Food and Agriculture Organization of the United Nations

UN environment

PIC CIRCULAR XLVII (47) – June 2018

ROTTERDAM CONVENTION

SECRETARIAT OF THE ROTTERDAM CONVENTION
ON THE PRIOR INFORMED CONSENT PROCEDURE
FOR CERTAIN HAZARDOUS CHEMICALS AND PESTICIDES
IN INTERNATIONAL TRADE

PIC CIRCULAR XLVII (47) – June 2018

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INTRODUCTION

1. THE PURPOSE OF THE PIC CIRCULAR

The Rotterdam Convention on the Prior Informed Consent Procedure (PIC) for Certain Hazardous Chemicals in International Trade entered into force on 24 February 2004.

The purpose of the PIC Circular is providing to all Parties, through their designated national authorities, the information required in Articles 4, 5, 6, 7, 10, 11, 13 and 14 of the Convention. The decision guidance documents on relevant chemicals dispatched to Parties in line with paragraph 3 of Article 7 are sent out in a separate communication.

The PIC Circular is published every six months, in June and December. The present Circular contains information related to and received during the period from **1 November 2017 to 30 April 2018**. Information received after 30 April 2018 will be included in the next PIC Circular.

Designated national authorities are requested to review the information relating to their countries and communicate any inconsistencies, errors or omissions to the Secretariat.

2. IMPLEMENTATION OF THE ROTTERDAM CONVENTION

2.1 Designated national authorities

In line with paragraph 3 of Article 4, Parties shall notify the Secretariat on designations of or changes to designated national authorities. A register of designated national authorities is distributed together with the present PIC Circular and is also available on the Rotterdam Convention website.[1]

2.2 Notifications of final regulatory action

Parties that have adopted final regulatory actions shall notify the Secretariat within the timeframes established in paragraphs 1 and 2 of Article 5.

Appendix I of the PIC Circular contains a synopsis of all notifications of final regulatory action received from Parties since the last PIC Circular, in line with paragraphs 3 and 4 of Article 5 of the Convention. It contains summaries of notifications of final regulatory action that have been received by the Secretariat and verified to contain the information required by Annex I to the Convention (Part A), information regarding notifications which do not contain all the information (Part B), as well as those notifications that are still under verification by the Secretariat (Part C).

Appendix V contains a list of all the notifications of final regulatory action for chemicals not listed in Annex III, received during the interim PIC procedure and the current PIC procedure (September 1998 to 30 April 2018).

Information on notifications submitted by Parties for the chemicals listed in Annex III to the Convention verified as containing the information required by Annex I to the Convention is also available on the Convention website.[2]

A synopsis of all notifications received under the original prior informed consent procedure, which is before the adoption of the Convention in 1998, was published in **PIC Circular X** in December 1999.[3] These notifications however do not meet the requirements of Annex I because the information requirements for notifications under the original PIC procedure were different. Although Parties are not obliged to resubmit notifications submitted under the original PIC procedure,[4] they may wish to consider

[1] http://www.pic.int/tabid/1168/language/en-US/Default.aspx; http://www.pic.int/tabid/3282/Default.aspx.

[2] http://www.pic.int/tabid/1368/language/en-US/Default.aspx.

[3] http://www.pic.int/tabid/1168/language/en-US/Default.aspx.

[4] Article 5, paragraph 2 of the Rotterdam Convention.

doing so for those chemicals not presently listed in Annex III if sufficient supporting information is available.

To facilitate the submission of notifications, a **form for notification of final regulatory action to ban or severely restrict a chemical and instructions on how to complete it** is available on the Convention website.[5]

2.3 Proposals for the listing of severely hazardous pesticide formulations

In line with paragraph 1 of Article 6, any Party that is a developing country or a country with an economy in transition and that is experiencing problems caused by a severely hazardous pesticide formulations under conditions of use in its territory, may propose to the Secretariat the listing of the severely hazardous pesticide formulations in Annex III.

Appendix II of the PIC Circular contains summaries of such proposals, for which the Secretariat has verified to contain the information required by part 1 of Annex IV to the Convention.

To facilitate the submission of proposals, an **incident report form for human health incidents involving severely hazardous pesticide formulations** and an **incident report form for environmental incidents involving severely hazardous pesticide formulations** are available on the Convention website.[6]

2.4 Chemicals subject to the PIC procedure

Appendix III of the PIC Circular lists all the chemicals that are currently listed in Annex III to the Convention and subject to the PIC procedure, their categories (pesticide, industrial and severely hazardous pesticide formulation) and the date of first dispatch of the corresponding decision guidance document to designated national authorities.

The Conference of the Parties, at its eighth meeting (24 April–5 May 2017), decided to amend Annex III to the Convention to include the following chemicals, and approved the related decision guidance documents:

Chemical name	CAS No.	Category	Decision
Carbofuran	1563-66-2	Pesticide	RC-8/2
Trichlorfon	52-68-6	Pesticide	RC-8/3
Short-chain chlorinated paraffins	85535-84-8	Industrial	RC-8/4
All tributyltin compounds including: - Tributyltin oxide - Tributyltin fluoride - Tributyltin methacrylate - Tributyltin benzoate - Tributyltin chloride - Tributyltin linoleate - Tributyltin naphthenate	 56-35-9 1983-10-4 2155-70-6 4342-36-3 1461-22-9 24124-25-2 85409-17-2	Industrial	RC-8/5

The amendments entered into force for all Parties on 15 September 2017. The decisions to list the above chemicals in Annex III to the Convention including decision guidance documents on carbofuran, trichlorfon, short-chain chlorinated paraffins and the revised decision guidance document on tributyltin compounds approved by the Conference of the Parties were communicated to Parties with a request to provide an import response within nine months of dispatch of these documents (by 15 June 2018), in accordance with paragraph 2 of Article 10.

[5] http://www.pic.int/tabid/1182/language/en-US/Default.aspx.

[6] http://www.pic.int/tabid/1192/language/en-US/Default.aspx.

2.5 Information exchange on exports and export notifications

Article 12 and Annex V to the Convention set out the provisions and information requirements related to export notifications. When a chemical that is banned or severely restricted by a Party is exported from its territory, that Party shall provide an export notification to the importing Party, which shall include the information in Annex V. The importing Party has the obligation to acknowledge receipt of the export notification.

To assist Parties in meeting their obligations under the Convention, a **standard form for export notification** is available on the Convention website.[7]

The Conference of the Parties, at its eighth meeting, recalled decision RC-7/2 on the proposal on ways of exchanging information on exports and export notifications and urged Parties to continue implementing this decision, including the obligations under paragraph 2 of Article 11 and under Article 12. It also invited Parties to reply to the questionnaire on paragraph 2 of Article 11 and Articles 12 and 14.[8]

2.6 Information to accompany exported chemicals

In accordance with paragraph 1 of Article 13, the World Customs Organization has assigned specific Harmonized System customs codes to the individual chemicals or groups of chemicals listed in Annex III to the Convention. These codes entered into force on 1 January 2007. For the chemicals listed in Annex III after 2011, Harmonized System codes will be assigned by the World Customs Organization. A table containing this information is available on the Convention website.[9]

If a Harmonized System customs code has been assigned to a chemical listed in Annex III, Parties shall require that the shipping document carries this assigned code when the chemical is exported.

2.7 Information on responses concerning import of chemicals listed in Annex III to the Convention

In accordance with paragraphs 2 and 4 of Article 10, each Party shall transmit to the Secretariat, as soon as possible, and in any event no later than nine months after the date of dispatch of the decision guidance document, a response concerning the future import of the chemical concerned. If a Party modifies this response, the Party shall forthwith submit the revised response to the Secretariat. The response shall consist of either a final decision or an interim response.

Paragraph 7 of Article 10 provides that, each new Party shall, no later than the date of entry into force of the Convention for that Party, transmit to the Secretariat import responses with respect to each chemical listed in Annex III to the Convention.

Appendix IV includes an overview of import responses received since the last PIC Circular. All import responses received, including a description of the legislative or administrative measures on which the decisions have been based, are available on the Convention website.[10] Information on any cases of failure to transmit a response is also available.

As at 30 April 2018, the following Parties have submitted import responses for all 50 chemicals listed in Annex III to the Convention: Cabo Verde, Cook Islands, Guinea Bissau, Mauritius and Senegal. 154 Parties have not yet provided import responses for one or more of the chemicals listed in Annex III to the Convention. Of these, the following 11 Parties have failed to provide any import responses:

[7] http://www.pic.int/tabid/1365/language/en-US/Default.aspx.

[8] http://www.pic.int/tabid/5959/language/en-US/Default.aspx.

[9] http://www.pic.int/tabid/1159/language/en-US/Default.aspx.

[10] http://www.pic.int/tabid/1370/language/en-US/Default.aspx.

Afghanistan, Botswana, Djibouti, Maldives, Marshall Islands, Montenegro, Namibia, Saint Vincent and the Grenadines, Sierra Leone, Somalia and State of Palestine.

To facilitate the submission of responses regarding import, a **form for import response and instructions on how to complete it** are available on the Convention website.[11]

2.8 Information on chemicals for which the Conference of the Parties has yet to take a final decision

The Conference of the Parties, in its decisions RC-3/3, RC-4/4, RC-6/8, RC-8/6 and RC-8/7, encouraged Parties to make use of all information available on the following chemicals, to assist others, in particular developing countries and countries with economies in transition, to make informed decisions regarding their import and management and to inform other Parties of those decisions using the information exchange provisions in Article 14: chrysotile asbestos; liquid formulations (emulsifiable concentrate and soluble concentrate) containing paraquat dichloride at or above 276 g/L, corresponding to paraquat ion at or above 200 g/L; carbosulfan; and fenthion (ultra low volume formulations at or above 640 g active ingredient/L).

In line with these decisions and paragraph 1 of Article 14, **Appendix VI** of the PIC Circular contains information on chemicals recommended by the Chemical Review Committee for listing in Annex III but for which the Conference of the Parties has yet to take a final decision.

2.9 Information on transit movements

As outlined in paragraph 5 of Article 14, any Party requiring information on transit movements through its territory of chemicals listed in Annex III may report its need to the Secretariat, which shall inform all Parties accordingly.

Since the last PIC Circular, no Party has reported to the Secretariat its need for information on transit movements through its territory of Annex III chemicals.

3. ADDITIONAL INFORMATION

3.1 Information on the status of ratification of the Rotterdam Convention

As at 30 April 2018 there were 160 Parties to the Rotterdam Convention.[12] Information on Parties for whom the Convention entered into force after 30 April 2018 will be reported in the next PIC Circular.

3.2 Documents relevant to the implementation of the Rotterdam Convention

The following documents relevant to the implementation of the Convention are available on the Convention website:[13]

- Text of the Convention - Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade *(Arabic, Chinese, English, French, Russian, Spanish)*;[14]
- Decision guidance documents for each of the chemicals listed in Annex III to the Convention *(English, French, Spanish)*;[15]

[11] http://www.pic.int/tabid/1165/language/en-US/Default.aspx.
[12] http://www.pic.int/tabid/1072/language/en-US/Default.aspx.
[13] http://www.pic.int/.
[14] http://www.pic.int/tabid/1048/language/en-US/Default.aspx.
[15] http://www.pic.int/tabid/2413/language/en-US/Default.aspx.

- Form and instructions for notification of final regulatory action to ban or severely restrict a chemical *(English, French, Spanish)*;[5]
- Form and instructions for import responses *(English, French, Spanish)*;[11]
- Form and instructions for reporting human health incidents and environmental incidents relating to severely hazardous pesticide formulations *(English, French, Spanish)*;[6]
- Export notification form and instructions *(English, French, Spanish)*;[7]
- Form for notification of designation of contacts *(English, French, Spanish)*;[16]
- All past PIC Circulars *(English, French, Spanish)*;[3]
- Register of designated national authorities for the Rotterdam Convention *(English)*.[1]

3.3 Resource Kit of information on the Rotterdam Convention

The Resource Kit[17] is a collection of publications containing information on the Rotterdam Convention. It has been developed with a range of end-users in mind, including the public, designated national authorities and stakeholders involved in the implementation of the Convention. It includes elements to assist in awareness-raising activities and detailed technical information and training materials aimed at facilitating implementation of the Convention.

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[16] http://www.pic.int/tabid/3285/language/en-US/Default.aspx.
[17] http://www.pic.int/tabid/1064/language/en-US/Default.aspx.

APPENDIX I

SYNOPSIS OF NOTIFICATIONS OF FINAL REGULATORY ACTION RECEIVED SINCE THE LAST PIC CIRCULAR

This appendix consists of three parts:

Part A: Summary of notifications of final regulatory action that have been verified as containing all the information required by Annex I to the Convention

Notifications of final regulatory action that have been verified as containing all the information required in Annex I to the Convention, received between 1 November 2017 and 30 April 2018.

Part B: Notifications of final regulatory action that have been verified as <u>not</u> containing all the information required by Annex I to the Convention

Notifications of final regulatory action that have been verified as not containing all the information required by Annex I to the Convention, received between 1 November 2017 and 30 April 2018.

Part C: Notifications of final regulatory action still under verification

Notifications of final regulatory action that have been received by the Secretariat for which the verification process has not yet been completed.

The information is also available on the Convention website.[18]

[18] http://www.pic.int/tabid/1368/language/en-US/Default.aspx.

Synopsis of notifications of final regulatory action received since the last PIC Circular

PART A

SUMMARY OF NOTIFICATIONS OF FINAL REGULATORY ACTION THAT HAVE BEEN VERIFIED AS CONTAINING ALL THE INFORMATION REQUIRED BY ANNEX I TO THE CONVENTION

CANADA

Common Name(s): Hexabromocyclododecane

CAS number(s): 134237-50-6, 134237-51-7, 134237-52-8, 25637-99-4, 3194-55-6

Chemical Name: Hexabromcyclododecane

Final regulatory action has been taken for the category: Industrial

Final regulatory action: The chemical is severely restricted.

Use or uses prohibited by the final regulatory action: The manufacture, use, sale, offer for sale or import of HBCD, as well as expanded and extruded foams and their intermediary products containing HBCD used in building/construction applications are prohibited, with a limited number of exemptions, as of 1 January 2017.

Use or uses that remain allowed: The Regulations do not apply to any toxic substance that is:

(a) Contained in a hazardous waste, hazardous recyclable material or non-hazardous waste to which Division 8 of Part 7 of CEPA applies;

(b) Contained in a pest control product as defined in subsection 2(1) of the Pest Control Products Act;

(c) Present as a contaminant in a chemical feedstock that is used in a process from which there are no releases of the toxic substance and on the condition that the toxic substance is destroyed or completely converted in that process to a substance that is not a toxic substance set out in either Schedule 1 or 2 of the regulations; or

(d) To be used in a laboratory for analysis, in scientific research or as a laboratory analytical standard.

The Regulations do not prohibit:

(a) The import, manufacture, use, sale and offer for sale of HBCD or a EPS or XPS foam product containing it, if HBCD is incidentally present [subsection 4(1) of the Regulations];

(b) The import, manufacture, use, sale and offer for sale of products that contain HBCD other than EPS or XPS foams and their intermediary products for a building or construction application [subsection 4(3) of the Regulations];

(c) The use, sale or offer for sale of:

  (i) HBCD that was manufactured or imported before 1 January 2017 [subsection 4.1(1) of the Regulations];

  (ii) EPS and XPS foams and their intermediary products that contain HBCD, for a building or construction application, if manufactured or imported before 1 January 2017 [subsection 4.1(2) of the Regulations].

REFERENCES

Prohibition of Certain Toxic Substances Regulations, 2012 (SOR/2012-285) under CEPA, as amended 2016 (SOR/2016-252).

http://www.gazette.gc.ca/rp-pr/p2/2016/2016-10-05/html/sor-dors252-eng.html

Substance Prohibition Summary for Hexabromocyclododecane. Environment and Climate Change Canada. July 2017.

http://ec.gc.ca/lcpe-cepa/default.asp?lang=En&xml=8AA39B1F-3399-43CF-ABDB-B24A2AD2E3D9

The final regulatory action was based on a risk or hazard evaluation: Yes

Summary of the final regulatory action: HBCD and certain products containing it are subject to the Prohibition of Certain Toxic Substances Regulations, 2012 (the Regulations) as amended in 2016, made

under the Canadian Environmental Protection Act, 1999 (CEPA).

The manufacture, use, sale, offer for sale or import of HBCD, as well as expanded and extruded foams and their intermediary products containing HBCD used in building/construction applications are prohibited, with a limited number of exemptions, as of 1 January 2017.

Prior to these amendments, there were no risk management instruments in place respecting preventative or control actions for HBCD in Canada.

The reasons for the final regulatory action were relevant to: Human health and environment

Summary of known hazards and risks to human health: N/A

Expected effect of the final regulatory action in relation to human health: N/A

Summary of known hazards and risks to the environment:

Release of HBCD into the environment may occur during manufacture, processing, transportation, use, improper handling, improper storage or containment, product usage and disposal of the substance or products containing the substance. HBCD is not manufactured in Canada.

HBCD has been detected in all environmental media. In addition, the substance is present in samples collected from regions considered remote from potential sources, including the Arctic, indicating that it is sufficiently stable in the environment to allow long-range transport in air or water, or both. HBCD has demonstrated toxicity in both aquatic and terrestrial species.

The available information on persistence, bioaccumulation and toxicity, as well as the risk quotient analysis for pelagic and benthic organisms, indicate that HBCD has the potential to cause ecological harm in Canada. The widespread presence of HBCD in the environment warrants concern in light of strong evidence that the substance is environmentally persistent and bioaccumulative. Based on the available information, it is concluded that HBCD is entering the environment in a quantity or concentration or under conditions that have or may have an immediate or long-term harmful effect on the environment or its biological diversity.

