use and production of these chemicals in Annex B as follows:

- (1) Acceptable purpose:
 - Photo imaging
 - Photo resist and anti-reflective coatings for semi-conductors
 - Etching agent for compound semi-conductors and ceramic filters
 - Aviation hydraulic fluids
 - Metal plating (hard metal plating) only in closed-loop systems
 - Certain medical devices (such as ethylene tetrafluoroethylene copolymer (ETFE) layers and radio-opaque ETFE production, in vitro diagnostic medical devices, and CCD colour filters)
 - Fire fighting foam
 - Insect baits for control of leaf-cutting ants from *Atta* spp. and *Acromyrmex* spp.
- (2) Specific exemption:
 - Photo masks in the semiconductor and liquid crystal display (LCD) industries
 - Metal plating (hard metal plating)
 - Metal plating (decorative plating)
 - Electric and electronic parts for some colour printers and colour copy machines
 - Insecticides for control of red imported fire ants and termites
 - Chemically driven oil production
 - Carpets
 - Leather and apparel
 - Textiles and upholstery
 - Paper and packaging
 - Coatings and coating additives
 - Rubber and plastics

3. Work programme adopted by the Conference of the Parties (SC-4/19)

1) For the two groups of polybrominated diphenyl ethers, the Conference of the Parties requested Parties and invited observers to provide information pursuant to paragraphs 1–4 of the annex to decision SC-4/19 as follows:

- (1) Types and quantities of articles containing brominated diphenyl ethers, including concentrations of those substances in the articles, including recycled articles;
- (2) Types of articles recycled, the extent of recycling, the types of articles produced from recycling, the options for the environmental management of recycling operations and releases or potential releases resulting from recycling operations;
- (3) Cost-effectiveness of different management options;
- (4) Options for environmentally sound disposal;
- (5) Methods for identifying the presence and levels of brominated diphenyl ethers in articles;
- (6) Identification of remediation methods for contaminated sites as listed in subparagraph 1 (e) of Article 6 of the Convention;
- (7) Any other related information.

The Secretariat was requested in decision SC-4/19 to gather and compile the above mentioned information and to summarize it to facilitate the work of the Persistent Organic Pollutants Review Committee at its sixth meeting.

2) For PFOS, its salts and PFOSF, in order to facilitate the restriction or elimination of these chemicals, the Conference of the Parties requested Parties and invited observers to provide information pursuant to paragraphs 1–4 of the annex to decision SC-4/19 as follows:

- (1) Types and quantities of articles containing PFOS, its salts and PFOSF, including concentrations of those substances in such articles;
- (2) Types of processes using PFOS, its salts and PFOSF, including concentrations of those substances used in such processes, the options for the environmental management of such processing operations, recycling operations and releases and potential releases resulting from such processing operations;
- (3) Types of articles recycled, the extent of recycling, the types of articles produced from recycling, the options for the environmental management of recycling operations and releases or potential releases resulting from recycling operations;
- (4) Cost effectiveness of different management options;
- (5) Methods for sampling and analysis of PFOS, its salts and PFOSF in articles;
- (6) Identification of remediation methods for contaminated sites as listed in subparagraph 1 (e) of Article 6 of the Convention;
- (7) Any other related information.

The Secretariat was requested in decision SC-4/19 to gather and compile the above mentioned information and to summarize it to facilitate the work of the Persistent Organic Pollutants Review Committee at its sixth meeting.

3) For other chemicals listed in Annexes A of the Convention at the fourth meeting, the Conference requested Parties and invited observers to provide information on the extent to which such chemicals occur in articles or present a risk of exposure from stockpiles and contaminated sites.

The Secretariat was requested in decision SC-4/19 to gather and compile the above mentioned information and to summarize it to facilitate the work of the Persistent Organic Pollutants Review Committee at its sixth meeting.

