POPRC-20/2: Chlorinated paraffins with carbon chain lengths in the range $C_{14–17}$ and chlorination levels at or exceeding 45 per cent chlorine by weight

The Persistent Organic Pollutants Review Committee,

Recalling decision POPRC-19/1, by which it recommended to the Conference of the Parties that it consider listing chlorinated paraffins with carbon chain lengths in the range $C_{14–17}$ and chlorination levels at or exceeding 45 per cent chlorine by weight, subject to further specifying the chemical identity, in Annex A to the Stockholm Convention on Persistent Organic Pollutants with specific exemptions as specified in paragraph 3 (a)–(c) of the decision,

Having assessed the information provided in accordance with paragraph 8 of decision POPRC-19/1,[1]

1. *Adopts* the addendum to the risk management evaluation for chlorinated paraffins with carbon chain lengths in the range $C_{14–17}$ and chlorination levels at or exceeding 45 per cent chlorine by weight;[2]

2. *Decides,* in accordance with paragraph 9 of Article 8 of the Convention, and noting paragraphs 1 and 2 above, to recommend to the Conference of the Parties that it consider listing chlorinated paraffins with carbon chain lengths in the range $C_{14–17}$ and chlorination levels at or exceeding 45 per cent chlorine by weight in Annex A to the Convention with specific exemptions for the following:

(a) For five years from the date of entry into force of the amendment in accordance with Article 4:

(i) Polyvinyl chloride (PVC), limited to the following uses:

a. Wires and cables in the construction sector;

b. Calendered films in the packaging field, excluding food packaging;

c. Rubber and plastic insulation materials;

d. Solid woven conveyor belts used in underground coal mines;

(ii) Adhesives and sealants, limited to the following uses:

a. One-component polyurethane foam used in sealing for doors and windows;

b. Waterproof coatings and anticorrosion coatings;

c. Aerospace and defence applications (e.g., polyurethane adhesives and tamper-proof putty);

(iii) Tape used for non-structural bonding in aerospace and defence products;

(b) For metalworking fluids in professional or industrial settings with collection systems, until 2036, limited to use as extreme temperature and pressure additives for metalworking fluids

[1] UNEP/POPS/POPRC.20/3.

[2] UNEP/POPS/POPRC.20/10/Add.2.

used in "heavy-duty" processes[3] for the production and repair of metals and metal alloy[4] components such as those used in the following applications and sectors:

(i) Aerospace;

(ii) Defence;

(iii) Automobiles;[5]

(iv) Electrical and electronic equipment (EEE) used in medical devices, *in vitro* diagnostics devices, and instruments for measurement, analysis, manufacturing, control, monitoring, testing and inspection;

(v) Production of machinery and tools used in agriculture and building/construction;

(vi) Energy and power generation;

(vii) Oil and gas extraction;

(viii) Chemical production and refining;

(ix) Nuclear power facilities;

(x) Low-carbon and renewable energy technologies;

(xi) Non-EEE medical devices;

(c) For use of polymers and rubbers[6] used in replacement parts, limited to use in the following applications (where it was originally used in the manufacture of those articles), until the end of service life of the articles or 2041, whichever comes earlier:

(i) Production of automobile parts;[7]

(ii) EEE used for medical devices, *in vitro* diagnostics devices, and instruments for measurement, analysis, manufacturing, control, monitoring, testing and inspection;

(iii) Aerospace and defence products;

3. *Recommends* that the Conference of the Parties consider inserting the following rows in part I of Annex A:

Chemical	*Activity*	*Specific exemption*
Chlorinated paraffins with carbon chain lengths in the range $C_{14–17}$ and chlorination levels at or exceeding 45 per cent chlorine by weight	Production	As allowed for the Parties listed in the Register
	Use	[to be inserted]

[3] Including the following processes: deep drawing, broaching and fine blanking, drawing with ironing, precision metalworking (cutting/punching/drilling), tapping, cold drawing, cold rolling (pilgering), stamping, forging and grinding.

[4] Including the following alloys, metals, and alloys of these metals: stainless steel, titanium, nickel, aluminium, copper and beryllium.

[5] Defined as motor vehicles covering all land-based vehicles, such as cars, motorcycles, agriculture and construction vehicles, and industrial trucks.

[6] Including PVC, ethylene propylene diene monomer (EPDM) rubber, chloroprene (CR), nitrile butadiene rubber (NBR) and chlorinated polyethylene (CPE).