It is therefore concluded that HBCD meets one or more of the criteria set out in section 64 of CEPA. In addition, HBCD meets the criteria for persistence and bioaccumulation potential as set out in the Persistence and Bioaccumulation Regulations (Canada 2000).

Expected effect of the final regulatory action in relation to the environment: The risk management objective for HBCD is to achieve the lowest level of release of the substance, which is technically and economically feasible, into the Canadian environment.

The final regulatory action protects the Canadian environment from risks associated with the manufacture, use, sale, offer for sale or import of HBCD and certain products containing HBCD.

Date of entry into force of the final regulatory action: 01/01/2017

CANADA

Common Name(s): Perfluorooctanoic acid (PFOA), its salts and PFOA-related compounds

CAS number(s): 2395-00-8, 3108-24-5, 335-66-0, 335-67-1, 335-93-3, 335-95-5, 376-27-2, 3825-26-1, 45285-51-6, 90480-56-1 (list is not exhaustive)

Chemical Name: Pentadecafluoro octanoic acid, its salts and precursors

Final regulatory action has been taken for the category: Industrial

Final regulatory action: The chemical is severely restricted.

Use or uses prohibited by the final regulatory action: The Regulations prohibit the manufacture, use, sale, offer for sale or import of PFOA and products containing PFOA, unless the substance is incidentally present. A limited number of exemptions are listed below.

Use or uses that remain allowed: The Regulations do not apply to any toxic substance that is:

(a) Contained in a hazardous waste, hazardous recyclable material or non-hazardous waste to which Division 8 of Part 7 of CEPA applies;

(b) Contained in a pest control product as defined in subsection 2(1) of the Pest Control Products Act;

(c) Present as a contaminant in a chemical feedstock that is used in a process from which there are no releases of the toxic substance and on the condition that the toxic substance is destroyed or completely converted in that process to a substance that is not a toxic substance set out in either

Schedule 1 or 2 of the regulations; or

(d) To be used in a laboratory for analysis, in scientific research or as a laboratory analytical standard.

The Regulations do not prohibit:

(a) The import, manufacture, use, sale and offer for sale of PFOA or a product containing them, if PFOA are incidentally present [subsection 6(1) of the Regulations];

(b) The import, manufacture, use, sale and offer for sale of PFOA or a product containing them, before 1 January 2017, if it is designed for use in water-based inks or in photo media coatings, [paragraph 6(2)(b) of the Regulations];

(c) The import, use, sale and offer for sale of aqueous film forming foam for fire-fighting operations that contain PFOA [subsection 6(2.2) of the Regulations];

(d) The import, use, sale or offer for sale of manufactured items containing PFOA [subsection 6(2.4) of the Regulations];

(e) The use or import of products containing PFOA, if the product is for personal use [subsection 6(4) of the Regulations];

(f) The use, sale or offer for sale of:

(i) Products containing PFOA if manufactured or imported before the Regulations come into force [paragraph 7(2)(a) of the Regulations];

(ii) Water-based inks and photo media coatings containing PFOA that were manufactured or imported before 1 January 2017 [subsection 7(1) of the Regulations];

(iii) PFOA or products containing them if they were manufactured or imported in accordance with a permit (section 8 of the Regulations).

The Regulations allow manufacturers and importers of PFOA and products containing PFOA to apply for a permit to continue their activities after the coming into force of the amendments or after expiry of a temporary exemption. Permits are valid for one year and can potentially be renewed twice allowing manufacturers and importers to continue their activities for an additional three years.

REFERENCES

Prohibition of Certain Toxic Substances Regulations, 2012 (SOR/2012-285) under CEPA, as amended 2016 (SOR/2016-252).

http://www.gazette.gc.ca/rp-pr/p2/2016/2016-10-05/html/sor-dors252-eng.html

Substance Prohibition Summary for Perfluorooctanoic acid, its salts, and its precursors and Long-Chain Perfluorocarboxylic acids, their salts, and their precursors. Environment and Climate Change Canada. July 2017.

http://ec.gc.ca/lcpe-cepa/default.asp?lang=En&xml=3E603995-6012-4D22-993B-0ADEA222C2C4

The final regulatory action was based on a risk or hazard evaluation: Yes

Summary of the final regulatory action: Perfluorooctanoic acid, which has the molecular formula $C_7F_{15}CO_2H$, its salts, and its precursors (collectively referred to as PFOA) and products containing them are subject to the *Prohibition of Certain Toxic Substances Regulations, 2012* (the Regulations) as amended in 2016, under the *Canadian Environmental Protection Act, 1999* (CEPA).

The *Prohibition of Certain Toxic Substances Regulations, 2012* prohibit the import, manufacture, use, sale and offer for sale of PFOA, and products containing PFOA, with a limited number of exemptions.

The reasons for the final regulatory action were relevant to: Environment

Summary of known hazards and risks to human health: N/A

Expected effect of the final regulatory action in relation to human health: N/A

Summary of known hazards and risks to the environment: An ecological screening assessment was undertaken on perfluorooctanoic acid (PFOA), its salts and its precursors containing the perfluorinated alkyl moiety (C_7H_{15}, C_8H_{17}) and is directly bound to any chemical moiety other than a fluorine, chlorine or bromine atom.

Once in the environment, PFOA is extremely persistent and not known to undergo significant abiotic or biotic degradation under relevant environmental conditions. PFOA is highly soluble in water and typically present as an anion (conjugate base) in solution. It has low vapour pressure; therefore, the aquatic environment is expected to be its primary sink, with some additional partitioning to sediment.

The presence of PFOA in the Canadian Arctic is likely attributable to the long-range transport of PFOA (e.g., via ocean currents) and/or volatile precursors to PFOA (e.g., via atmospheric transport).

PFOA has been detected at trace levels in the northern hemisphere. In North America, higher levels were measured in surface waters in the vicinity of US fluoropolymer manufacturing facilities (<0.025-1900 µg/L) and in groundwater near US military bases (not detected (ND) to 6570 µg/L). PFOA was detected in effluent from Canadian wastewater treatment facilities at concentrations ranging from 0.007 to 0.055 µg/L. PFOA was also detected in the influent at US wastewater treatment facilities at concentrations ranging from 0.0074-0.089 µg/L.

Trace levels of PFOA have been measured in Canadian freshwater (ND-11.3 µg/L) and freshwater sediments (0.3-7.5 µg/kg). PFOA has also been detected in a variety of Canadian biota (ND-90 µg/kg wet weight [kg-ww] tissue) in southern Ontario and the Canadian Arctic. The highest concentration of PFOA in Canadian organisms was found in the benthic invertebrate *Diporeia hoyi* at 90 µg/kg-ww, followed by turbot liver at 26.5 µg/kg-ww, polar bear liver at 13 µg/kg-ww, caribou liver at 12.2 µg/kg-ww, ringed seal liver at 8.7 µg/kg-ww and walrus liver at 5.8 µg/kg-ww. Following an accidental release of fire-fighting foam in Etobicoke Creek (Ontario), PFOA was measured in common shiner liver at a maximum concentration of 91 µg/kg-ww. However, current PFOA concentrations in Canadian biota (tissue specific and whole body) are below the highest concentration found in US biota (up to 1934.5 µg/kg-ww in gar liver).

Temporal or spatial trends in PFOA concentrations in guillemot eggs, lake trout, thick-billed murres, northern fulmars or ringed seals could not be determined. However, temporal trends were found for PFOA concentrations in polar bears (1972-2002 and 1984-2006) and sea otters (1992-2002). PFOA doubling time in liver tissue was calculated to be 7.3 ± 2.8 years for Baffin Island polar bears and 13.9 ± 14.2 years for Barrow, Alaska, polar bears; central East Greenland polar bears showed an annual increase of 2.3% in PFOA concentrations. Concentrations of PFOA also increased significantly over a 10-year period for adult female sea otters.

Due to the perfluorination, the perfluorinated chains are both oleophobic and hydrophobic. PFOA primarily binds to albumin proteins in the blood of biota and, as a result, is present in blood and highly perfused tissues such as liver and kidney, rather than lipid tissue. There is experimental evidence indicating that PFOA is not highly bioaccumulative in fish. However, these results should not be extrapolated to non-aquatic species, since gills provide an additional mode of elimination for PFOA that air-breathing organisms, such as terrestrial and marine mammals, do not possess. Field studies indicating biomagnification factors greater than 1 for Arctic and other mammals (such as narwhal, beluga, polar bear, walrus, bottlenose dolphins, and harbour seals) suggest that PFOA may bioaccumulate and biomagnify in terrestrial and marine mammals. Reported field biomagnification factors for terrestrial and marine mammals ranged from 0.03-31. Polar bears, as the apex predator in the Arctic marine food web, have been shown to be the most contaminated with PFOA relative to other Arctic terrestrial organisms.

The risk quotients for pelagic organisms indicate a low likelihood of risk from exposures at current concentrations in the aquatic environment. The risk quotient for Canadian mammalian wildlife (i.e., polar bears) is less than 1; however, due to the persistence of the substance, its tendency to accumulate and biomagnify in a variety of terrestrial and marine mammals, its hepatotoxicity, and the upward temporal trend of PFOA concentrations in polar bears and some other species, PFOA concentrations in polar bears may approach exposures resulting in harm.

The assessment is based on a weight of evidence approach regarding persistence, bioaccumulation, temporal trends in some species (i.e. the polar bear), long-range transport and the widespread occurrence and concentrations of PFOA in the environment and in biota (including remote areas of Canada). Based on the information presented in the screening assessment, it is concluded that PFOA, its salts and its precursors are entering or may be entering the environment in a quantity or concentration or under conditions that have or may have an immediate or long-term harmful effect on the environment or its biological diversity.

Expected effect of the final regulatory action in relation to the environment: The risk management objective for PFOA is to achieve the lowest level of releases into the Canadian environment which is technically or economically feasible.

The final regulatory action protects the Canadian environment from risks associated with the manufacture, use, sale, offer for sale or import of PFOA and certain products containing PFOA.

REFERENCE

Regulatory Impact Analysis Statement, Regulations Amending the Prohibition of Certain Toxic Substances Regulations, 2012. Environment Canada and Health Canada. October 2016.

http://www.gazette.gc.ca/rp-pr/p2/2016/2016-10-05/html/sor-dors252-eng.html.

Date of entry into force of the final regulatory action: 23/12/2016

CANADA

Common Name(s): Perfluorocarboxylic acids ($C_nF_{(2n+1)}CO_2H$, $8 \leq n \leq 20$), their salts and their precursors (LC-PFCAs)

CAS number(s): 133921-38-7, 141074-63-7, 16517-11-6, 203743-03-7, 2058-94-8, 307-55-1, 335-76-2, 375-95-1, 376-06-7, 57475-95-3, 67905-19-5, 68310-12-3, 72629-94-8 (list is not exhaustive)

Group Members: Perfluorononanoic acid (C_9 PFCA), Perfluorodecanoic acid (C_{10} PFCA), Perfluoroundecanoic acid (C_{11} PFCA), Perfluorododecanoic acid (C_{12} PFCA), Perfluorotridecanoic acid (C_{13} PFCA), Perfluorotetradecanoic acid (C_{14} PFCA), Perfluoropentadecanoic acid (C_{15} PFCA), Perfluorohexadecanoic acid (C_{16} PFCA), Perfluoroheptadecanoic acid (C_{17} PFCA), Perfluorooctadecanoic acid (C_{18} PFCA), Perfluorononadecanoic acid (C_{19} PFCA), Perfluoroeicosanoic acid (C_{20} PFCA), 2-Propenoic acid, 2-methyl-, hexadecyl ester, polymers with 2-hydroxyethyl methacrylate, gamma-omega-perfluoro-C_{10-16}-alkyl acrylate and stearyl methacrylate (list is not exhaustive).

Final regulatory action has been taken for the category: Industrial

Final regulatory action: The chemical is severely restricted.

Use or uses prohibited by the final regulatory action: The Regulations prohibit the manufacture, use, sale, offer for sale or import of LC-PFCAs and products containing LC-PFCAs, unless the substance is incidentally present. A limited number of exemptions are listed below.

Use or uses that remain allowed: The Regulations do not apply to any toxic substance that is:

(a) Contained in a hazardous waste, hazardous recyclable material or non-hazardous waste to which Division 8 of Part 7 of CEPA applies;

(b) Contained in a pest control product as defined in subsection 2(1) of the *Pest Control Products Act*;

(c) Present as a contaminant in a chemical feedstock that is used in a process from which there are no releases of the toxic substance and on the condition that the toxic substance is destroyed or completely converted in that process to a substance that is not a toxic substance set out in either Schedule 1 or 2 of the regulations; or

(d) To be used in a laboratory for analysis, in scientific research or as a laboratory analytical standard.

The Regulations do not prohibit:

(a) The import, manufacture, use, sale and offer for sale of LC-PFCAs or a product containing them, if LC-PFCAs are incidentally present [subsection 6(1) of the Regulations];

(b) The import, manufacture, use, sale and offer for sale of LC-PFCAs or a product containing them, before 1 January 2017, if it is designed for use in water-based inks or in photo media coatings, [paragraph 6(2)(b) of the Regulations];

(c) The import, use, sale and offer for sale of aqueous film forming foam for fire-fighting operations that contain LC-PFCAs [subsection 6(2.2) of the Regulations];

(d) The import, use, sale or offer for sale of manufactured items containing LC-PFCAs [subsection 6(2.4) of the Regulations];

(e) The use or import of products containing LC-PFCAs, if the product is for personal use [subsection 6(4) of the Regulations].

(f) The use, sale or offer for sale of:

  (i) Products containing LC-PFCAs if manufactured or imported before the Regulations come into force [paragraph 7(2)(a) of the Regulations];

  (ii) Water-based inks and photo media coatings containing LC-PFCAs that were manufactured or imported before 1 January 2017 [subsection 7(1) of the Regulations];

  (iii) LC-PFCAs or products containing them if they were manufactured or imported in

accordance with a permit (section 8 of the Regulations).

The Regulations allow manufacturers and importers of LC-PFCAs and products containing LC-PFCAs to apply for a permit to continue their activities after the coming into force of the amendments or after expiry of a temporary exemption. Permits are valid for one year and can potentially be renewed twice allowing manufacturers and importers to continue their activities for an additional three years.

REFERENCES

Prohibition of Certain Toxic Substances Regulations, 2012 (SOR/2012-285) under CEPA, as amended 2016 (SOR/2016-252).

http://www.gazette.gc.ca/rp-pr/p2/2016/2016-10-05/html/sor-dors252-eng.html

Substance Prohibition Summary for Perfluorooctanoic acid, its salts, and its precursors and Long-Chain Perfluorocarboxylic acids, their salts, and their precursors. Environment and Climate Change Canada. July 2017.

http://ec.gc.ca/lcpe-cepa/default.asp?lang=En&xml=3E603995-6012-4D22-993B-0ADEA222C2C4

The final regulatory action was based on a risk or hazard evaluation: Yes

Summary of the final regulatory action: Perfluorocarboxylic acids that have the molecular formula $C_nF_{2n+1}CO_2H$ in which $8 \leq n \leq 20$, their salts, and their precursors (collectively referred to as LC-PFCAs) and products containing them are subject to the *Prohibition of Certain Toxic Substances Regulations, 2012* (the Regulations) as amended in 2016, under the *Canadian Environmental Protection Act, 1999* (CEPA).

The *Prohibition of Certain Toxic Substances Regulations, 2012* prohibit the import, manufacture, use, sale and offer for sale of LC-PFCAs, and products containing LC-PFCAs, with a limited number of exemptions.

The reasons for the final regulatory action were relevant to: Environment

Summary of known hazards and risks to human health: N/A

Expected effect of the final regulatory action in relation to human health: N/A

Summary of known hazards and risks to the environment:

An ecological assessment was undertaken on the PFCAs with carbon chain lengths from 9 to 20 inclusive, their salts and their precursors. Precursors, i.e., substances that could transform or degrade to long-chain PFCAs, were considered on the basis of their contribution to the total presence of long-chain PFCAs in the environment. The assessment defines precursors as any substances where the perfluorinated alkyl moiety has the formula C_nF_{2n+1} (where $8 \leq n \leq 20$) and is directly bonded to any chemical moiety other than a fluorine, chlorine or bromine atom. While the assessment did not directly consider the potential additive effects of long-chain PFCAs and their precursors and their salts, it is recognized that the precursors and salts may contribute to the total presence of long-chain PFCAs in the environment. The expression C# is used to define the carbon chain length of the perfluorocarboxylic acid in question, e.g., C_9 is a nine carbon PFCA.

In traditional toxicity studies (e.g., lethality, growth), several long-chain PFCAs were found to be low to moderately toxic, with acute toxicity values ranging from 8.8 to 285 mg/L. There are two studies on the toxicity of long-chain PFCAs in terrestrial species. In one study, no adverse effects were observed up to 1.0 mg/kg body weight for male chickens dosed with C_{10} PFCA three times/week for three weeks. In another study, a soil-dwelling nematode showed acute lethality at 306 mg/L and multi-generation effects (decreased fecundity) at 0.000464 mg/L when exposed to C_9 PFCA.

There is the potential for long-chain PFCAs to cause the activation of the PPARα in Baikal seal livers at 35.25 - 64.26 mg/L C_9-C_{11} PFCAs - based on data from *in vitro* laboratory studies. There is also the potential for long-chain PFCAs to affect endocrine function, e.g., vitellogenesis in rainbow trout at 0.0256 - 2000 µg/g diet C_{10} PFCA. C_9-C_{10} PFCAs are also chemical sensitizers for the marine mussel, *Mytilus californianus*, by allowing normally excluded toxic substances to accumulate in the marine mussel. C_{12} and C_{14} PFCAs increased the mitochondrial membrane potential in the freshwater alga, *Scenedesmus obliquus*, indicating damage to the mitochondrial function.