4. Questionnaire for information submission

In order to collect the information requested in decision SC-4/19, the Secretariat has prepared the attached questionnaire. The questionnaire is structured in four parts:

PART I – General information on the submission

PART II – Commercial PentaBDE (tetra- and pentabromodiphenyl ether) and commercial OctaBDE (hepta- and hexabromodiphenyl ether)

PART III – Perfluorooctane sulfonic acid (PFOS), its salts and perfluorooctane sulfonyl fluoride (PFOSF)

PART IV – Other chemicals listed in Annex A at the fourth Meeting of the Conference of the Parties

PART II and III contain Section A – general questions and Section B – detailed questions.

These more detailed questions are directed to countries that manufacture articles containing these chemicals, use these chemicals in processes, recycle articles containing these chemicals, or any other entity that can provide detailed information. If you do not have any information on the question asked, please indicate so.

Extensive information on the nine new POPs listed under the Stockholm Convention can be found in the respective Risk Management Evaluation developed by the Persistent Organic Pollutants Review Committee for each chemical (www.pops.int/poprc). Please contact the Secretariat of the Stockholm Convention should you have any questions about the questionnaire or need additional background information on any of these chemicals.

Annex II**Questionnaire for submission of information on
New POPs in accordance with SC-4/19****PART I – General information on the submission**

| | |
|--|--|
| Date of submission | |
| Name of the submitting Party/observer | |
| Contact details (name, address, telephone, e-mail) | |
| Information sources: (Industry groups, private entities, NGOs, government, universities, sites, waste treatment plants, facilities, landfills, etc.) | |

**PART II – Commercial PentaBDE (tetra- and pentabromodiphenyl ether)
and commercial OctaBDE (hepta- and hexabromodiphenyl ether)****SECTION A – GENERAL QUESTIONS**

II-A-1 Has your country ever manufactured articles containing commercial PentaBDE or commercial OctaBDE? (Please see Part II - Section B for a list of articles potentially containing commercial PentaBDE or commercial OctaBDE)

- Yes (Please also answer the more detailed questions in section B)
 No
 Unknown

II-A-2 Do you have information on articles in use in your country containing commercial PentaBDE or commercial OctaBDE, including concentrations of those substances in articles?

- Yes (Please also answer the more detailed questions in section B)
 No

II-A-3 If possible, please provide information on articles containing commercial pentaBDE and octaBDE that are recycled in your country. Please add additional rows if necessary.

| Types of articles recycled | Congener or commercial mixture | Rate of recycling of articles (%) |
|----------------------------|--------------------------------|-----------------------------------|
| 1. | | |
| 2. | | |
| 3. | | |

II-A-4 What types of new articles are produced from recycled articles which contained commercial pentaBDE and octaBDE?

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| |
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II-A-5 Are there any legal or other frameworks (e.g. voluntary agreement, license conditions, extended producer responsibility, export control, labelling requirements, etc.), for waste management and/or recycling of articles containing polybrominated diphenyl ethers under development or currently being implemented in your country? Please add additional rows if necessary.

- Yes No Unknown

If yes, please describe these frameworks and indicate references. Please add additional rows if needed.

| | Description (entry into force, elements of framework, concerned entities, etc.) | Reference |
|--|---|-----------|
| Framework for waste management of articles containing PBDE | | |
| Framework for recycling of the articles containing PBDE | | |

II-A-6 Please identify methods you are aware of for identifying the presence and levels of commercial pentaBDE and octaBDE in articles. Please add additional rows if necessary.

| Type of material | Method | Reference |
|------------------|--------|-----------|
| 1. | | |
| 2. | | |
| 3. | | |

II-A-7 Please describe recycling operations in your country for articles potentially containing commercial pentaBDE and octaBDE (e.g. large scale commercial recycling of plastics or foams, small backyard recycling of electronic equipment, etc.). Please add additional rows if necessary.

| Recycling Operation | Description | Potential releases of commercial pentaBDE and octaBDE |
|---------------------|-------------|---|
| 1. | | |
| 2. | | |
| 3. | | |

II-A-8 Please describe measures for the environmental management of recycling operations under development or currently implemented in your country (e.g. flue-gas treatment, water treatment, etc.). Please add additional rows if necessary.