[7] Including powertrain and under-hood applications such as powertrains, wiring and under-hood harnesses (engine wiring, etc.); hoses, caps, tubes, filters; fuel system applications such as fuel hoses, fuel tanks, caps and underbodies; suspension and interior applications such as trim components, acoustic material and seat belts; exterior vehicle applications such as foam pads, sealers, gaskets, fasteners and windows; pyrotechnical devices and applications affected by pyrotechnical devices such as airbag ignition cables, seat covers/fabrics (only if airbag-relevant) and airbags.

4. *Also recommends* that the Conference of the Parties consider inserting new note [--] in part I of Annex A as follows:

> "Chloroalkanes of the following molecular formula: $C_{14}H_{(30-y)}Cl_y$ where $y \geq 5$; $C_{15}H_{(32-y)}Cl_y$ where $y \geq 5$; $C_{16}H_{(34-y)}Cl_y$ where $y \geq 6$; $C_{17}H_{(36-y)}Cl_y$ where $y \geq 6$, were assessed and identified as persistent organic pollutants."

5. *Notes* that manufacturers of chlorinated paraffins can comply with the concentration limit referred to in paragraph 1 of the new part in Annex A referred to in paragraph 6 below, by ensuring that the concentration of $C_{14–17}$ n-alkanes present in the feedstock used to produce the corresponding chlorinated paraffin product is below the agreed limit;

6. *Recommends* that, if the Conference of the Parties agrees to list these substances, it consider adding a new part in Annex A, including the following:

"Part [--]

Chlorinated paraffins with carbon chain lengths in the range $C_{14–17}$ and chlorination levels at or exceeding 45 per cent chlorine by weight

1. Note (i) of Annex A does not apply when the summed concentration of the chloroalkanes ($C_{14}H_{(30-y)}Cl_y$ where $y \geq 5$; $C_{15}H_{(32-y)}Cl_y$ where $y \geq 5$; $C_{16}H_{(34-y)}Cl_y$ where $y \geq 6$; $C_{17}H_{(36-y)}Cl_y$ where $y \geq 6$) in substances or mixtures occur at concentrations greater than 3 per cent by weight, subject to review by the Conference of the Parties at its fourteenth ordinary meeting and every second ordinary meeting thereafter, with the aim to reduce this limit over time.

2. The concentration limit does not apply to production and use of chlorinated paraffins with carbon chain lengths in the range $C_{14–17}$ and chlorination level below 45 per cent by weight, for a period of 5 years from the date of entry into force of the amendment, subject to review by the Conference of the Parties at its fourteenth ordinary meeting and every second ordinary meeting thereafter, with the aim to determine whether this period needs to be extended. Parties shall notify the Secretariat of its intention to make use of this provision along with the information on intended uses.

3. The use of chlorinated paraffins with carbon chain lengths in the range $C_{14–17}$ and chlorination levels at or exceeding 45 per cent chlorine by weight shall be eliminated except for Parties that have notified the Secretariat of their intention to use them in accordance with Article 4.

4. Each Party shall require that manufacturers of chlorinated paraffins products within their jurisdiction disclose information on the concentration of $C_{14–17}$ chloroalkanes in these products as follows:

(a) $\Sigma C_{14}H_{(30-y)}Cl_y$ where $y \geq 5$;

(b) $\Sigma C_{15}H_{(32-y)}Cl_y$ where $y \geq 5$;

(c) $\Sigma C_{16}H_{(34-y)}Cl_y$ where $y \geq 6$;

(d) $\Sigma C_{17}H_{(36-y)}Cl_y$ where $y \geq 6$.

Alternatively, manufacturers can provide the concentration of $C_{14–17}$ alkanes present in the feedstock used to produce the corresponding chlorinated paraffin products to demonstrate that they are below the agreed concentration limit for the chlorinated paraffin congener groups identified as persistent organic pollutants.

For mixtures containing more than one chlorinated paraffin product, or containing chlorinated paraffin products and other substances, the information indicated above should be provided for all chlorinated paraffin products present in the mixture.

5. Specific exemptions for the use of chlorinated paraffins with carbon chain lengths in the range $C_{14–17}$ and chlorination levels at or exceeding 45 per cent chlorine by weight for [to be completed].

6. Each Party that has registered for a specific exemption pursuant to Article 4 for the use of chlorinated paraffins with carbon chain lengths in the range $C_{14–17}$ and chlorination levels at or exceeding 45 per cent chlorine by weight for metalworking fluids in professional or industrial settings with collection systems shall ensure worker protection.