Certain long-chain PFCAs have been measured in the Canadian aquatic environment in concentrations ranging from <0.5 ng/L to 19 ng/L. C_9-C_{12} PFCAs were measured in sediment from the Canadian Arctic ranging in concentration from 0.5 - 3.3 ng/g. C_9 to C_{15} PFCAs were measured in the liver of

seals, foxes, fish, polar bears, Greenland shark, narwhals, beluga whales and birds either in the Canadian Arctic or the Great Lakes region. Concentrations ranged from below detection levels to 180 ng/g liver-ww with concentrations greatest for polar bears followed by Greenland shark, narwhals and beluga whales. Worldwide, levels of C_9 to C_{15} PFCAs have been reported in ringed, fur and harbour seals, dolphins (i.e., white-sided, bottlenose, white-beaked, Franciscana, humpback), finless porpoises, glaucous gulls, sperm whale, beavers, Amur tigers, wild rats and several species of birds (little egret, little ringed plover, parrotbills, black-crowned herons). Concentrations ranged from below detection levels to 480 ng/g-ww, with concentrations highest in the white-beaked dolphin.

All long-chain PFCAs are considered to be persistent due to the strength of the carbon-fluorine bond. Furthermore, long-chain PFCAs have been detected in remote areas (e.g., the Canadian Arctic). While mechanisms of transport are not fully understood, certain precursors may undergo long-range transport to remote areas, where subsequent degradation can result in the formation of long-chain PFCAs.

For C_{11} (2700<BCF<11000), C_{12} (18000<BCF<40000), and C_{14} (23000<BCF<30000) PFCAs, there is empirical evidence that these substances are highly bioaccumulative in fish and have the potential for biomagnification in fish and marine mammals. There are no experimental or predicted bioaccumulation data available for long-chain PFCAs greater than C_{14}. Nevertheless, there is the potential that long-chain PFCAs could accumulate or biomagnify in marine and/or terrestrial species based on chemical conformations. In addition, C_{14} and C_{15} PFCAs have been found in fish, invertebrates and polar bears.

Increasing trends of long-chain PFCA concentrations have been shown in polar bears, ringed seals and birds. From 1980 to 2000, C_{10} and C_{11} PFCAs in ringed seal livers from Greenland increased 3.3 and 6.8% per year, respectively. From 1992 to 2005, the mean concentrations of C_9 and C_{10} PFCA in the livers of Baikal seals were 1.2 to 1.7-fold higher. From 1972 to 2002, mean doubling times for concentrations in polar bear livers from the Arctic ranged from 5.8 to 9.1 years for C_9 to C_{11} PFCAs. From 1993 to 2004, concentrations in ringed seal liver samples increased, with a doubling time of 4 to 10 years for C_9 to C_{12} PFCAs. In northern fulmar liver samples, C_9 to C_{15} PFCA levels increased from 1987 to 1993 and remained steady from 1993 to 2003. Thick-billed murre liver samples showed an increase in C_9 to C_{15} PFCAs concentrations from 1975 to 2004. Concentrations of C_9 to C_{13} PFCAs increased significantly in whole eggs of herring gulls in Norway from 1983 to 1993. Annual temporal increases of C_9-C_{12} PFCAs were observed in male beluga whales from Nunavut at 1.8 ng/g-ww liver from 1980-2010.

The presence of long-chain PFCAs, their salts and their precursors results from anthropogenic activity. The long-chain PFCAs and their salts are persistent. There is empirical evidence that long-chain PFCAs can accumulate to a significant extent and biomagnify in marine and terrestrial mammals. They have been found in remote regions, likely due to the long-range atmospheric or oceanic transport of volatile precursors and/or the acids themselves. Long-chain PFCAs and their precursors have been detected in biota over wide areas in Canada, including the Canadian Arctic. There is evidence that environmental concentrations are increasing with time for Canadian Arctic species such as polar bears, ringed seals, northern fulmars and thick-billed murres. Based on the above, it is concluded that long-chain PFCAs their salts and their precursors have the potential to cause ecological harm.

Based on the information presented in this screening assessment, it is concluded that long-chain (C_9-C_{20}) PFCAs, their salts and their precursors are entering or may enter the environment in a quantity or concentration or under conditions that have or may have an immediate or long-term harmful effect on the environment or its biological diversity. In addition, it is concluded that long-chain (C_9-C_{20}) PFCAs and their salts are extremely persistent and meet the criteria for persistence as set out in the *Persistence and Bioaccumulation Regulations*. Long-chain (C_9-C_{20}) PFCAs do not meet the criteria for bioaccumulation as set out in the *Persistence and Bioaccumulation Regulations*. Nevertheless, the weight of evidence is sufficient to conclude that long-chain (C_9-C_{20}) PFCAs and their salts accumulate and biomagnify in terrestrial and marine mammals.

It is, therefore, concluded that long-chain (C_9-C_{20}) PFCAs, their salts, and their precursors meet one or more of the criteria in section 64 of CEPA.

Expected effect of the final regulatory action in relation to the environment: The risk management objective for LC-PFCAs is to achieve the lowest level of releases into the Canadian environment which is technically or economically feasible.

The final regulatory action protects the Canadian environment from risks associated with the

manufacture, use, sale, offer for sale or import of LC-PFCAs and certain products containing them.

REFERENCE

Regulatory Impact Analysis Statement, Regulations Amending the Prohibition of Certain Toxic Substances Regulations, 2012. Environment Canada and Health Canada. October 2016.

http://www.gazette.gc.ca/rp-pr/p2/2016/2016-10-05/html/sor-dors252-eng.html

Date of entry into force of the final regulatory action: 23/12/2016

CANADA

Common Name(s): Perfluorooctane sulfonic acid, perfluorooctane sulfonates, perfluorooctane sulfonamides and perfluorooctane sulfonyls and related compounds

CAS number(s): 1691-99-2, 24448-09-7, 2795-39-3, 29081-56-9, 2991-51-7, 307-35-7, 31506-32-8, 4151-50-2, 70225-14-8, 92265-81-1(list is not exhaustive)

Chemical Name: 1-Octanesulfonic acid, 1,1,2,2,3,3,4,4,5,5,6,6,7,7,8,8,8-heptadecafluoro-, and its salts and compounds that contain one of: $C_8F_{17}SO_2$, $C_8F_{17}SO_3$ or $C_8F_{17}SO_2N$

Final regulatory action has been taken for the category: Industrial

Final regulatory action: The chemical is severely restricted.

Use or uses prohibited by the final regulatory action: The Regulations prohibit the manufacture, use, sale, offer for sale or import of PFOS, or a product containing PFOS, unless the substance is incidentally present, with a limited number of exemptions listed below.

Use or uses that remain allowed: The Regulations do not apply to any toxic substance that is:

(a) contained in a hazardous waste, hazardous recyclable material or non-hazardous waste to which Division 8 of Part 7 of CEPA applies;

(b) contained in a pest control product as defined in subsection 2(1) of the *Pest Control Products Act*;

(c) present as a contaminant in a chemical feedstock that is used in a process from which there are no releases of the toxic substance and on the condition that the toxic substance is destroyed or completely converted in that process to a substance that is not a toxic substance set out in either Schedule 1 or 2 of the regulations; or

(d) to be used in a laboratory for analysis, in scientific research or as a laboratory analytical standard.

The Regulations do not prohibit:

(a) The import, manufacture, use, sale and offer for sale of PFOS or a product containing it, if PFOS is incidentally present [subsection 6(1) of the Regulations];

(b) The import, manufacture, use, sale and offer for sale of PFOS or a product containing it if it is designed for use in photoresists or anti-reflective coatings for photolithography process or photographic films, papers and printing plates [paragraph 6(2)(a) of the Regulations];

(c) The use and import of PFOS in aqueous film forming foam present in a military vessel or military fire-fighting vehicle contaminated during a foreign military operation [subsection 6(2.1) of the Regulations];

(d) The use of PFOS in aqueous film forming foam at a concentration less than or equal to 10 ppm [subsection 6(2.5) of the Regulations];

(e) The use, sale or offer for sale of manufactured items containing PFOS if they were manufactured or imported before May 29, 2008 [subsection 7(3) of the Regulations].

REFERENCES

Prohibition of Certain Toxic Substances Regulations, 2012 (SOR/2012-285) under CEPA, as amended 2016 (SOR/2016-252).

http://www.gazette.gc.ca/rp-pr/p2/2016/2016-10-05/html/sor-dors252-eng.html

Substance Prohibition Summary for Perfluorooctane sulfonate, its salts and its precursors. Environment and Climate Change Canada. July 2017.

http://ec.gc.ca/lcpe-cepa/default.asp?lang=En&xml=86BBBD05-D88E-44B2-932D-1ECCDF5FE9F1

The final regulatory action was based on a risk or hazard evaluation: Yes

Summary of the final regulatory action: Perfluorooctane sulfonate and its salts and compounds that

contain one of the following groups: $C_8F_{17}SO_2$, $C_8F_{17}SO_3$ or $C_8F_{17}SO_2N$ (collectively referred to as PFOS) and products containing it are subject to *Prohibition of Certain Toxic Substances Regulations, 2012* (the Regulations) as amended in 2016, made under the *Canadian Environmental Protection Act, 1999* (CEPA).

The manufacture, use, sale, offer for sale or import of PFOS is prohibited with a limited number of exemptions.

The Regulations replace the former *Perfluorooctane Sulfonate and Its Salts and Certain Other Compounds Regulations* which were the subject of a previous Notification of Final Regulatory Action from Canada.

Regulatory controls pertaining to PFOS already existed under CEPA prior to this new regulatory action, which were maintained. The new regulatory action expanded the controls by removing certain exemptions.

The reasons for the final regulatory action were relevant to: Environment

Summary of known hazards and risks to human health: N/A

Expected effect of the final regulatory action in relation to human health: N/A

Summary of known hazards and risks to the environment: An ecological screening assessment was undertaken on perfluorooctane sulfonate (PFOS), its salts and its precursors containing the perfluorooctylsulfonyl ($C_8F_{17}SO_2$, $C_8F_{17}SO_3$, or $C_8F_{17}SO_2N$) moiety.

PFOS is resistant to hydrolysis, photolysis, microbial degradation, and metabolism by vertebrates. PFOS has been detected in fish, in wildlife worldwide and in the northern hemisphere. This includes Canadian wildlife located far from known sources or manufacturing facilities indicating that PFOS and/or its precursors may undergo long-range transport. Maximum concentrations in liver of biota in remote areas of the Canadian Arctic include: mink (20 μg.kg-1), common loon (26 μg.kg-1), ringed seal (37 μg.kg-1), brook trout (50 μg.kg-1), Arctic fox (1400 μg.kg-1) and polar bear (>4000 μg.kg-1).

Unlike many other persistent organic pollutants, certain perfluorinated substances, such as PFOS, are present as ions in environmental media and partition preferentially to proteins in liver and blood rather than to lipids. Therefore, the bioaccumulation potential of PFOS may not be related to the typical mechanisms associated with bioaccumulation in lipid-rich tissues. Discretion is required when applying numeric criteria for bioaccumulation such as those outlined in the Government of Canada's Toxic Substances Management Policy (TSMP) and in the *Persistence and Bioaccumulation Regulations* under CEPA when determining whether substances such as PFOS are bioaccumulative. These numeric criteria were derived from bioaccumulation data for aquatic species and for substances which preferentially partition to lipids.

The assessment is based on a weight of evidence approach regarding persistence, bioaccumulation, the widespread occurrence of and concentrations of PFOS in the environment and in biota (including remote areas of Canada), and risk quotient analyses. Based on available data, it is concluded that PFOS, its salts and its precursors are entering the environment in a quantity or concentration or under conditions that have or may have an immediate or long-term harmful effect on the environment or its biological diversity. In addition, based on available data, it is concluded that PFOS and its salts is persistent. The weight of evidence is also sufficient to conclude that PFOS and its salts are bioaccumulative.

Expected effect of the final regulatory action in relation to the environment: This regulatory action builds upon original action taken in 2008. The continued prohibition on manufacture, use, sale, offer for sale, or import of PFOS will work towards the objective of virtual elimination of the substance. Therefore, this regulatory action will also result in a reduction of risk for Canada's environment.

The final regulatory action protects the Canadian environment from risks associated with the manufacture, use, sale, offer for sale or import of PFOS and certain products containing them.

Date of entry into force of the final regulatory action: 23/12/2016

LESOTHO

Common Name(s): Actinolite asbestos ***CAS number(s):*** 77536-66-4

Chemical Name: Actinolite asbestos

Final regulatory action has been taken for the category: Industrial

Final regulatory action: The chemical is banned.

Use or uses prohibited by the final regulatory action: All uses are banned.

Use or uses that remain allowed: None

The final regulatory action was based on a risk or hazard evaluation: Yes

Summary of the final regulatory action: No person shall import, manufacture, handle, sell or transport this chemical in the country as listed in the Second Schedule of the Environment Act 2008.

The reasons for the final regulatory action were relevant to: Human health

Summary of known hazards and risks to human health: Inhalation of asbestos dust can cause fibrosis of the lung (asbestosis), changes in one or both surfaces of the pleura, bronchial carcinoma (lung cancer), mesothelioma of the pleura and peritoneum, and possibly cancers of other sites.

Expected effect of the final regulatory action in relation to human health: Reduce exposure.

Date of entry into force of the final regulatory action: 16/06/2009

LESOTHO

Common Name(s): Amosite asbestos ***CAS number(s):*** 12172-73-5

Chemical Name: Asbestos, grunerite

Final regulatory action has been taken for the category: Industrial

Final regulatory action: The chemical is banned.

Use or uses prohibited by the final regulatory action: All uses are banned.

Use or uses that remain allowed: None

The final regulatory action was based on a risk or hazard evaluation: Yes

Summary of the final regulatory action: No person shall import, manufacture, handle, sell or transport this chemical in the country as listed in the Second Schedule of the Environment Act 2008.

The reasons for the final regulatory action were relevant to: Human health

Summary of known hazards and risks to human health: Inhalation of asbestos dust can cause fibrosis of the lung (asbestosis), changes in one or both surfaces of the pleura, bronchial carcinoma (lung cancer), mesothelioma of the pleura and peritoneum, and possibly cancers of other sites.

Expected effect of the final regulatory action in relation to human health: Reduce exposure.

Date of entry into force of the final regulatory action: 16/06/2009

LESOTHO

Common Name(s): Anthophyllite ***CAS number(s):*** 77536-67-5

Chemical Name: Anthophyllite

Final regulatory action has been taken for the category: Industrial

Final regulatory action: The chemical is banned.

Use or uses prohibited by the final regulatory action: All uses are banned.

Use or uses that remain allowed: None

The final regulatory action was based on a risk or hazard evaluation: Yes

Summary of the final regulatory action: No person shall import, manufacture, handle, sell or transport this chemical in the country as listed in the Second Schedule of the Environment Act 2008.

The reasons for the final regulatory action were relevant to: Human health

Summary of known hazards and risks to human health: Inhalation of asbestos dust can cause fibrosis of the lung (asbestosis), changes in one or both surfaces of the pleura, bronchial carcinoma

(lung cancer), mesothelioma of the pleura and peritoneum, and possibly cancers of other sites.

Expected effect of the final regulatory action in relation to human health: Reduce exposure.

Date of entry into force of the final regulatory action: 16/06/2009

LESOTHO

Common Name(s): Crocidolite ***CAS number(s):*** 12001-28-4

Chemical Name: Crocidolite

Final regulatory action has been taken for the category: Industrial

Final regulatory action: The chemical is banned.

Use or uses prohibited by the final regulatory action: All uses are banned.

Use or uses that remain allowed: None

The final regulatory action was based on a risk or hazard evaluation: Yes

Summary of the final regulatory action: No person shall import, manufacture, handle, sell or transport this chemical in the country as listed in the Second Schedule of the Environment Act 2008.

The reasons for the final regulatory action were relevant to: Human health

Summary of known hazards and risks to human health: Inhalation of asbestos dust can cause fibrosis of the lung (asbestosis), changes in one or both surfaces of the pleura, bronchial carcinoma (lung cancer), mesothelioma of the pleura and peritoneum, and possibly cancers of other sites.

Expected effect of the final regulatory action in relation to human health: Reduce exposure.

Date of entry into force of the final regulatory action: 16/06/2009

LESOTHO

Common Name(s): Polybrominated biphenyls (PBBs)

CAS number(s): 13654-09-6, 27858-07-7, 36355-01-8

Chemical Name(s): Hexabromobiphenyl, octabromobiphenyl, decabromobiphenyl

Final regulatory action has been taken for the category: Industrial

Final regulatory action: The chemical is banned.

Use or uses prohibited by the final regulatory action: All uses are banned.

Use or uses that remain allowed: None

The final regulatory action was based on a risk or hazard evaluation: Yes

Summary of the final regulatory action: No person shall import, manufacture, handle, sell or transport this chemical in the country as listed in the Second Schedule of the Environment Act 2008.

The reasons for the final regulatory action were relevant to: Environment

Summary of known hazards and risks to the environment: It accumulates in food chains, evidence exists of chronic toxicity to various species, and because they are embryotoxic and teratogenic.

Expected effect of the final regulatory action in relation to the environment: Reduce exposure.

Date of entry into force of the final regulatory action: 16/06/2009

LESOTHO

Common Name(s): Polychlorinated biphenyls (PCB) ***CAS number(s):*** 1336-36-3

Chemical Name: Polychlorinated biphenyls

Final regulatory action has been taken for the category: Industrial

Final regulatory action: The chemical is banned.

Use or uses prohibited by the final regulatory action: All uses are banned.

Use or uses that remain allowed: None

The final regulatory action was based on a risk or hazard evaluation: Yes

Summary of the final regulatory action: No person shall import, manufacture, handle, sell or

transport this chemical in the country as listed in the Second Schedule of the Environment Act 2008.