| Measures for the environmental management of recycling operations | Description (e.g., effectiveness including cost effectiveness, waste by-products, etc.) |
|---|---|
| 1. | |
| 2. | |
| 3. | |

II-A-9 Please provide a list of methods in development or in use for the disposal of articles containing commercial pentaBDE and octaBDE (e.g., environmentally sound disposal, low technology methods, etc.). Please add additional rows if necessary.

| Methods for the environmentally sound disposal | Description (e.g., effectiveness including cost effectiveness, releases, technology in use, etc.) |
|--|---|
| 1. | |
| 2. | |
| 3. | |

II-A-10 If your country has identified sites contaminated by commercial pentaBDE and octaBDE e.g. from production and compounding sites or open burning areas, please describe environmentally sound methods used in your country for the remediation of these sites. Please add additional rows if necessary.

| Remediation methods for contaminated sites | Description (e.g., technology in use, effectiveness including cost effectiveness, etc.) |
|--|---|
| 1. | |
| 2. | |
| 3. | |

II-A-11 Please provide any other related information that may be useful for the work programme to facilitate the elimination of commercial pentaBDE and octaBDE listed under the Stockholm Convention.

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SECTION B – DETAILED QUESTIONS

Categories of articles potentially containing commercial OctaBDE and commercial PentaBDE could include, but are not limited to, the following:

1. Electronic equipment
 - Housings of electronic products (e.g. computers monitors)
 - Small encapsulated electronic components
 - Technical laminates
 - Printed circuit boards
 - Dashboards in automobiles
 - Major appliances (e.g. equipment in refrigerators, etc.)
 - Telephones and mobiles
2. Products for buildings/construction
 - Building films
 - Conveyor belts
 - Coatings for chemical processing plants moulds
 - Construction panels and rigid foams
 - Pipes and fittings
 - Foam insulation for pipes
3. Wire and cables
 - Cable sheaths
 - Wiring components
4. Textiles
 - Cushioning materials
 - Mattresses
 - Protective clothing
 - Carpets and rugs (including polyurethane underlay)
 - Curtains
 - Upholstery fabrics
 - Tents
 - Other technical textiles
 - Carpet backing and impregnated carpet fabric
5. Transportation sector
 - Moulded and slab foams for automotive parts
 - Vehicle seats
 - Automotive parts and trim
6. Other applications
 - Packaging
 - Padding
 - Toys
 - Furniture
 - Small appliances (e.g. housewares, tools, etc.)
 - Etc.

II-B-1 Please indicate the types and quantities of articles containing commercial PentaBDE or commercial OctaBDE that were manufactured in your country including concentrations of those substances in the articles. Please also indicate any additional information, such as the years you are referring to, the year when production was stopped, estimates or assumptions used for calculations, the estimated lifetime of products, etc. Please add additional rows as required to include other types of articles. If you do not have information on any of the elements, please indicate “no data”.

| Types of articles | Congener or commercial mixture | Estimated content [% by weight] | Quantities of articles manufactured [kg/year] | Annual amount of PBDE in articles [kg/year] | Comments (e.g. year, assumptions, references, applied emission factors, etc.) | Estimated lifetime of products |
|---|--------------------------------|---------------------------------|---|---|---|--------------------------------|
| EXAMPLES | | | | | | |
| ARTICLE X | <i>BDE-153</i> | <i>2%</i> | <i>5000 kg/year</i> | <i>100kg/year</i> | <i>Production from 1995-2000</i> | <i>10 years</i> |
| ARTICLE X | <i>BDE-175</i> | <i>0.2%</i> | <i>2500 kg/year</i> | <i>5kg/year</i> | <i>Production from 1997-2003</i> | <i>7 years</i> |
| | | | | | | |
| 1. Electronic equipment | | | | | | |
| | | | | | | |
| 2. Products for buildings/construction | | | | | | |
| | | | | | | |
| 3. Wire and cables | | | | | | |
| | | | | | | |
| 4. Textiles | | | | | | |
| | | | | | | |
| 5. Transportation sector | | | | | | |
| | | | | | | |
| 6. Other applications | | | | | | |
| | | | | | | |
| Total | | | | | | |