The reasons for the final regulatory action were relevant to: Human health and environment

Summary of known hazards and risks to human health: PCB exposure leads to skin abnormalities. Effects may be retardation of foetal growth and alteration of calcium metabolism related to hormonal disfunction. PCBs also cause cancer of the liver, biliary tract and gall bladder.

Expected effect of the final regulatory action in relation to human health: Reduce exposure.

Summary of known hazards and risks to the environment: They are persistent in the environment, bioaccumulates in the human food chain, forms extremely toxic substances on thermolysis and contaminates the environment.

Expected effect of the final regulatory action in relation to the environment: Reduce exposure.

Date of entry into force of the final regulatory action: 16/06/2009

LESOTHO

Common Name(s): Tremolite ***CAS number(s):*** 77536-68-6

Chemical Name: Asbestos, tremolite

Final regulatory action has been taken for the category: Industrial

Final regulatory action: The chemical is banned.

Use or uses prohibited by the final regulatory action: All uses are banned.

Use or uses that remain allowed: None

The final regulatory action was based on a risk or hazard evaluation: Yes

Summary of the final regulatory action: No person shall import, manufacture, handle, sell or transport this chemical in the country as listed in the Second Schedule of the Environment Act 2008.

The reasons for the final regulatory action were relevant to: Human health

Summary of known hazards and risks to human health: Inhalation of asbestos dust can cause fibrosis of the lung (asbestosis), changes in one or both surfaces of the pleura, bronchial carcinoma (lung cancer), mesothelioma of the pleura and peritoneum, and possibly cancers of other sites.

Expected effect of the final regulatory action in relation to human health: Reduce exposure.

Date of entry into force of the final regulatory action: 16/06/2009

NORWAY

Common Name(s): Metaldehyde ***CAS number(s):*** 108-62-3, 9002-91-9

Chemical Name: 2,4,6,8 - tetramethyl-1,3,5,7-tetraoxocyclooctane

Final regulatory action has been taken for the category: Pesticide

Final regulatory action: The chemical is banned.

Use or uses prohibited by the final regulatory action: All uses of metaldehyde as a plant protection product. The application for authorization of the plant protection product Gusto was for professional use in strawberry, potato, root vegetables, onion, tomato, lettuce, cabbage, beans and peas and for non-professional use in private gardens.

The final regulatory action was based on a risk or hazard evaluation: Yes

Summary of the final regulatory action: After an evaluation, the Norwegian Food Safety Authority has decided to deny the application for authorization of the plant protection product Gusto (containing metaldehyde) according to the Regulation of 26 July 2004 nr. 1138 on pesticides.

The reason for this decision was the unacceptable risks to birds and mammals.

The reasons for the final regulatory action were relevant to: Environment

Summary of known hazards and risks to the environment: According to the EFSA conclusion on the peer review of the pesticide risk assessment of the active substance metaldehyde (EFSA, 2010), a high acute and long-term risk was assessed for birds and mammals. Data gaps were identified for all representative uses to provide new acute and long-term risk assessments for birds from all routes of exposure and a new acute and long-term risk assessment for granivorous mammals.

In the national evaluation conducted by the Norwegian Food Safety Authority on the plant protection product Gusto (with metaldehyde as active substance), the risk assessment concluded with high risk to birds. The estimated acute Toxicity Exposure Ratios (TER_A) and long-term Toxicity Exposure Ratios (T ER_{LT}) indicate an acute and long-term risk for birds ingesting granules as source of food, as grit or when seeking seeds as food. The proposed refinements are not acceptable as they do not cover smaller bird species, and assume a lower food intake than expected. For mammals, the risk assessment also concludes with a high acute and chronic risk from ingesting granules as source of food, TER_A and T ER_{LT} indicate an acute and long-term risk, and the proposed refinements are not accepted.

Expected effect of the final regulatory action in relation to the environment: Complete reduction of the risk to birds and mammals from exposure to metaldehyde.

Date of entry into force of the final regulatory action: 16/02/2016

PANAMA

Common Name(s): Carbofuran ***CAS number(s):*** 1563-66-2

Chemical Name: 2,3-dihydro-2,2-dimethylbenzofuran-7-yl methylcarbamate

Final regulatory action has been taken for the category: Pesticide

Final regulatory action: The chemical is banned.

Use or uses prohibited by the final regulatory action: Banning: import, manufacture, fractionation, commercialization with Monocrotophos active ingredient in the national territory.

The final regulatory action was based on a risk or hazard evaluation: No

Summary of the final regulatory action: Among the considerations of the Resolution it is noted that the Ministry of Agricultural Development of Panama (MIDA), adopts the decision of banning the active ingredient Carbofuran for all agricultural uses. This measure is adopted for two main reasons:

(a) The banning of Carbofuran by the United States of America (USA), throughout its territory, for the severe problems to public health and the environment;

(b) Decision of the United States of America, January 2010: zero tolerance to Carbofuran. This restrictive action for fruits and vegetables imports from different origins could have a negative impact on Panama's agro-export activity.

Another reason for the banning of agricultural formulations based on the active ingredient carbofuran is because its highly harmful effects on public health and its polluting effects on the environment, indicated in several international studies. Under this decision, all sales licenses for products Carbofuran formulated were canceled in Panama.

The reasons for the final regulatory action were relevant to: Human health and environment

Date of entry into force of the final regulatory action: 28/10/2010

PANAMA

Common Name(s): Methamidophos ***CAS number(s):*** 10265-92-6

Chemical Name: *O,S*-dimethyl phosphoramidothioate

Final regulatory action has been taken for the category: Pesticide

Final regulatory action: The chemical is banned.

Use or uses prohibited by the final regulatory action: Banning: import, manufacture, fractionation, commercialization and use of agricultural products formulated with Methamidophos active ingredient in the national territory.

The final regulatory action was based on a risk or hazard evaluation: No

Summary of the final regulatory action: Resolution No. 024 of 10 June 2011, states that the Ministry of Agricultural Development of Panama (MIDA), adopts the decision to ban 11 different active ingredients for all agricultural uses, including Methanidophos. This measure is adopted for the following reasons:

(a) Pesticide molecules listed cause a relevant risk to public health and other living organisms due to their extreme and high toxicity; proven persistence, bioaccumulative properties, high carcinogenic,

mutagenic, teratogenic and infertility risks;

(b) Current measures to regulate exposure to these substances will not reduce risks to acceptable levels. In addition, there are alternative, effective, economically competitive and viable products available for agricultural production. Another reason for the prohibition of agricultural formulations based on the active ingredient Methamidophos is their highly harmful effects on public health and environmental pollution, as indicated in numerous international studies. Under this decision, all sales licenses for these products were canceled in Panama.

The reasons for the final regulatory action were relevant to: Human health and environment

Date of entry into force of the final regulatory action: 17/06/2011

PANAMA

Common Name(s): Methyl Parathion ***CAS number(s):*** 298-00-0

Chemical Name: Phosphorothioic acid, *O*,*O*-dimethyl *O*-(4-nitrophenyl) ester

Final regulatory action has been taken for the category: Pesticide

Final regulatory action: The chemical is banned.

Use or uses prohibited by the final regulatory action: Prohibit in the national territory import, manufacture, processing, commercialization and use of all agricultural products formulations with the active ingredient methyl parathion.

The final regulatory action was based on a risk or hazard evaluation: No

Summary of the final regulatory action: Resolution No. 024 of 10 June 2011, states that the Ministry of Agricultural Development of Panama (MIDA), adopts the decision to ban 11 different active ingredients for all agricultural uses, including Methyl-parathion. This measure is adopted for the following reasons:

(a) Pesticide molecules listed cause a relevant risk to public health and other living organisms due to their extreme and high toxicity; proven persistence, bioaccumulative properties, high carcinogenic, mutagenic, teratogenic and infertility risks;

(b) Current measures to regulate exposure to these substances will not reduce risks to acceptable levels. In addition, there are alternative, effective, economically competitive and viable products available for agricultural production. Another reason for the prohibition of agricultural formulations based on the active ingredient Methyl-parathion is their highly harmful effects on public health and environmental pollution, as indicated in numerous international studies. Under this decision, all sales licenses for these products were canceled in Panama.

The reasons for the final regulatory action were relevant to: Human health and environment

Date of entry into force of the final regulatory action: 17/06/2011

PANAMA

Common Name(s): Monocrotophos (BSI, E-ISO) ***CAS number(s):*** 6923-22-4

Chemical Name: Dimethyl (E)-1-methyl-2-(methylcarbamoyl)vinyl phosphate

Final regulatory action has been taken for the category: Pesticide

Final regulatory action: The chemical is banned.

Use or uses prohibited by the final regulatory action: Banning: import, manufacture, fractionation, commercialization and use of agricultural products formulated with Monocrotophos active ingredient in the national territory.

The final regulatory action was based on a risk or hazard evaluation: No

***Summary of the final regulatory action*:** Resolution No. 024 of 10 June 2011, states that the Ministry of Agricultural Development of Panama (MIDA), adopts the decision to ban 11 different active ingredients for all agricultural uses, including Moncrotophos. This measure is adopted for the following reasons:

(a) Pesticide molecules listed cause a relevant risk to public health and other living organisms due to their extreme and high toxicity; proven persistence, bioaccumulative properties, high carcinogenic, mutagenic, teratogenic and infertility risks;

(b) Current measures to regulate exposure to these substances will not reduce risks to acceptable levels. In addition, there are alternative, effective, economically competitive and viable products available for agricultural production. Another reason for the prohibition of agricultural formulations based on the active ingredient Monocrotophos is their highly harmful effects on public health and environmental pollution, as indicated in numerous international studies. Under this decision, all sales licenses for these products were canceled in Panama.

The reasons for the final regulatory action were relevant to: Human health and environment

Date of entry into force of the final regulatory action: 17/06/2011

Synopsis of notifications of final regulatory action received since the last PIC Circular

PART B

NOTIFICATIONS OF FINAL REGULATORY ACTION THAT HAVE BEEN VERIFIED AS NOT CONTAINING ALL THE INFORMATION REQUIRED BY ANNEX I TO THE CONVENTION

Chemical name	CAS No.	Category	Country	Region	Annex III
Alachlor	15972-60-8	Pesticide	Costa Rica	Latin America and the Carribean	Yes
Aldicarb	116-06-03	Pesticide	Costa Rica	Latin America and the Carribean	Yes
Bromacil	314-40-9	Pesticide	Costa Rica	Latin America and the Carribean	No
Carbofuran	1563-66-22	Pesticide	Costa Rica	Latin America and the Carribean	Yes
Endosulfan	115-29-7	Pesticide	Costa Rica	Latin America and the Carribean	Yes
2,4,5-Trichlorophenol	95-95-4	Pesticide	Ecuador	Latin America and the Carribean	No
Alachlor	15972-60-8	Pesticide	Ecuador	Latin America and the Carribean	Yes
Aldicarb	116-06-03	Pesticide	Ecuador	Latin America and the Carribean	Yes
Aldrin	309-00-2	Pesticide	Ecuador	Latin America and the Carribean	Yes
Amitrole	61-82-5	Pesticide	Ecuador	Latin America and the Carribean	No
Benomyl	17804-35-2	Pesticide	Ecuador	Latin America and the Carribean	No
Binapacryl	485-31-4	Pesticide	Ecuador	Latin America and the Carribean	Yes
Toxaphene (Camphechlor)	8001-35-2	Pesticide	Ecuador	Latin America and the Carribean	Yes
Carbofuran	1563-66-22	Pesticide	Ecuador	Latin America and the Carribean	Yes
Carbon tetrachloride	56-23-5	Pesticide	Ecuador	Latin America and the Carribean	No
Chlordane	57-74-9	Pesticide	Ecuador	Latin America and the Carribean	Yes
Chlorobenzilate	510-15-6	Pesticide	Ecuador	Latin America and the Carribean	Yes
Chlordimeform	6164-98-3	Pesticide	Ecuador	Latin America and the Carribean	Yes
DBCP (1,2-dibromo-3-chloropropane)	96-12-8	Pesticide	Ecuador	Latin America and the Carribean	No
DDT	50-29-3	Pesticide	Ecuador	Latin America and the Carribean	Yes
Dechlorane/Mirex	2385-85-5	Pesticide	Ecuador	Latin America and the Carribean	No
Dieldrin	60-57-1	Pesticide	Ecuador	Latin America and the Carribean	Yes
Dinoseb and its salts and esters	88-85-7	Pesticide	Ecuador	Latin America and the Carribean	Yes
Dinitro-ortho-cresol (DNOC) and its salts	534-52-1	Pesticide	Ecuador	Latin America and the Carribean	Yes
EDB	106-93-4	Pesticide	Ecuador	Latin America and the Carribean	Yes
Endrin	72-20-8	Pesticide	Ecuador	Latin America and the Carribean	No
Endosulfan	115-29-7	Pesticide	Ecuador	Latin America and the Carribean	Yes
Fluoroacetamide	640-19-7	Pesticide	Ecuador	Latin America and the Carribean	Yes
Heptachlor	76-44-8	Pesticide	Ecuador	Latin America and the Carribean	Yes
Hexachlorobenzene	118-74-1	Pesticide	Ecuador	Latin America and the Carribean	Yes
Leptophos	21609-90-5	Pesticide	Ecuador	Latin America and the Carribean	No
Lindane (HCH)	58-89-9	Pesticide	Ecuador	Latin America and the Carribean	Yes
Methamidophos	10265-92-6	Pesticide	Ecuador	Latin America and the Carribean	Yes
Pentachlorophenol	87-86-5 (*)	Pesticide	Ecuador	Latin America and the Carribean	Yes
Phosphamidon	13171-21-6	Pesticide	Ecuador	Latin America and the Carribean	No
Thiram	137-26-8	Pesticide	Ecuador	Latin America and the Carribean	No
Trichlorfon	52-68-6	Pesticide	Ecuador	Latin America and the Carribean	Yes

PART C

NOTIFICATIONS OF FINAL REGULATORY ACTION STILL UNDER VERIFICATION

Chemical name	CAS No.	Category	Country	Region	Annex III
Alachlor	15972-60-8	Pesticide	Trinidad and Tobago	Latin America and the Carribean	Yes
Endosulfan	115-29-7	Pesticide	Trinidad and Tobago	Latin America and the Carribean	Yes
Mercury	7439-97-6	Industrial	Sweden	Europe	No
Polybrominated diphenyl ethers ($C_{12}H_{(10-n)}Br_{(n)}O$, $4 \leq n \leq 10$) (PBDE)	1163-19-5, 32534-81-9, 32536-52-0, 36483-60-0, 40088-47-9, 63936-56-1, 68928-80-3	Industrial	Canada	North America	No
Tetraethyl lead	78-00-2	Industrial	Lesotho	Africa	Yes
Tetramethyl lead	75-74-1	Industrial	Lesotho	Africa	Yes

APPENDIX II

PROPOSALS FOR INCLUSION OF SEVERELY HAZARDOUS PESTICIDE FORMULATIONS IN THE PIC PROCEDURE

PART A

SUMMARY OF EACH PROPOSAL FOR INCLUSION OF A SEVERELY HAZARDOUS PESTICIDE FORMULATION THAT HAS BEEN VERIFIED TO CONTAIN ALL INFORMATION REQUESTED BY PART 1 OF ANNEX IV TO THE CONVENTION

None.

PART B

PROPOSALS FOR INCLUSION OF SEVERELY HAZARDOUS PESTICIDE FORMULATIONS STILL UNDER VERIFICATION

None.