II-B-2 Please indicate the types and quantities of articles containing commercial PentaBDE or commercial OctaBDE that currently exist in your country including concentrations of those substances in the articles. Please also indicate any additional information, such as the years you are referring to, the year when production was stopped, estimates or assumptions used for calculations, the estimated lifetime of products, etc. Please add additional rows as required to include other types of articles. If you do not have information on any of the elements, please indicate “no data”.

| Types of articles | Congener or commercial mixture | Estimated content [% by weight] | Quantities of articles in use [kg] | Annual amount of PBDE in articles [kg] | Comments (e.g. year, assumptions, references, applied emission factors, etc.) | Estimated lifetime of products |
|---|--------------------------------|---------------------------------|------------------------------------|--|---|--------------------------------|
| EXAMPLES | | | | | | |
| ARTICLE X | <i>BDE-153</i> | <i>2%</i> | <i>5000 kg</i> | <i>100kg</i> | <i>Data from 2007</i> | <i>10 years</i> |
| ARTICLE X | <i>BDE-175</i> | <i>0.2%</i> | <i>2500 kg</i> | <i>5kg</i> | <i>Data from 2005</i> | <i>4 years</i> |
| | | | | | | |
| 1. Electronic equipment | | | | | | |
| | | | | | | |
| 2. Products for buildings/construction | | | | | | |
| | | | | | | |
| 3. Wire and cables | | | | | | |
| | | | | | | |
| 4. Textiles | | | | | | |
| | | | | | | |
| 5. Transportation sector | | | | | | |
| | | | | | | |
| 6. Other applications | | | | | | |
| | | | | | | |
| Total | | | | | | |

PART III – Perfluorooctane sulfonic acid (PFOS), its salts and perfluorooctane sulfonyl fluoride (PFOSF)

SECTION A – GENERAL QUESTIONS

III-A-1 Has your country ever manufactured or is it still manufacturing articles containing PFOS, its salts or PFOSF? (Please see Part III - Section B for a list of articles potentially containing these chemicals)

- Yes (Please also answer the more detailed questions in section B)
 No
 Unknown

III-A-2 Do you have information on articles in use in your country containing PFOS, its salts or PFOSF, including concentrations of those substances in articles?

- Yes (Please also answer the more detailed questions in section B)
 No

III-A-3 Are there legal and other frameworks (e.g. voluntary agreement, licence conditions, extended producer responsibility, export control, labelling, etc.) for processes using PFOS, its salts or PFOSF and for recycling operations of articles containing these chemicals under development or currently implemented in your country?

- Yes No Unknown

If yes, please describe these frameworks, indicate references and add additional rows if needed.

| | Description (entry into force, elements of framework, concerned entities, etc.) | Reference |
|---|---|-----------|
| Framework for processes using PFOS, its salts or PFOSF | | |
| Framework for recycling of the articles containing PFOS, its salts or PFOSF | | |

III-A-4 Does your country use PFOS, its salts or PFOSF in processes (please see Section B for a list of processing potentially using these chemicals) ?

- Yes (Please also answer the more detailed questions in section B)
 No
 Unknown

III-A-5 Does your country recycle articles that contain PFOS, its salts and PFOSF? (e.g. articles such coated fabrics or packaging recycled commercially on a large scale or articles recycled on a small scale by communities, etc.)

- Yes (Please also answer the more detailed questions in section B)
 No
 Unknown

Q6. Please indicate methods you are aware of for identifying the presence and levels of PFOS, its salts and PFOSF in articles. Please add additional rows if necessary.

| Type of material | Method | Reference |
|------------------|--------|-----------|
| 1. | | |
| 2. | | |
| 3. | | |

III-A-7 If your country has identified sites contaminated by PFOS, its salts and PFOSF such as production and compounding sites, please describe environmentally sound methods used in your country for the remediation of these sites. Please add additional rows if necessary.

| Remediation methods for contaminated sites | Description (e.g., technology in use, effectiveness including cost effectiveness, etc.) |
|---|--|
| 1. | |
| 2. | |
| 3. | |

III-A-8 Please provide any other related information that may be useful for the work programme to facilitate the elimination of PFOS, its salts and PFOSF listed under the Stockholm Convention.

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SECTION B – DETAILED QUESTIONS

Categories of articles containing or processes using as an intermediate PFOS, its salts and PFOSF could include, but are not limited to, the following:

1. Articles

- Impregnation of packaging (paper/cardboard)
- Impregnation/surface protection of clothing, footwear, rugs, carpets, furniture with leather or textile fabrics, etc.
- Medical devices (ethylene tetrafluoroethylene copolymer (ETFE) layers and radio-opaque ETFE production, in-vitro diagnostic medical devices and CCD color filters)
- Aviation hydraulic fluids
- Insect baits for control of leaf-cutting ants and insecticides for red imported fire ants and termites
- Electric and electronic parts for some color printers and color copying machines
- Some rubber and plastics and some coatings and coating additives

2. Industrial processes

- Metal plating
- Etching agent for compound semi-conductors and ceramic filters
- Photo masks in the semiconductor and liquid crystal display (LCD) industry
- Photo imaging
- Photo-resist and anti-reflective coatings for semi-conductor production
- Chemically driven oil production

3. Consumer products

- Cleaning agents, waxes and polishes for cars and floors
- Waxes for skiing
- Paints and varnishes
- Oil and mining industry
- Aviation hydraulic fluids
- Fire-fighting foams

III-B-I Please indicate:

- Types and quantities of articles containing PFOS, its salts or PFOSF that are/were manufactured in your country (include concentrations of these substances)
- Processes using/that used these chemicals
- Any additional information, such as the years you are referring to, estimates or assumptions used for calculations, etc.

Please add additional rows as required to include other types of articles and processes. If you do not have information on any of the elements, please indicate "no data".

| Types of articles | Specify compound | Estimated content [% by weight] | Quantities of articles manufactured [kg/year] | Annual amount of compound in articles [kg/year] | Comments (e.g. year, assumptions, references, applied emission factors, etc.) |
|--------------------------------|------------------|---------------------------------|---|---|---|
| | | | | | |
| EXAMPLES | | | | | |
| ARTICLE X | PFOS-X | 2% | 5000 kg | 100kg | |
| ARTICLE Y | PFOS-Y | 0.2% | 2500 kg | 5kg | |
| | | | | | |
| 1. Articles | | | | | |
| | | | | | |
| 2. Industrial processes | | | | | |
| | | | | | |
| 3. Consumer products | | | | | |
| | | | | | |
| 4. Others | | | | | |
| | | | | | |
| Total | | | | | |

III-B-2 Please indicate the types and quantities of articles containing PFOS, its salts or PFOSF that currently exist in your country including concentrations of those substances in the articles. Please also indicate any additional information, such as the years you are referring to, estimates or assumptions used for calculations, etc. Please add additional rows as required to include others types of articles. If you do not have information on any of the elements, please indicate “no data”.

| Types of articles | Specify compound | Estimated content [% by weight] | Quantities of articles in use [kg] | Annual amount of PBDE in articles [kg] | Comments (e.g. year, assumptions, references, applied emission factors, etc.) |
|-----------------------------|------------------|---------------------------------|------------------------------------|--|---|
| | | | | | |
| EXAMPLES | | | | | |
| ARTICLE X | PFOS-X | 2% | 5000 kg | 100kg | |
| ARTICLE Y | PFOS-Y | 0.2% | 2500 kg | 5kg | |
| | | | | | |
| 1. Articles | | | | | |
| | | | | | |
| 2. Consumer products | | | | | |
| | | | | | |
| 3. Others | | | | | |
| | | | | | |
| Total | | | | | |

III-B-3 Please describe existing processes using PFOS, its salts or PFOSF in your country, indicate the specific names and concentrations of the chemicals used (including the precursors¹) and provide information on releases and potential releases resulting from such processing operations. Please add additional rows if necessary.