APPENDIX III

CHEMICALS SUBJECT TO THE PIC PROCEDURE

Chemical name	CAS No.	Category	Date of first dispatch of decision guidance document
2,4,5-T and its salts and esters	93-76-5[1]	Pesticide	Prior to adoption of Convention
Alachlor	15972-60-8	Pesticide	24 October 2011
Aldicarb	116-06-3	Pesticide	24 October 2011
Aldrin	309-00-2	Pesticide	Prior to adoption of Convention
Azinphos-methyl	86-50-0	Pesticide	10 August 2013
Binapacryl	485-31-4	Pesticide	1 February 2005
Captafol	2425-06-1	Pesticide	Prior to adoption of Convention
Carbofuran	1563-66-2	Pesticide	15 September 2017
Chlordane	57-74-9	Pesticide	Prior to adoption of Convention
Chlordimeform	6164-98-3	Pesticide	Prior to adoption of Convention
Chlorobenzilate	510-15-6	Pesticide	Prior to adoption of Convention
DDT	50-29-3	Pesticide	Prior to adoption of Convention
Dieldrin	60-57-1	Pesticide	Prior to adoption of Convention
Dinitro-*ortho*-cresol (DNOC) and its salts (such as ammonium salt, potassium salt and sodium salt)	534-52-1 2980-64-5 5787-96-2 2312-76-7	Pesticide	1 February 2005
Dinoseb and its salts and esters	88-85-7[1]	Pesticide	Prior to adoption of Convention
1,2-dibromoethane (EDB)	106-93-4	Pesticide	Prior to adoption of Convention
Endosulfan	115-29-7	Pesticide	24 October 2011
Ethylene dichloride	107-06-2	Pesticide	1 February 2005
Ethylene oxide	75-21-8	Pesticide	1 February 2005
Fluoroacetamide	640-19-7	Pesticide	Prior to adoption of Convention
HCH (mixed isomers)	608-73-1	Pesticide	Prior to adoption of Convention
Heptachlor	76-44-8	Pesticide	Prior to adoption of Convention
Hexachlorobenzene	118-74-1	Pesticide	Prior to adoption of Convention
Lindane	58-89-9	Pesticide	Prior to adoption of Convention
Mercury compounds, including inorganic mercury compounds, alkyl mercury compounds and alkyloxyalkyl and aryl mercury compounds		Pesticide	Prior to adoption of Convention
Methamidophos	10265-92-6	Pesticide	15 September 2015[2]
Monocrotophos	6923-22-4	Pesticide	1 February 2005
Parathion	56-38-2	Pesticide	1 February 2005
Pentachlorophenol and its salts and esters	87-86-5[1]	Pesticide	Prior to adoption of Convention
Toxaphene	8001-35-2	Pesticide	1 February 2005
All tributyltin compounds including: - Tributyltin oxide - Tributyltin fluoride - Tributyltin methacrylate - Tributyltin benzoate - Tributyltin chloride - Tributyltin linoleate - Tributyltin naphthenate	 56-35-9 1983-10-4 2155-70-6 4342-36-3 1461-22-9 24124-25-2 85409-17-2	Pesticide	1 February 2009[3]
Trichlorfon	52-68-6	Pesticide	15 September 2017

Chemical name	CAS No.	Category	Date of first dispatch of decision guidance document
Dustable powder formulations containing a combination of: - Benomyl at or above 7%, - Carbofuran at or above 10%, - Thiram at or above 15%	 17804-35-2 1563-66-2 137-26-8	Severely hazardous pesticide formulation	1 February 2005
Phosphamidon (soluble liquid formulations of the substance that exceed 1000 g active ingredient/L)	13171-21-6 (mixture, (E)&(Z) isomers) 23783-98-4 ((Z)-isomer) 297-99-4 ((E)-isomer)	Severely hazardous pesticide formulation	Prior to adoption of Convention
Methyl-parathion (emulsifiable concentrates (EC) at or above 19.5% active ingredient and dusts at or above 1.5% active ingredient)	298-00-0	Severely hazardous pesticide formulation	Prior to adoption of Convention
Asbestos: - Actinolite - Anthophyllite - Amosite - Crocidolite - Tremolite	 77536-66-4 77536-67-5 12172-73-5 12001-28-4 77536-68-6	Industrial	 1 February 2005 1 February 2005 1 February 2005 Prior to adoption of Convention 1 February 2005
Commercial octabromodiphenyl ether including: - Hexabromodiphenyl ether - Heptabromodiphenyl ether	 36483-60-0 68928-80-3	Industrial	10 August 2013
Commercial pentabromodiphenyl ether including: - Tetrabromodiphenyl ether - Pentabromodiphenyl ether	 40088-47-9 32534-81-9	Industrial	10 August 2013
Perfluorooctane sulfonic acid, perfluorooctane sulfonates, perfluorooctane sulfonamides and perfluorooctane sulfonyls including: - Perfluorooctane sulfonic acid - Potassium perfluorooctane sulfonate - Lithium perfluorooctane sulfonate - Ammonium perfluorooctane sulfonate - Diethanolammonium perfluorooctane sulfonate - Tetraethylammonium perfluorooctane sulfonate - Didecyldimethylammonium perfluorooctane sulfonate - N-Ethylperfluorooctane sulfonamide - N-Methylperfluorooctane sulfonamide - N-Ethyl-N-(2-hydroxyethyl)perfluorooctane sulfonamide - N-(2-Hydroxyethyl)-N-methylperfluorooctane sulfonamide - Perfluorooctane sulfonyl fluoride	 1763-23-1 2795-39-3 29457-72-5 29081-56-9 70225-14-8 56773-42-3 251099-16-8 4151-50-2 31506-32-8 1691-99-2 24448-09-7 307-35-7	Industrial	10 August 2013
Polybrominated biphenyls (PBB)	36355-01-8 (hexa-) 27858-07-7 (octa-) 13654-09-6 (deca-)	Industrial	Prior to adoption of Convention
Polychlorinated biphenyls (PCB)	1336-36-3	Industrial	Prior to adoption of Convention
Polychlorinated terphenyls (PCT)	61788-33-8	Industrial	Prior to adoption of Convention
Short-chain chlorinated paraffins	85535-84-8	Industrial	15 September 2017

Chemical name	CAS No.	Category	Date of first dispatch of decision guidance document
Tetraethyl lead	78-00-2	Industrial	1 February 2005
Tetramethyl lead	75-74-1	Industrial	1 February 2005
All tributyltin compounds including: - Tributyltin oxide - Tributyltin fluoride - Tributyltin methacrylate - Tributyltin benzoate - Tributyltin chloride - Tributyltin linoleate - Tributyltin naphthenate	 56-35-9 1983-10-4 2155-70-6 4342-36-3 1461-22-9 24124-25-2 85409-17-2	Industrial	15 September 2017[4]
Tris(2,3-dibromopropyl) phosphate	126-72-7	Industrial	Prior to adoption of Convention

Notes:

1. Only the CAS numbers of parent compounds are listed. For a list of other relevant CAS numbers, reference may be made to the relevant decision guidance document.

2. The date relates to the date for the communication of the decision guidance document for the chemical currently included in Annex III and adopted by decision RC-7/4, which amended Annex III to list methamidophos and deleted a previous entry in Annex III for "methamidophos (soluble liquid formulations of the substance that exceed 600 g active ingredient/L)".

3. See the related entry for all tributyltin compounds within the industrial category. Tributyltin compounds were listed within the pesticide category by decision RC-4/5 and the initial decision guidance document communicated to Parties related solely to the pesticide category. A revised decision guidance document was subsequently approved (see note 4).

4. This entry refers to the date for communication of the revised decision guidance document for tributyltin compounds, which relates to both the pesticide and industrial categories, which was approved by decision RC-8/5.

APPENDIX IV

LISTING OF ALL IMPORT RESPONSES RECEIVED FROM PARTIES AND CASES OF FAILURE TO SUBMIT RESPONSES

All import responses received from Parties and cases of failure to submit responses are available on the Convention website: http://www.pic.int/tabid/1370/language/en-US/Default.aspx.

The online database is presented with four tabs:

1. Import responses recently transmitted;
2. Import responses by Party;
3. Import responses by Chemical;
4. Cases of failure to submit responses.

The import responses received since the last PIC Circular (between 1 November 2017 and 30 April 2018) may be viewed under the first tab "Import responses recently transmitted". The overview of those import responses is available in this appendix.

All import responses, including latest and previously transmitted information, may be viewed under the second tab "Import responses by Party" or the third tab "Import responses by Chemical".

The cases of failure to submit responses are available under the fourth tab "Cases of failure to submit responses". It also includes the date on which the Secretariat first informed all Parties, through publication in the PIC Circular, of cases of failure to transmit a response.

OVERVIEW OF NEW IMPORT RESPONSES RECEIVED SINCE THE LAST PIC CIRCULAR

Pesticides

2,4,5-T and its salts and esters
Lesotho

Alachlor
Guyana
Jamaica
Lesotho

Aldicarb
Guyana
Jamaica
Lesotho

Aldrin
Lesotho

Azinphos-methyl
Guyana
Jamaica
Lesotho

Binapacryl
Lesotho

Captafol
Lesotho

Carbofuran
El Salvador
Jamaica
Mauritius
Morocco
Norway
Panama

Chlordane
Lesotho

Chlordimeform
Lesotho

Chlorobenzilate
Lesotho

DDT
Lesotho

Dieldrin
Lesotho

Dinitro-*ortho*-cresol (DNOC) and its salts (such as ammonium salt, potassium salt and sodium salt)
Lesotho

Dinoseb and its salts and esters
Lesotho

1,2-dibromoethane (EDB)
Lesotho

Endosulfan
Guyana
Jamaica
Lesotho

Ethylene dichloride
Lesotho

Ethylene oxide
Lesotho

Fluoroacetamide
Lesotho

HCH (mixed isomers)
Lesotho

Heptachlor
Lesotho

Hexachlorobenzene
Lesotho

Lindane
Lesotho

Mercury compounds, including inorganic mercury compounds, alkyl mercury compounds and alkyloxyalkyl and aryl mercury compounds
Lesotho

Methamidophos
Guyana
Jamaica
Lesotho
Panama

Monocrotophos
Lesotho

Parathion
Lesotho

Pentachlorophenol and its salts and esters
Lesotho

Toxaphene
Lesotho

All tributyltin compounds
Guyana
Jamaica
Lesotho
Mauritius[1]

Trichlorfon
El Salvador
Jamaica
Mauritius
Morocco
Norway
Panama

Severely hazardous pesticide formulations

Dustable powder formulations containing a combination of benomyl at or above 7%, carbofuran at or above 10% and thiram at or above 15%
Lesotho

Methyl-parathion (Emulsifiable concentrates (EC) at or above 19.5% active ingredient and dusts at or above 1.5% active ingredient)
Lesotho

Phosphamidon (Soluble liquid formulations of the substance that exceed 1000 g active ingredient/L)
Lesotho

Industrial Chemicals

Actinolite asbestos
Georgia
Lesotho
Ukraine

Amosite asbestos
Georgia
Lesotho
Ukraine

Anthophyllite asbestos
Georgia
Lesotho
Ukraine

Crocidolite asbestos
Georgia
Lesotho
Ukraine

Tremolite asbestos
Georgia
Lesotho
Ukraine

Commercial octabromodiphenyl ether (including hexabromodiphenyl ether and heptabromodiphenyl ether)
Canada[2]
Georgia
Lesotho
Ukraine
United Arab Emirates

Commercial pentabromodiphenyl ether (including tetrabromodiphenyl ether and pentabromodiphenyl ether)
Canada[2]
Georgia
Lesotho
Ukraine
United Arab Emirates

Perfluorooctane sulfonic acid, perfluorooctane sulfonates, perfluorooctane sulfonamides and perfluorooctane sulfonyls
Canada[2]
Georgia
Lesotho
Ukraine
United Arab Emirates

Polybrominated biphenyls (PBB)
Georgia
Lesotho
Ukraine

Polychlorinated biphenyls (PCB)
Georgia
Lesotho
Ukraine

Polychlorinated terphenyls (PCT)
Georgia
Lesotho
Ukraine

Short-chain chlorinated paraffins
Canada
Mauritius
Ukraine

Tetraethyl lead
Georgia
Lesotho
Ukraine

Tetramethyl lead
Georgia
Lesotho
Ukraine

All tributyltin compounds

Canada
Guyana
Mauritius
Ukraine

Tris(2,3-dibromopropyl)phosphate

Georgia
Lesotho
Ukraine

Notes:

1. A revision to the import response published in PIC Circular XLIV (December 2016).
2. A revision to the import response published in PIC Circular XXXIX (June 2014).

APENDIX V

NOTIFICATIONS OF FINAL REGULATORY ACTION FOR CHEMICALS NOT LISTED IN ANNEX III

This appendix consists of two parts:

Part A: Notifications of final regulatory action for chemicals not listed in Annex III and verified as containing all the information required by Annex I to the Convention

The table lists all the notifications received during the interim PIC procedure and the current PIC procedure (September 1998 to 30 April 2018) verified as containing all the information required by Annex I to the Convention.

Part B: Notifications of final regulatory action for chemicals not listed in Annex III and verified as <u>not</u> containing all the information required by Annex I to the Convention

The table lists all the notifications received during the interim PIC procedure and the current PIC procedure (September 1998 to 30 April 2018) verified as not containing all the information required by Annex I to the Convention.

The information is also available on the Convention website.[19]

[19] http://www.pic.int/tabid/1368/language/en-US/Default.aspx.

Notifications of final regulatory action for chemicals not listed in Annex III

PART A

NOTIFICATIONS OF FINAL REGULATORY ACTION FOR CHEMICALS NOT LISTED IN ANNEX III AND VERIFIED AS CONTAINING ALL THE INFORMATION REQUIRED BY ANNEX I TO THE CONVENTION

Chemical name	CAS No.	Category	Country	Region	PIC Circular
1,1,1,2-Tetrachloroethane	630-20-6	Industrial	Latvia	Europe	XX
1,1,1-Trichloroethane	71-55-6	Industrial	Latvia	Europe	XX
1,1,2,2-Tetrachloroethane	79-34-5	Industrial	Latvia	Europe	XX
1,1,2-Trichloroethane	79-00-5	Industrial	Latvia	Europe	XX
1,1-Dichloroethylene	75-35-4	Industrial	Latvia	Europe	XX
1,3-Dichloropropene	542-75-6	Pesticide	European Union	Europe	XXXVI
2- Nitrobenzaldehyde	552-89-6	Industrial	Latvia	Europe	XX
2,4,5-TP (Silvex; Fenoprop)	93-72-1	Pesticide	Thailand	Asia	XIV
2,4,6-Tri-*tert*-butylphenol	732-26-3	Industrial	Japan	Asia	XXI
2,4-D	94-75-7	Pesticide	Norway	Europe	XIII
2-Ethyl-1,3-hexanediol	94-96-2	Pesticide	Thailand	Asia	XX
2-Naphthylamine	91-59-8	Industrial	Japan	Asia	XXI
2-Naphthylamine	91-59-8	Industrial	Latvia	Europe	XX
2-Naphthylamine	91-59-8	Industrial	Republic of Korea	Asia	XX
2-Naphthylamine	91-59-8	Industrial	Switzerland	Europe	XXIII
2-Propen-1-ol, reaction products with pentafluoroiodoethane tetrafluoroethylene telomer, dehydroiodinated, reaction products with epichlorohydrin and triethylenetetramine	464178-90-3	Industrial	Canada	North America	XLI
2-Propenoic acid, 2-methyl-, 2-methylpropyl ester, polymer with butyl 2-propenoate and 2,5 furandione, gamma-omega-perfluoro-C_{8-14}-alkyl esters, *tert*-Bu benzenecarboperoxoate-initiated	459415-06-6	Industrial	Canada	North America	XLI
2-Propenoic acid, 2-methyl-, hexadecyl ester, polymers with 2-hydroxyethyl methacrylate, gamma-omega-perfluoro-C_{10-16}-alkyl acrylate and stearyl methacrylate	203743-03-7	Industrial	Canada	North America	XLI
4-Aminobiphenyl	92-67-1	Industrial	Japan	Asia	XXI
4-Aminobiphenyl	92-67-1	Industrial	Latvia	Europe	XX
4-Aminobiphenyl	92-67-1	Industrial	Republic of Korea	Asia	XX
4-Aminobiphenyl	92-67-1	Industrial	Switzerland	Europe	XXIII
4-Nitrobiphenyl	92-93-3	Industrial	Japan	Asia	XXI
4-Nitrobiphenyl	92-93-3	Industrial	Latvia	Europe	XX
4-Nitrobiphenyl	92-93-3	Industrial	Switzerland	Europe	XXIII

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Acephate	30560-19-1	Pesticide	European Union	Europe	XVIII
Acetochlor	34256-82-1	Pesticide	Burkina Faso	Africa	XLV
Acetochlor	34256-82-1	Pesticide	Cabo Verde	Africa	XLV
Acetochlor	34256-82-1	Pesticide	Chad	Africa	XLV
Acetochlor	34256-82-1	Pesticide	European Union	Europe	XLV
Acetochlor	34256-82-1	Pesticide	Gambia	Africa	XLV
Acetochlor	34256-82-1	Pesticide	Guinea-Bissau	Africa	XLV
Acetochlor	34256-82-1	Pesticide	Mali	Africa	XLV
Acetochlor	34256-82-1	Pesticide	Mauritania	Africa	XLV
Acetochlor	34256-82-1	Pesticide	Niger	Africa	XLV
Acetochlor	34256-82-1	Pesticide	Senegal	Africa	XLV
Acetochlor	34256-82-1	Pesticide	Togo	Africa	XLV
Allyl alcohol	107-18-6	Pesticide	Canada	North America	XXII
Alpha hexachlorocyclohexane	319-84-6	Pesticide	China	Asia	XLV
Alpha hexachlorocyclohexane	319-84-6	Industrial	Japan	Asia	XXXII
Alpha hexachlorocyclohexane	319-84-6	Pesticide	Japan	Asia	XXXIII
Aluminium phosphide	20859-73-8	Pesticide & Industrial	Japan	Asia	XX
Aminopyralid	150114-71-9	Pesticide	Norway	Europe	XXXIII
Amitraz	33089-61-1	Pesticide	European Union	Europe	XXI
Amitraz	33089-61-1	Pesticide	Iran (Islamic Republic of)	Asia	XXX
Amitraz	33089-61-1	Pesticide	Syrian Arab Republic	Near East	XXXII
Amitrole	61-82-5	Pesticide	Thailand	Asia	XX
Ammonium hydrogen sulfide	12124-99-1	Industrial	Latvia	Europe	XX
Ammonium polysulfide	9080-17-5	Industrial	Latvia	Europe	XX
Anthracene oil	90640-80-5	Industrial	Latvia	Europe	XX
Aramite	140-57-8	Pesticide	Thailand	Asia	XIV
Arsenic compounds	7440-38-2	Industrial	Latvia	Europe	XX
Arsenic pentoxide	1303-28-2	Industrial	Republic of Korea	Asia	XX
Atrazine	1912-24-9	Pesticide	Cabo Verde	Africa	XLI
Atrazine	1912-24-9	Pesticide	Chad	Africa	XLI
Atrazine	1912-24-9	Pesticide	European Union	Europe	XXI
Atrazine	1912-24-9	Pesticide	Gambia	Africa	XLI
Atrazine	1912-24-9	Pesticide	Mauritania	Africa	XLI
Atrazine	1912-24-9	Pesticide	Niger	Africa	XLI
Atrazine	1912-24-9	Pesticide	Senegal	Africa	XLI
Atrazine	1912-24-9	Pesticide	Togo	Africa	XLI
Azinphos-ethyl	2642-71-9	Pesticide	Iran (Islamic Republic of)	Asia	XLVI
Azinphos-ethyl	2642-71-9	Pesticide	Thailand	Asia	XIV
Benfuracarb	82560-54-1	Pesticide	European Union	Europe	XXXV
Bentazon	25057-89-0	Pesticide	Norway	Europe	XIII

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Benzenamine, N-phenyl-, reaction products with styrene and 2,4,4-trimethylpentene (BNST)	68921-45-9	Industrial	Canada	North America	XLII
Benzene	71-43-2	Industrial	Latvia	Europe	XX
Benzidine	92-87-5	Industrial	Canada	North America	XXI
Benzidine	92-87-5	Industrial	Canada	North America	XXVIII
Benzidine	92-87-5	Industrial	Jordan	Near East	XLII
Benzidine	92-87-5	Industrial	Latvia	Europe	XX
Benzidine	92-87-5	Industrial	Republic of Korea	Asia	XX
Benzidine and its salts	92-87-5	Industrial	India	Asia	XX
Benzidine and its salts	92-87-5	Industrial	Japan	Asia	XXI
Benzidine and its salts	92-87-5	Industrial	Jordan	Near East	XVIII
Benzidine and its salts	92-87-5	Industrial	Switzerland	Europe	XXIII
Beta hexachlorocyclohexane	319-85-7	Pesticide	China	Asia	XLV
Beta hexachlorocyclohexane	319-85-7	Industrial	Japan	Asia	XXXII
Beta hexachlorocyclohexane	319-85-7	Pesticide	Japan	Asia	XXXIII
Beta hexachlorocyclohexane	319-85-7	Pesticide	Thailand	Asia	XX
Bifenthrin	82657-04-3	Pesticide	Netherlands	Europe	XIV
Bis(2-chloroethyl)ether	111-44-4	Industrial	Republic of Korea	Asia	XX
Bis(chloromethyl)ether	542-88-1	Industrial	Canada	North America	XII
Bis(chloromethyl)ether	542-88-1	Industrial	Japan	Asia	XXI
Bis(chloromethyl)ether	542-88-1	Industrial	Republic of Korea	Asia	XX
Bitertanol	55179-31-2	Pesticide	Norway	Europe	XXXV
Bromobenzylbromotoluene (DBBT)	99688-47-8	Industrial	Latvia	Europe	XX
Bromobenzylbromotoluene (DBBT)	99688-47-8	Industrial	Switzerland	Europe	XXIII
Bromochlorodifluoromethane (Halon 1211)	353-59-3	Industrial	Canada	North America	XIII
Bromochloromethane	74-97-5	Industrial	Thailand	Asia	XXIV
Bromotrifluoromethane	75-63-8	Industrial	Canada	North America	XII
Bromoxynil octanoate	1689-99-2	Pesticide	Norway	Europe	XIV
Bromuconazole	116255-48-2	Pesticide	Norway	Europe	XIII
Butralin	33629-47-9	Pesticide	European Union	Europe	XXXIII
Cadmium	7440-43-9	Industrial	Latvia	Europe	XX
Cadusafos	95465-99-9	Pesticide	European Union	Europe	XXXVI
Calcium arsenate	7778-44-1	Pesticide	Thailand	Asia	XIV
Carbaryl	63-25-2	Pesticide	European Union	Europe	XXVI
Carbaryl	63-25-2	Pesticide	Jordan	Near East	XVIII
Carbaryl	63-25-2	Pesticide	Syrian Arab Republic	Near East	XXXII
Carbon tetrachloride	56-23-5	Pesticide & Industrial	Canada	North America	XII
Carbon tetrachloride	56-23-5	Industrial	Jordan	Near East	XLIV

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Carbon tetrachloride	56-23-5	Industrial	Latvia	Europe	XX
Carbon tetrachloride	56-23-5	Industrial	Republic of Korea	Asia	XX
Carbon tetrachloride	56-23-5	Pesticide & Industrial	Switzerland	Europe	XXI
Carbon tetrachloride	56-23-5	Pesticide	Thailand	Asia	XX
Carbosulfan	55285-14-8	Pesticide	Burkina Faso	Africa	XLI
Carbosulfan	55285-14-8	Pesticide	Cabo Verde	Africa	XLI
Carbosulfan	55285-14-8	Pesticide	Chad	Africa	XLI
Carbosulfan	55285-14-8	Pesticide	European Union	Europe	XXXV
Carbosulfan	55285-14-8	Pesticide	Gambia	Africa	XLI
Carbosulfan	55285-14-8	Pesticide	Mauritania	Africa	XLI
Carbosulfan	55285-14-8	Pesticide	Niger	Africa	XLI
Carbosulfan	55285-14-8	Pesticide	Senegal	Africa	XLI
Carbosulfan	55285-14-8	Pesticide	Togo	Africa	XLI
Chloral hydrate	302-17-0	Pesticide	Netherlands	Europe	XIV
Chlorates (including but not limited to Na, Mg, K chlorates)	7775-09-9, 10326-21-3, 3811-04-9 and others	Pesticide	European Union	Europe	XXXVIII
Chlordecone	143-50-0	Pesticide	China	Asia	XLV
Chlordecone	143-50-0	Industrial	Japan	Asia	XXXII
Chlordecone	143-50-0	Pesticide	Japan	Asia	XXXIII
Chlordecone	143-50-0	Pesticide	Peru	Latin America and the Caribbean	XLV
Chlordecone	143-50-0	Pesticide	Switzerland	Europe	XX
Chlordecone	143-50-0	Pesticide	Thailand	Asia	XIV
Chlorfenapyr	122453-73-0	Pesticide	European Union	Europe	XVIII
Chlorfenvinphos	470-90-6	Pesticide	Norway	Europe	XIII
Chlornitrofen	1836-77-7	Pesticide	Japan	Asia	XX
Chloroethylene	75-01-4	Industrial	Latvia	Europe	XX
Chlorofluorocarbon (totally halogenated)	75-69-4, 75-71-8, 76-13-1, 76-14-2, 76-15-3	Industrial	Canada	North America	XII
Chloroform	67-66-3	Industrial	Latvia	Europe	XX
Chloromethyl methyl ether	107-30-2	Industrial	Canada	North America	XXVIII
Chlorsulfuron	64902-72-3	Pesticide	Norway	Europe	XIII
Chlorthal-dimethyl	1861-32-1	Pesticide	European Union	Europe	XXXVII
Chlorthiophos	60238-56-4	Pesticide	Thailand	Asia	XIV
Chlozolinate	84332-86-5	Pesticide	European Union	Europe	XVI
Chrysotile asbestos	12001-29-5	Industrial	Australia	Southwest Pacific	XIX
Chrysotile asbestos	12001-29-5	Industrial	Bulgaria	Europe	XXII

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Chrysotile asbestos	12001-29-5	Industrial	Chile	Latin America and the Caribbean	XV
Chrysotile asbestos	12001-29-5	Industrial	European Union	Europe	XIII
Chrysotile asbestos	12001-29-5	Industrial	Japan	Asia	XXX
Chrysotile asbestos	12001-29-5	Industrial	Japan	Asia	XXV
Chrysotile asbestos	12001-29-5	Industrial	Latvia	Europe	XX
Chrysotile asbestos	12001-29-5	Industrial	South Africa	Africa	XXX
Chrysotile asbestos	12001-29-5	Industrial	Switzerland	Europe	XXI
Creosote	8001-58-9	Industrial	Latvia	Europe	XX
Creosote oil	61789-28-4	Industrial	Latvia	Europe	XX
Creosote oil, acenaphthene fraction	90640-84-9	Industrial	Latvia	Europe	XX
Creosote, wood	8021-39-4	Industrial	Latvia	Europe	XX
Cycloheximide	66-81-9	Pesticide	Thailand	Asia	XIV
Cyhexatin	13121-70-5	Pesticide	Brazil	Latin America and the Caribbean	XXXVI
Cyhexatin	13121-70-5	Pesticide	Canada	North America	XXII
Cyhexatin	13121-70-5	Pesticide	Japan	Asia	XX
DDD	72-54-8	Pesticide	Thailand	Asia	XX
Decabromodiphenyl ether	1163-19-5	Industrial	Norway	Europe	XXXIX
Demephion-*O*	682-80-4	Pesticide	Thailand	Asia	XIV
Demeton-methyl (isomeric mixture of demeton-*O*-methyl and demeton-*S*-methyl)	8022-00-2, 867-27-6, 919-86-8	Pesticide & Industrial	Japan	Asia	XX
Diazinon	333-41-5	Pesticide	European Union	Europe	XXXII
DBCP (1,2-dibromo-3-cloropropano)	96-12-8	Pesticide	Canada	North America	XXII
DBCP (1,2-dibromo-3-cloropropano)	96-12-8	Pesticide	Colombia	Latin America and the Caribbean	XLV
DBCP (1,2-dibromo-3-cloropropano)	96-12-8	Pesticide	Thailand	Asia	XIV
Dibromotetrafluoroethane	124-73-2	Industrial	Canada	North America	XIII
Dibutyltin hydrogen borate (DBB)	75113-37-0	Industrial	Latvia	Europe	XX
Dichlobenil	1194-65-6	Pesticide	European Union	Europe	XXXVI
Dichlobenil	1194-65-6	Pesticide	Norway	Europe	XII
Dichloro[(dichlorophenyl) methyl]methylbenzene	76253-60-6	Industrial	Latvia	Europe	XX
Dichloro[(dichlorophenyl) methyl]methylbenzene	76253-60-6	Industrial	Switzerland	Europe	XXIII
Dichlorobenzyltoluene	81161-70-8	Industrial	Switzerland	Europe	XXIII
Dichlorophen	97-23-4	Pesticide	Thailand	Asia	XIV
Dichlorvos	62-73-7	Pesticide	European Union	Europe	XXXIV
Dicloran	99-30-9	Pesticide	European Union	Europe	XXXVI

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Dicofol	115-32-2	Pesticide	European Union	Europe	XXXIII
Dicofol	115-32-2	Industrial	Japan	Asia	XXII
Dicofol	115-32-2	Industrial	Japan	Asia	XXXII
Dicofol	115-32-2	Pesticide	Japan	Asia	XXXIII
Dicofol	115-32-2	Pesticide	Netherlands	Europe	XXII
Dicofol	115-32-2	Pesticide	Romania	Europe	XX
Dicofol	115-32-2	Pesticide	Switzerland	Europe	XXIV
Dicrotophos	141-66-2	Pesticide	Jordan	Near East	XVIII
Dimefox	115-26-4	Pesticide	Jordan	Near East	XVIII
Dimefox	115-26-4	Pesticide	Thailand	Asia	XIV
Dimethenamid	87674-68-8	Pesticide	European Union	Europe	XXVII
Diniconazole-*M*	83657-18-5	Pesticide	European Union	Europe	XXXIV
Dinoterb	1420-07-1	Pesticide	European Union	Europe	XIV
Dinoterb	1420-07-1	Pesticide	Switzerland	Europe	XX
Dinoterb	1420-07-1	Pesticide	Thailand	Asia	XIV
Diphenylamine	122-39-4	Pesticide	European Union	Europe	XXXIX
Distillates (coal tar), naphthalene oils	84650-04-4	Industrial	Latvia	Europe	XX
Distillates (coal tar), upper	65996-91-0	Industrial	Latvia	Europe	XX
Disulfoton	298-04-4	Pesticide	Thailand	Asia	XIV
Endosulfan	115-29-7**, 959-98-8, 33213-65-9	Pesticide* & Industrial	Japan	Asia	XLIV
Endrin	72-20-8	Pesticide	Bulgaria	Europe	XXII
Endrin	72-20-8	Pesticide	Canada	North America	XXII
Endrin	72-20-8	Pesticide	Guyana	Latin America and the Caribbean	XXVI
Endrin	72-20-8	Pesticide & Industrial	Japan	Asia	XX
Endrin	72-20-8	Pesticide	Jordan	Near East	XVIII
Endrin	72-20-8	Pesticide	Peru	Latin America and the Caribbean	XIII
Endrin	72-20-8	Pesticide & Industrial	Republic of Korea	Asia	XX
Endrin	72-20-8	Pesticide	Romania	Europe	XX
Endrin	72-20-8	Pesticide	Switzerland	Europe	XX
Endrin	72-20-8	Pesticide	Uruguay	Latin America and the Caribbean	XXVIII
Epoxiconazole	106325-08-0	Pesticide	Norway	Europe	XIII
EPTC	759-94-4	Pesticide	Norway	Europe	XIII
Ethylbromoacetate	105-36-2	Industrial	Latvia	Europe	XX
Extract residues (coal), low temp. coal tar alk	122384-78-5	Industrial	Latvia	Europe	XX

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Fenarimol	60168-88-9	Pesticide	European Union	Europe	XXXVII
Fenitrothion	122-14-5	Pesticide	European Union	Europe	XXXII
Fensulfothion	115-90-2	Pesticide	Thailand	Asia	XIV
Fenthion	55-38-9	Pesticide	European Union	Europe	XXII
Fentin acetate	900-95-8	Pesticide	European Union	Europe	XVI
Fentin hydroxide	76-87-9	Pesticide	European Union	Europe	XVI
Fipronil	120068-37-3	Pesticide	Cabo Verde	Africa	XLI
Fipronil	120068-37-3	Pesticide	Chad	Africa	XLI
Fipronil	120068-37-3	Pesticide	Gambia	Africa	XLI
Fipronil	120068-37-3	Pesticide	Mauritania	Africa	XLI
Fipronil	120068-37-3	Pesticide	Niger	Africa	XLI
Fipronil	120068-37-3	Pesticide	Senegal	Africa	XLI
Fipronil	120068-37-3	Pesticide	Togo	Africa	XLI
Fluazifop-*P*-butyl	79241-46-6	Pesticide	Norway	Europe	XIII
Fluazinam	79622-59-6	Pesticide	Norway	Europe	XXXII
Flufenoxuron	101463-69-8	Pesticide	European Union	Europe	XXXIX
Fluopicolide	239110-15-7	Pesticide	Norway	Europe	XLIII
Fluoroacetic acid	144-49-0	Pesticide & Industrial	Japan	Asia	XX
Flurprimidol	56425-91-3	Pesticide	European Union	Europe	XXXVI
Folpet	133-07-3	Pesticide	Malaysia	Asia	XII
Fonofos	944-22-9	Pesticide	Thailand	Asia	XIV
Furfural	98-01-1	Pesticide	Canada	North America	XXII
Hexabromocyclododecane	25637-99-4, 3194-55-6, 134237-50-6, 134237-51-7, 134237-52-8	Industrial	Canada	North America	XLVII
Hexabromocyclododecane	25637-99-4, 3194-55-6, 134237-50-6, 134237-51-7, 134237-52-8	Industrial	China	Asia	XLV
Hexabromocyclododecane	25637-99-4	Industrial	Japan	Asia	XLIV
Hexabromocyclododecane	25637-99-4, 3194-55-6, 134237-50-6, 134237-51-7, 134237-52-8	Industrial	Norway	Europe	XLIV
Hexachlorobenzene	118-74-1	Industrial	Canada	North America	XXVIII
Hexachlorobenzene	118-74-1	Industrial	China	Asia	XLII
Hexachlorobenzene	118-74-1	Pesticide* & Industrial	Japan	Asia	XX
Hexachlorobenzene	118-74-1	Pesticide* & Industrial	Panama	Latin America and the Caribbean	XIX

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Hexachlorobutadiene	87-68-3	Industrial	Canada	North America	XXVIII
Hexachlorobutadiene	87-68-3	Industrial	Japan	Asia	XXII
Hexachloroethane	67-72-1	Industrial	Latvia	Europe	XX
Hexane, 1,6-diisocyanato-, homopolymer, reaction products with alpha-fluoro-omega-2-hydroxyethyl-poly(difluoromethylene), C_{16-20}-branched alcohols and 1-octadecanol	Not available	Industrial	Canada	North America	XLI
Hexazinone	51235-04-2	Pesticide	Burkina Faso	Africa	XLV
Hexazinone	51235-04-2	Pesticide	Cabo Verde	Africa	XLV
Hexazinone	51235-04-2	Pesticide	Chad	Africa	XLV
Hexazinone	51235-04-2	Pesticide	Gambia	Africa	XLV
Hexazinone	51235-04-2	Pesticide	Guinea-Bissau	Africa	XLV
Hexazinone	51235-04-2	Pesticide	Mali	Africa	XLV
Hexazinone	51235-04-2	Pesticide	Mauritania	Africa	XLV
Hexazinone	51235-04-2	Pesticide	Niger	Africa	XLV
Hexazinone	51235-04-2	Pesticide	Norway	Europe	XIII
Hexazinone	51235-04-2	Pesticide	Senegal	Africa	XLV
Hexazinone	51235-04-2	Pesticide	Togo	Africa	XLV
Imazalil	35554-44-0	Pesticide	Norway	Europe	XIII
Imazapyr	81334-34-1	Pesticide	Norway	Europe	XIV
Isodrin	465-73-6	Pesticide	Switzerland	Europe	XX
Isopyrazam	881685-58-1	Pesticide	Norway	Europe	XXXVII
Kelevan	4234-79-1	Pesticide	Switzerland	Europe	XX
Lead arsenate	7784-40-9	Pesticide	Japan	Asia	XX
Lead arsenate	7784-40-9	Pesticide	Peru	Latin America and the Caribbean	XXXV
Lead carbonate	598-63-0	Industrial	Jordan	Near East	XXXVI
Lead carbonate	598-63-0	Industrial	Latvia	Europe	XX
Lead hydroxycarbonate	1319-46-6	Industrial	Latvia	Europe	XX
Lead sulfate	15739-80-7	Industrial	Latvia	Europe	XX
Lead(II)sulfate	7446-14-2	Industrial	Latvia	Europe	XX
Linuron	330-55-2	Pesticide	Norway	Europe	XXVI
Malathion	121-75-5	Pesticide	Syrian Arab Republic	Near East	XXXII
Maleic hydrazide	123-33-1	Pesticide	Romania	Europe	XX
MCPA-thioethyl(phenothiol)	25319-90-8	Pesticide	Thailand	Asia	XIV
MCPB	94-81-5	Pesticide	Thailand	Asia	XIV
Mecoprop	7085-19-0	Pesticide	Thailand	Asia	XIV
Mephosfolan	950-10-7	Pesticide	Thailand	Asia	XIV
Mepiquat chloride	24307-26-4	Pesticide	Norway	Europe	XIII
Mercurous chloride (Calomel)	10112-91-1	Pesticide	Romania	Europe	XX
Mercury	7439-97-6	Industrial	Sweden	Europe	XXIII
Metaldehyde	108-62-3, 9002-91-9	Pesticide	Norway	Europe	XLVII
Methazole	20354-26-1	Pesticide	Australia	Southwest Pacific	XII