| Types of process using PFOS, its salts or PFOSF | Description (e.g. technology used, specific names and concentrations of chemicals, potential and actual releases of PFOS, its salts and PFOSF, etc.) |
|---|--|
| 1. | |
| 2. | |
| 3. | |

III-B-4 Please describe measures for the environmental management of processes using PFOS, its salts or PFOSF in development or implemented in your country (e.g. flue-gas treatment, water treatment, etc.). Please add additional rows if necessary.

| Measures for the environmental management of processes using PFOS, its salts or PFOSF | Description (e.g., effectiveness including cost effectiveness, waste by-products, etc.) |
|---|---|
| 1. | |
| 2. | |
| 3. | |

III-B-5 Please list articles, recycled in your country, that contain PFOS, its salts and PFOSF. Please add additional rows if necessary.

| Types of articles recycled | Compound/precursor | Rate of recycling (%) |
|----------------------------|--------------------|-----------------------|
| 1. | | |
| 2. | | |
| 3. | | |

III-B-6 What types of articles are produced from recycling articles which contained PFOS, its salts and PFOSF?

| |
|--|
| |
|--|

III-B-7 Please describe recycling operations in your country for articles potentially containing PFOS, its salts and PFOSF. Please add additional rows if necessary.

| Recycling Operation | Description | Potential releases of PFOS, its salts and PFOSF resulting from recycling operations | If possible, cost of recycling per ton of article |
|---------------------|-------------|---|---|
| 1. | | | |
| 2. | | | |
| 3. | | | |

III-B-8 Please describe measures for the environmental management of recycling operations in development or implemented in your country (e.g. flue-gas treatment, water treatment). Please add additional rows if necessary.

| Measures for the environmental management of recycling operations | Description (e.g., effectiveness including cost effectiveness, waste by-products, etc.) |
|---|---|
| 1. | |
| 2. | |
| 3. | |

¹ The term "precursors" is used here to indicate other compounds that may be transformed into PFOS in the environment.

PART IV – Other chemicals listed in Annex A at the fourth Meeting of the Conference of the Parties

IV-1-a Please indicate if any one of the following chemicals is contained in articles in your country?²

- Lindane
- Alpha-HCH
- Beta-HCH
- Chlordane
- Hexabromobiphenyl
- Pentachlorobenzene

IV-1-b If 'yes' for any of the above chemicals, please provide information on the extent to which such chemicals occur in articles (e.g., types of articles, percent content of the chemical in the articles, if possible quantities of each article or category of article in metric values, etc.) ?

IV-2-a Please indicate if you have stockpiles of the following chemicals?

- Lindane
- Alpha-HCH
- Beta-HCH
- Chlordane
- Hexabromobiphenyl
- Pentachlorobenzene

IV-2-b If 'yes' for any of the above chemicals, please provide information on the extent to which these chemicals present a risk of human exposure from stockpiles (e.g. condition and size of stockpile, security, planned intervention to safeguard the site, proximity to local population or vulnerable groups, etc.)? Please explain how you are defining a 'stockpile' in the information you provide below.

IV-3-a Please indicate if you have sites contaminated with any of the following chemicals?

- Lindane
- Alpha-HCH
- Beta-HCH
- Chlordane
- Hexabromobiphenyl
- Pentachlorobenzene

IV-3-b If 'yes' for any of the above chemicals, please provide information on the extent to which these chemicals present a risk of human exposure from contaminated sites (e.g., condition and size of contaminated site, security, planned intervention to safeguard the site, proximity to local population or vulnerable groups, etc.)? Please explain how you are defining a 'contaminated site' in the information you provide below.

² According to note (ii) found in Annex A and in Annex B of the Convention, quantities of a chemical occurring as constituents of articles manufactured or already in use before or on the date of entry into force of the relevant obligation with respect to that chemical, shall not be considered as listed in this Annex, provided that a Party has notified the Secretariat that a particular type of article remains in use within that Party.