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Methyl bromide	74-83-9	Pesticide	Malawi	Africa	XXX
Methyl bromide	74-83-9	Pesticide	Netherlands	Europe	XV
Methyl bromide	74-83-9	Pesticide & Industrial	Republic of Korea	Asia	XX
Methyl bromide	74-83-9	Pesticide & Industrial	Switzerland	Europe	XXI
Methyl bromoacetate	96-32-2	Industrial	Latvia	Europe	XX
Methyl cellosolve	109-86-4	Industrial	Canada	North America	XXVIII
Methyl parathion	298-00-0	Pesticide	Brazil	Latin America and the Caribbean	XX
Methyl parathion	298-00-0	Pesticide	Bulgaria	Europe	XXII
Methyl parathion	298-00-0	Pesticide	Côte d'Ivoire	Africa	XX
Methyl parathion	298-00-0	Pesticide	Dominican Republic	Latin America and the Caribbean	XXV
Methyl parathion	298-00-0	Pesticide	El Salvador	Latin America and the Caribbean	XX
Methyl parathion	298-00-0	Pesticide	European Union	Europe	XVIII
Methyl parathion	298-00-0	Pesticide	Gambia	Africa	XIX
Methyl parathion	298-00-0	Pesticide	Guyana	Latin America and the Caribbean	XXVI
Methyl parathion	298-00-0	Pesticide & Industrial	Japan	Asia	XX
Methyl parathion	298-00-0	Pesticide	Nigeria	Africa	XXI
Methyl parathion	298-00-0	Pesticide	Panama	Latin America and the Caribbean	XIX
Methyl parathion	298-00-0	Pesticide	Panama	Latin America and the Caribbean	XLVII
Methyl parathion	298-00-0	Pesticide	Thailand	Asia	XXI
Methyl parathion	298-00-0	Pesticide	Uruguay	Latin America and the Caribbean	XXVIII
Mevinphos	26718-65-0	Pesticide	Jordan	Near East	XVIII
Mevinphos	26718-65-0	Pesticide	Thailand	Asia	XIV
MGK Repellent 11	126-15-8	Pesticide	Thailand	Asia	XX
Mirex	2385-85-5	Pesticide	Bulgaria	Europe	XXII
Mirex	2385-85-5	Industrial	Canada	North America	XII
Mirex	2385-85-5	Industrial	Canada	North America	XXVIII
Mirex	2385-85-5	Pesticide	Colombia	Latin America and the Caribbean	XLV
Mirex	2385-85-5	Pesticide	Cuba	Latin America and the Caribbean	XXVIII
Mirex	2385-85-5	Pesticide	Guyana	Latin America and the Caribbean	XXVI
Mirex	2385-85-5	Pesticide & Industrial	Japan	Asia	XXI
Mirex	2385-85-5	Pesticide & Industrial	Switzerland	Europe	XXIII

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Mirex	2385-85-5	Pesticide	Thailand	Asia	XX
Mirex	2385-85-5	Pesticide	Uruguay	Latin America and the Caribbean	XXVIII
Monomethyl dichlorodiphenyl methane	122808-61-1	Industrial	Latvia	Europe	XX
N,N'-Ditolyl-*p*-phenylenediamine; N,N'-Dixylyl-*p*-phenylenediamine; N-Tolyl-N'-xylyl-*p*-phenylenediamine	27417-40-9, 28726-30-9, 70290-05-0	Industrial	Japan	Asia	XXI
Naled	300-76-5	Pesticide	European Union	Europe	XXXIX
NCC ether	94097-88-8	Industrial	Canada	North America	XXVIII
Nickel	7440-02-0	Industrial	Latvia	Europe	XX
Nitrofen	1836-75-5	Pesticide	European Union	Europe	XVI
Nitrofen	1836-75-5	Pesticide	Romania	Europe	XX
N-Nitrosodimethylamine	62-75-9	Industrial	Canada	North America	XXVIII
Nonylphenol	11066-49-2, 25154-52-3, 84852-15-3, 90481-04-2	Pesticide & Industrial	European Union	Europe	XXIII
Nonylphenol ethoxylate	127087-87-0, 26027-38-3, 37205-87-1, 68412-54-4, 9016-45-9	Pesticide & Industrial	European Union	Europe	XXIII
Nonylphenols and nonylphenol ethoxylates	104-40-5, 11066-49-2, 25154-52-3, 84852-15-3, 90481-04-2, 127087-87-0, 26027-38-3, 37205-87-1, 68412-54-4, 9016-45-9	Pesticide & Industrial	Switzerland	Europe	XXXVI
Octylphenols and octylphenol ethoxylates	140-66-9	Pesticide & Industrial	Switzerland	Europe	XXXVI
Oxydemeton-methyl	301-12-2	Pesticide	European Union	Europe	XXX
Paraquat	4685-14-7	Pesticide	Sri Lanka	Asia	XXVIII
Paraquat	4685-14-7	Pesticide	Sweden	Europe	XXIII
Paraquat	4685-14-7	Pesticide	Togo	Africa	XLII
Paraquat dichloride	1910-42-5	Pesticide	Burkina Faso	Africa	XXXV
Paraquat dichloride	1910-42-5	Pesticide	Cabo Verde	Africa	XXXV
Paraquat dichloride	1910-42-5	Pesticide	Chad	Africa	XXXV
Paraquat dichloride	1910-42-5	Pesticide	Mali	Africa	XXXV
Paraquat dichloride	1910-42-5	Pesticide	Mauritania	Africa	XXXV
Paraquat dichloride	1910-42-5	Pesticide	Niger	Africa	XXXV
Paraquat dichloride	1910-42-5	Pesticide	Senegal	Africa	XXXV

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Paraquat dichloride	1910-42-5	Pesticide	Sweden	Europe	XXIII
Paraquat dichloride	1910-42-5	Pesticide	Uruguay	Latin America and the Caribbean	XXVIII
Paraquat dimethyl,bis	2074-50-2	Pesticide	Sweden	Europe	XXIII
Paris green	12002-03-8	Pesticide	Thailand	Asia	XIV
Pendimethalin	40487-42-1	Pesticide	Norway	Europe	XXV
Pentachlorobenzene	608-93-5	Industrial	Canada	North America	XXVIII
Pentachlorobenzene	608-93-5	Pesticide	China	Asia	XLV
Pentachlorobenzene	608-93-5	Industrial	Japan	Asia	XXXII
Pentachlorobenzene	608-93-5	Pesticide	Japan	Asia	XXXIII
Pentachloroethane	76-01-7	Industrial	Latvia	Europe	XX
Pentachlorophenol and its salts and esters	87-86-5**, 131-52-2, 27735-64-4, 3772-94-9	Pesticide* & Industrial	Japan	Asia	XLIV
Perfluorocarboxylic acids that have the molecular formula $C_nF_{2n+1}CO_2H$ in which $8 \leq n \leq 20$, their salts, and their precursors (LC-PFCAs)	375-95-1, 335-76-2, 2058-94-8, 307-55-1, 72629-94-8, 376-06-7, 141074-63-7, 67905-19-5, 57475-95-3, 16517-11-6, 133921-38-7, 68310-12-3 (list is not exhaustive)	Industrial	Canada	North America	XLVII
Perfluorooctane sulphonate (PFOS), its salts and perfluorooctanesulfonyl fluoride (PFOSF)	2795-39-3**, 70225-14-8**, 29081-56-9**, 29457-72-5**, 307-35-7**	Pesticide & Industrial*	China	Asia	XLV
Perfluorooctanoic acid (PFOA), its salts and PFOA related compounds	335-67-1, 45285-51-6 3825-26-1, 90480-56-1 335-95-5, 2395-00-8, 335-93-3, 335-66-0, 376-27-2, 3108-24-5 (list is not exhaustive)	Industrial	Canada	North America	XLVII

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Perfluorooctanoic acid (PFOA), its salts and PFOA related compounds	335-67-1, 3825-26-1, 335-95-5, 2395-00-8, 335-93-3, 335-66-0, 376-27-2, 3108-24-5	Industrial	Norway	Europe	XLI
Permethrin	52645-53-1	Pesticide	Syrian Arab Republic	Near East	XXXII
Phenol, 2-(2*H*-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)-	3846-71-7	Industrial	Japan	Asia	XXVII
Phenthoate	2597-03-7	Pesticide	Malaysia	Asia	XLIV
Phorate	298-02-2	Pesticide	Brazil	Latin America and the Caribbean	XLV
Phorate	298-02-2	Pesticide	Canada	North America	XXVIII
Phorate	298-02-2	Pesticide	Thailand	Asia	XIV
Phosalone	2310-17-0	Pesticide	European Union	Europe	XXVII
Phosphamidon	13171-21-6	Pesticide	Brazil	Latin America and the Caribbean	XX
Phosphamidon	13171-21-6	Pesticide	Côte d'Ivoire	Africa	XX
Phosphamidon	13171-21-6	Pesticide & Industrial	Japan	Asia	XX
Phosphamidon	13171-21-6	Pesticide	Panama	Latin America and the Caribbean	XIX
Phosphamidon	13171-21-6	Pesticide	Thailand	Asia	XIV
Polychlorinated naphthalenes	70776-03-3	Industrial	Canada	North America	XXXVIII
Polychlorinated naphthalenes	70776-03-3	Industrial	Japan	Asia	XXI
Polychlorinated naphthalenes	28699-88-9, 1321-65-9, 1335-88-2, 1321-64-8, 1335-87-1, 32241-08-0, 2234-13-1	Industrial	Japan	Asia	XLIV
Polychloroterpenes	8001-50-1	Pesticide	Thailand	Asia	XX
Procymidone	32809-16-8	Pesticide	European Union	Europe	XXXVII
Profenofos	41198-08-7	Pesticide	Malaysia	Asia	XLIV
Propachlor	1918-16-7	Pesticide	European Union	Europe	XXXIII
Propachlor	1918-16-7	Pesticide	Norway	Europe	XXVI
Propanil	709-98-8	Pesticide	European Union	Europe	XXXIX
Propargite	2312-35-8	Pesticide	European Union	Europe	XXXIX
Propisochlor	86763-47-5	Pesticide	European Union	Europe	XXXVI
Propylbromoacetate	35223-80-4	Industrial	Latvia	Europe	XX
Prothiofos	34643-46-4	Pesticide	Malaysia	Asia	XLIV

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Prothoate	2275-18-5	Pesticide	Thailand	Asia	XIV
Pymetrozine	123312-89-0	Pesticide	Norway	Europe	XXXIX
Pyrazophos	13457-18-6	Pesticide	European Union	Europe	XIII
Pyrinuron	53558-25-1	Pesticide	Thailand	Asia	XX
Quinalphos	13593-03-8	Pesticide	Malaysia	Asia	XLIV
Quintozene	82-68-8	Pesticide	European Union	Europe	XV
Quintozene	82-68-8	Pesticide	Romania	Europe	XX
Quintozene	82-68-8	Pesticide	Switzerland	Europe	XX
Schradan	152-16-9	Pesticide & Industrial	Japan	Asia	XX
Schradan	152-16-9	Pesticide	Thailand	Asia	XIV
Simazine	122-34-9	Pesticide	European Union	Europe	XXI
Simazine	122-34-9	Pesticide	Norway	Europe	XIII
Sodium arsenite	7784-46-5	Pesticide	Netherlands	Europe	XIV
Sodium fluoroacetate	62-74-8	Pesticide	Cuba	Latin America and the Caribbean	XXVIII
Sodium trichloroacetate	650-51-1	Pesticide	Netherlands	Europe	XIV
Sulfosulfurone	141776-32-1	Pesticide	Norway	Europe	XV
Sulfotep	3689-24-5	Pesticide	Thailand	Asia	XIV
Tar acids, coal, crude	65996-85-2	Industrial	Latvia	Europe	XX
Tecnazene	117-18-0	Pesticide	European Union	Europe	XV
Terbufos	13071-79-9	Pesticide	Canada	North America	XXVIII
Tetraethyl pyrophosphate (TEPP)	107-49-3	Pesticide & Industrial	Japan	Asia	XX
Tetrachlorobenzene	12408-10-5, 84713-12-2, 634-66-2, 634-90-2, 95-94-3	Industrial	Canada	North America	XXVIII
Thallium acetate	563-68-8	Industrial	Republic of Korea	Asia	XX
Thallium nitrate	10102-45-1	Industrial	Republic of Korea	Asia	XX
Thallium sulphate	7446-18-6	Industrial	Republic of Korea	Asia	XX
Thallium sulphate	7446-18-6	Pesticide	Thailand	Asia	XX
Thiabendazole	148-79-8	Pesticide	Norway	Europe	XIII
Thiodicarb	59669-26-0	Pesticide	European Union	Europe	XXVII
Triazophos	24017-47-8	Pesticide	Cabo Verde	Africa	XLI
Triazophos	24017-47-8	Pesticide	Chad	Africa	XLI
Triazophos	24017-47-8	Pesticide	Gambia	Africa	XLI
Triazophos	24017-47-8	Pesticide	Malaysia	Asia	XLIV
Triazophos	24017-47-8	Pesticide	Mauritania	Africa	XLI
Triazophos	24017-47-8	Pesticide	Niger	Africa	XLI
Triazophos	24017-47-8	Pesticide	Senegal	Africa	XLI
Triazophos	24017-47-8	Pesticide	Togo	Africa	XLI

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Tribufos	78-48-8	Pesticide	Australia	Southwest Pacific	XIII
Tributyl tetradecyl phosphonium chloride	81741-28-8	Industrial	Canada	North America	XIII
Trifluralin	1582-09-8	Pesticide	European Union	Europe	XXXVI
Tris-(1-aziridinyl)phosphine oxide	545-55-1	Industrial	Latvia	Europe	XX
Tris-(1-aziridinyl)phosphine oxide	545-55-1	Industrial	Switzerland	Europe	XXIII
Vinclozolin	50471-44-8	Pesticide	Jordan	Near East	XVIII
Vinclozolin	50471-44-8	Pesticide	Norway	Europe	XIII
Zineb	12122-67-7	Pesticide	Ecuador	Latin America and the Caribbean	XX

* The chemical is listed in Annex III under this category.
** The chemical is listed in Annex III under this CAS number.

Notifications of final regulatory action for chemicals not listed in Annex III

PART B

NOTIFICATIONS OF FINAL REGULATORY ACTION FOR CHEMICALS NOT LISTED IN ANNEX III AND VERIFIED AS NOT CONTAINING ALL THE INFORMATION REQUIRED BY ANNEX I TO THE CONVENTION

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Acrylonitrile	107-13-1	Pesticide	Saudi Arabia	Near East	XXVII
1,2-dichloropropane	78-87-5	Pesticide	Saudi Arabia	Near East	XXXII
1,4-dichlorobenzene	106-46-7	Pesticide	Israel	Europe	XXXV
1-Bromo-2-chloroethane	107-04-0	Pesticide	Saudi Arabia	Near East	XXXII
2-(2,4,5-trichlorephenoxy)ethyl 2,2dichloropropanoate	136-25-4	Pesticide	Saudi Arabia	Near East	XXVII
2,4,5-TP (Silvex; Fenoprop)	93-72-1	Pesticide	Saudi Arabia	Near East	XXXII
2,4,5-Trichlorophenol	95-95-4	Pesticide	Ecuador	Latin America and the Carribean	XLVII
Acephate	30560-19-1	Pesticide	Oman	Near East	XXXIX
Acrolein	107-02-8	Pesticide	Saudi Arabia	Near East	XXXII
Amitraz	33089-61-1	Pesticide	Oman	Near East	XXXIX
Amitrole	61-82-5	Pesticide	Ecuador	Latin America and the Carribean	XLVII
Amitrole	61-82-5	Pesticide	Oman	Near East	XXXIX
Amitrole	61-82-5	Pesticide	Saudi Arabia	Near East	XXVII
Atrazine	1912-24-9	Pesticide	Oman	Near East	XXXIX
Azinphos-ethyl	2642-71-9	Pesticide	Saudi Arabia	Near East	XXVII
Bendiocarb	22781-23-3	Pesticide	Saudi Arabia	Near East	XXVII
Benomyl	17804-35-2	Pesticide	Ecuador	Latin America and the Carribean	XLVII
Benomyl	17804-35-2	Pesticide	Oman	Near East	XXXIX
Benomyl	17804-35-2	Pesticide	Saudi Arabia	Near East	XXXVIII
Bifenthrin	82657-04-3	Pesticide	Oman	Near East	XXXIX
Bromacil	314-40-9	Pesticide	Costa Rica	Latin America and the Carribean	XLVII
Bromadiolone	28772-56-7	Pesticide	Oman	Near East	XXXIX
Bromadiolone	28772-56-7	Pesticide	Saudi Arabia	Near East	XXXVIII
Bromofos-ethyl	4824-78-6	Pesticide	Oman	Near East	XXXIX
Bromofos-ethyl	4824-78-6	Pesticide	Saudi Arabia	Near East	XXVII
Cadmium	7440-43-9	Pesticide	Thailand	Asia	XX
Cadusafos	95465-99-9	Pesticide	Oman	Near East	XXXIX
Calcium cyanide	592-01-8	Pesticide	Saudi Arabia	Near East	XXVII
Captan	133-06-2	Pesticide	Oman	Near East	
Captan	133-06-2	Pesticide	Saudi Arabia	Near East	XXVII
Carbaryl	63-25-2	Pesticide	El Salvador	Latin America and the Caribbean	XXVII
Carbaryl	63-25-2	Pesticide	Saudi Arabia	Near East	XXXVIII
Carbon tetrachloride	56-23-5	Pesticide	Ecuador	Latin America and the Carribean	XLVII
Chloranil	118-75-2	Pesticide	Mexico	Latin America and the Caribbean	XXVIII

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Chloranil	118-75-2	Pesticide	Saudi Arabia	Near East	XXXII
Chlordecone	143-50-0	Pesticide	Mexico	Latin America and the Caribbean	XXVIII
Chlordecone	143-50-0	Pesticide	Saudi Arabia	Near East	XXXII
Chlormephos	24934-91-6	Pesticide	Oman	Near East	XXXIX
Chlormephos	24934-91-6	Pesticide	Saudi Arabia	Near East	XXVII
Chloropicrin	76-06-2	Pesticide	Oman	Near East	XXXIX
Chloropicrin	76-06-2	Pesticide	Saudi Arabia	Near East	XXVII
Chlorothalonil	1897-45-6	Pesticide	Saudi Arabia	Near East	XXXVIII
Chlorpyrifos	2921-88-2	Pesticide	Saudi Arabia	Near East	XXXVIII
Chlorthiophos	60238-56-4	Pesticide	Saudi Arabia	Near East	XXVII
Chrysotile asbestos	12001-29-5	Industrial	El Salvador	Latin America and the Caribbean	XXVII
Copper arsenate hydroxide	16102-92-4	Pesticide	Thailand	Asia	XX
Cyanazine	21725-46-2	Pesticide	Oman	Near East	XXXIX
Cyanophos	2636-26-2	Pesticide	Mexico	Latin America and the Caribbean	XXVIII
Cycloheximide	66-81-9	Pesticide	Saudi Arabia	Near East	XXVII
Cyhexatin	13121-70-5	Pesticide	Saudi Arabia	Near East	XXXII
Daminozide	1596-84-5	Pesticide	Saudi Arabia	Near East	XXXII
DDD	72-54-8	Pesticide	Saudi Arabia	Near East	XXVII
Demeton-*S*-methyl	919-86-8	Pesticide	Oman	Near East	XXXIX
Demeton-*S*-methyl	919-86-8	Pesticide	Saudi Arabia	Near East	XXXVIII
Dialifos	10311-84-9	Pesticide	Mexico	Latin America and the Caribbean	XXVIII
DBCP (1,2-dibromo-3-chloropropane)	96-12-8	Pesticide	Ecuador	Latin America and the Carribean	XLVII
DBCP (1,2-dibromo-3-chloropropane)	96-12-8	Pesticide	Mexico	Latin America and the Caribbean	XXVIII
DBCP (1,2-dibromo-3-chloropropane)	96-12-8	Pesticide	Saudi Arabia	Near East	XXVII
Dichlorvos	62-73-7	Pesticide	Saudi Arabia	Near East	XXVII
Diclofop-methyl	51338-27-3	Pesticide	Saudi Arabia	Near East	XXXII
Dicofol	115-32-2	Pesticide	Oman	Near East	XXXIX
Dicofol	115-32-2	Pesticide	Saudi Arabia	Near East	XXXVIII
Dicrotophos	141-66-2	Pesticide	Oman	Near East	XXXIX
Dicrotophos	141-66-2	Pesticide	Saudi Arabia	Near East	XXVII
Diflubenzuron	35367-38-5	Pesticide	Oman	Near East	XXXIX
Dimefox	115-26-4	Pesticide	Oman	Near East	XXXIX
Dimefox	115-26-4	Pesticide	Saudi Arabia	Near East	XXVII
Dimethoate	60-51-5	Pesticide	Saudi Arabia	Near East	XXXVIII
Dimethylarsinic acid	75-60-5	Pesticide	Israel	Europe	XXXV
Dinitramine	29091-05-2	Pesticide	Mexico	Latin America and the Caribbean	XXVIII
Dinitramine	29091-05-2	Pesticide	Saudi Arabia	Near East	XXVII
Disulfoton	298-04-4	Pesticide	Oman	Near East	XXXIX
Disulfoton	298-04-4	Pesticide	Saudi Arabia	Near East	XXVII
Endrin	72-20-8	Pesticide	Ecuador	Latin America and the Carribean	XLVII

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Endrin	72-20-8	Pesticide	Mexico	Latin America and the Caribbean	XXVIII
Endrin	72-20-8	Pesticide	Nepal	Asia	XLII
Endrin	72-20-8	Pesticide	Saudi Arabia	Near East	XXVII
EPN	2104-64-5	Pesticide	Saudi Arabia	Near East	XXVII
Erbon	136-25-4	Pesticide	Mexico	Latin America and the Caribbean	XXVIII
Erbon	136-25-4	Pesticide	Saudi Arabia	Near East	XXXII
Ethephon	16672-87-0	Pesticide	Saudi Arabia	Near East	XXVII
Ethoprophos	13194-48-4	Pesticide	Oman	Near East	XXXIX
Ethoprophos	13194-48-4	Pesticide	Saudi Arabia	Near East	XXXVIII
Ethylan	72-56-0	Pesticide	Saudi Arabia	Near East	XXVII
Ethylmercury chloride	107-27-7	Pesticide	Armenia	Europe	XII
Fenamiphos	22224-92-6	Pesticide	Oman	Near East	XXXIX
Fenamiphos	22224-92-6	Pesticide	Saudi Arabia	Near East	XXVII
Fenthion	55-38-9	Pesticide	Oman	Near East	XXXIX
Fentin acetate	115-90-2	Pesticide	Saudi Arabia	Near East	XXVII
Fipronil	120068-37-3	Pesticide	Oman	Near East	XXXIX
Flucythrinate	70124-77-5	Pesticide	Oman	Near East	XXXIX
Fluorine	7782-41-4	Pesticide	Saudi Arabia	Near East	XXVII
Folpet	133-07-3	Pesticide	Saudi Arabia	Near East	XXVII
Fonofos	944-22-9	Pesticide	Oman	Near East	XXXIX
Fonofos	944-22-9	Pesticide	Saudi Arabia	Near East	XXVII
Formothion	2540-82-1	Pesticide	Mexico	Latin America and the Caribbean	XXVIII
Fosthietan	21548-32-3	Pesticide	Oman	Near East	XXXIX
Fosthietan	21548-32-3	Pesticide	Saudi Arabia	Near East	XXVII
Granosan M	2235-25-8	Pesticide	Armenia	Europe	XII
Hexaethyl tetra phosphate	757-58-4	Pesticide	Saudi Arabia	Near East	XXVII
Hydrogen cyanide	74-90-8	Pesticide	Saudi Arabia	Near East	XXVII
Lead arsenate	7784-40-9	Pesticide	Togo	Africa	XLII
Lead arsenate	7784-40-9	Pesticide	Thailand	Asia	XX
Leptophos	21609-90-5	Pesticide	Ecuador	Latin America and the Carribean	XLVII
Leptophos	21609-90-5	Pesticide	Saudi Arabia	Near East	XXVII
Linuron	330-55-2	Pesticide	Oman	Near East	XXXIX
Mancozeb	8018-01-7	Pesticide	Saudi Arabia	Near East	XXXVIII
Mephosfolan	950-10-7	Pesticide	Oman	Near East	XXXIX
Mephosfolan	950-10-7	Pesticide	Saudi Arabia	Near East	XXVII
Metham sodium	137-42-8	Pesticide	Saudi Arabia	Near East	XXVII
Methidathion	950-37-8	Pesticide	Oman	Near East	XXXIX
Methiocarb	2032-65-7	Pesticide	Saudi Arabia	Near East	XXXVIII
Methomyl	16752-77-5	Pesticide	Saudi Arabia	Near East	XXXVIII
Methoxychlor	72-43-5	Pesticide	Oman	Near East	XXXIX
Methoxychlor	72-43-5	Pesticide	Saudi Arabia	Near East	XXXVIII
Methyl parathion	298-00-0	Pesticide	Cameroon	Africa	XVIII
Mevinphos	7786-34-7	Pesticide	Oman	Near East	XXXIX
Mevinphos	7786-34-7	Pesticide	Saudi Arabia	Near East	XXVII

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Mirex	2385-85-5	Pesticide	El Salvador	Latin America and the Caribbean	XXVII
Mirex	2385-85-5	Pesticide	Ecuador	Latin America and the Carribean	XLVII
Mirex	2385-85-5	Pesticide	Mexico	Latin America and the Caribbean	XXVIII
Mirex	2385-85-5	Pesticide	Nepal	Asia	XLII
Mirex	2385-85-5	Pesticide	Peru	Latin America and the Caribbean	XXXVI
Mirex	2385-85-5	Pesticide	Saudi Arabia	Near East	XXVII
Monuron	150-68-5	Pesticide	Mexico	Latin America and the Caribbean	XXVIII
Nicotine	54-11-5	Pesticide	Oman	Near East	XXXIX
Nitrofen	1836-75-5	Pesticide	Mexico	Latin America and the Caribbean	XXVIII
Oxydemeton-methyl	301-12-2	Pesticide	Oman	Near East	XXXIX
Oxydemeton-methyl	301-12-2	Pesticide	Saudi Arabia	Near East	XXXVIII
Paraquat	4685-14-7	Pesticide	Saudi Arabia	Near East	XXVII
Paraquat dichloride	1910-42-5	Pesticide	Oman	Near East	XXXIX
Phenylmercury acetate	62-38-4	Pesticide	Mexico	Latin America and the Caribbean	XXVIII
Phorate	298-02-2	Pesticide	Saudi Arabia	Near East	XXVII
Phosfolan	947-02-4	Pesticide	Saudi Arabia	Near East	XXVII
Phosphamidon	13171-21-6	Pesticide	Ecuador	Latin America and the Carribean	XLVII
Phosphonic diamide, *p*-(5-amino-3-phenyl-1*H*-1,2,4-triazol-1-yl)-N,N,N',N'-tetramethyl-	1031-47-6	Pesticide	Mexico	Latin America and the Caribbean	XXVIII
Polychloroterpenes	8001-50-1	Pesticide	Saudi Arabia	Near East	XXVII
Propargite	2312-35-8	Pesticide	Saudi Arabia	Near East	XXXVIII
Propoxur	114-26-1	Pesticide	Saudi Arabia	Near East	XXXVIII
Prothoate	2275-18-5	Pesticide	Saudi Arabia	Near East	XXVII
Quintozene	82-68-8	Pesticide	Japan	Asia	XX
Quintozene	82-68-8	Pesticide	Saudi Arabia	Near East	XXXVIII
Quintozene	82-68-8	Pesticide	Oman	Near East	XXXIX
Safrole	94-59-7	Pesticide	Thailand	Asia	XX
Schradan	152-16-9	Pesticide	Mexico	Latin America and the Caribbean	XXVIII
Schradan	152-16-9	Pesticide	Saudi Arabia	Near East	XXVII
Simazine	122-34-9	Pesticide	Oman	Near East	XXXIX
Simazine	122-34-9	Pesticide	Saudi Arabia	Near East	XXXVIII
Sodium cyanide	143-33-9	Pesticide	Saudi Arabia	Near East	XXVII
Sodium dimethylarsinate	124-65-2	Pesticide	Israel	Europe	XXXV
Sodium fluoroacetate	62-74-8	Pesticide	Mexico	Latin America and the Caribbean	XXVIII
Sodium fluoroacetate	62-74-8	Pesticide	Saudi Arabia	Near East	XXVII
Tefluthrin	79538-32-2	Pesticide	Oman	Near East	XXXIX
TEPP	107-49-3	Pesticide	Saudi Arabia	Near East	XXVII
Terbufos	13071-79-9	Pesticide	Saudi Arabia	Near East	XXVII

Chemical name	CAS No.	Category	Country	Region	PIC Circular
Tetradifon	116-29-0	Pesticide	Saudi Arabia	Near East	XXXVIII
Thallium sulphate	7446-18-6	Pesticide	Saudi Arabia	Near East	XXVII
Thionazin	297-97-2	Pesticide	Saudi Arabia	Near East	XXVII
Thiram	137-26-8	Pesticide	Ecuador	Latin America and the Carribean	XLVII
Zineb	12122-67-7	Pesticide	Oman	Near East	XXXIX
Zineb	12122-67-7	Pesticide	Saudi Arabia	Near East	XXXVIII

APPENDIX VI

INFORMATION EXCHANGE ON CHEMICALS RECOMMENDED BY THE CHEMICAL REVIEW COMMITTEE FOR LISTING IN ANNEX III BUT FOR WHICH THE CONFERENCE OF THE PARTIES HAS YET TO TAKE A FINAL DECISION

In line with decisions[20] RC-3/3, RC-4/4, RC-6/8, RC-8/6 and RC-8/7 and paragraph 1 of Article 14, appendix VI has been prepared to facilitate information exchange on chemicals that have been recommended for listing in Annex III to the Convention by the Chemical Review Committee but for which the Conference of the Parties has yet to take a final decision.

This appendix consists of two parts:

Part A provides a reference to the information that has been submitted by Parties on their decisions concerning the management of these chemicals.

Part B is a list of decisions on the import of these chemicals submitted by Parties. These import decisions are circulated for information only and do not constitute part of the legally binding PIC procedure.

Further information on these chemicals is available on the Convention website,[21] including the notifications of final regulatory action and supporting documentation made available to the Chemical Review Committee and the draft decision guidance documents.

[20] http://www.pic.int/tabid/1728/language/en-US/Default.aspx.

[21] http://www.pic.int/tabid/1185/language/en-US/Default.aspx.

PART A

DECISIONS CONCERNING THE MANAGEMENT OF THE CHEMICALS RECOMMENDED BY THE CHEMICAL REVIEW COMMITTEE FOR LISTING IN ANNEX III BUT FOR WHICH THE CONFERENCE OF THE PARTIES HAS YET TO TAKE A FINAL DECISION

Chrysotile asbestos (CAS No: 12001-29-5)		
PARTY	**PIC CIRCULAR**	**LINK**
European Union	PIC Circular XXVII (27), June 2008	http://www.pic.int/tabid/1186/language/en-US/Default.aspx
Switzerland	PIC Circular XXVI (26), December 2007	http://www.pic.int/tabid/1186/language/en-US/Default.aspx

Liquid formulations (emulsifiable concentrate and soluble concentrate) containing paraquat dichloride at or above 276 g/L, corresponding to paraquat ion at or above 200 g/L (CAS No: 1910-42-5)		
PARTY	**PIC CIRCULAR**	**LINK**
Burkina Faso	PIC Circular XXXII (32), December 2010	http://www.pic.int/tabid/2396/language/en-US/Default.aspx

Carbosulfan (CAS No: 55285-14-8)		
PARTY	**PIC CIRCULAR**	**LINK**
European Union	PIC Circular XXXV (35), June 2012	http://www.pic.int/tabid/5393/language/en-US/Default.aspx
Burkina Faso, Cabo Verde, Chad, the Gambia, Mauritania, the Niger, Senegal and Togo	PIC Circular XLI (41), June 2015	http://www.pic.int/tabid/5393/language/en-US/Default.aspx

Fenthion (ultra low volume (ULV) formulations at or above 640 g active ingredient/L) (CAS No: 55-38-9)		
PARTY	**PIC CIRCULAR**	**LINK**
Chad	PIC Circular XXXVI (36), December 2012	http://www.pic.int/tabid/4339/language/en-US/Default.aspx

PART B

IMPORT DECISIONS ON THE CHEMICALS RECOMMENDED BY THE CHEMICAL REVIEW COMMITTEE FOR LISTING IN ANNEX III BUT FOR WHICH THE CONFERENCE OF THE PARTIES HAS YET TO TAKE A FINAL DECISION

Chrysotile asbestos (CAS No: 12001-29-5)		
PARTY	**IMPORT DECISION**	**DATE RECEIVED**
European Union	Consent to import only subject to specified conditions: The manufacture, placing on the market and use of chrysotile asbestos fibres and of articles containing these fibres added intentionally is prohibited. However, Member States may exempt the placing on the market and use of diaphragms containing chrysotile for existing electrolysis installations until they reach the end of their service life, or until suitable asbestos-free substitutes become available, whichever is the sooner. By 1 June 2011 Member States making use of this exemption shall provide a report to the Commission. The Commission shall ask the European Chemicals agency to prepare a dossier with a view to prohibit the placing on the market and use of diaphragms containing chrysotile. Administrative measure: The chemical was prohibited (with the one limited derogation referred to section 5.3 above) by Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the registration, evaluation, authorisation and restriction of chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (Official Journal of the European Communities (OJ) L396 of 30 December 2006, p. 1) as amended by Commission Regulation (EC) No 552/2009 of 22 June 2009 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as regards Annex XVII (OJ L 164 of 22 June 2009, p. 7).	6 October 2009

Liquid formulations (emulsifiable concentrate and soluble concentrate) containing paraquat dichloride at or above 276 g/L, corresponding to paraquat ion at or above 200 g/L		
PARTY	**IMPORT DECISION**	**DATE RECEIVED**
Qatar	No consent to import Administrative measure: (*) Ministry of Environment to perform all the tasks and actions to protect the environment in the country, According to the law No. 30 of 2002 Article (26). Prohibiting the import or handling or transport of hazadours materials, without authorization from the competent administrative authority, and article (29) or law No. 30 of 2002 Provides (spray or prohibited the use of pesticides or other chemical compounds for agriculture, public health or other purposes but after taking into account the requirements and checks and balances defined by the regulations, to ensure that human, animal or plant or watercourses or other components of the environment directly or indirectly on the spot or future adverse impacts of pesticides or chemical compounds (*)Law No. 24 of 2010 Promulgating the Law (Regulation) of Pesticides in the States of the Cooperation Council for the Arab State of the Gulf.	2 November 2015