

Quick Guide to IPEN Views on POPRC12

September 2016

Dicofol

Dicofol is persistent under acidic conditions that can be found in a number of lakes and watersheds (including in the Arctic). It is sufficiently persistent to be transported via riverine input to the open sea and to remote regions. Reported $\log K_{ow}$ values of up to 6.06 are supported by bioconcentration factors of up to 10,000 from experimental data. Estimated half-lives in air are 3.1-4.7 days confirming dicofol's potential for long-range transport. Dicofol is manufactured from technical DDT and is a potential source of on-going DDT contamination. Dicofol and/or its metabolites have been detected in milk, baby formula, eggs, fruits, vegetables, human breast milk, colostrum and blood. There is evidence of endocrine, immune, neurotoxic and reproductive effects and limited evidence of cancer. Dicofol disrupts reproductive function in birds.

> Dicofol meets the Annex E criteria and should move forward to Annex F evaluation.

PFOA

PFOA is so persistent that there are no measurable environmental half-lives. PFOA is found in water, snow, air, sediment and biota at remote locations including the Arctic. Assessment of bioaccumulation requires consideration of its properties. Since PFOA emulsifies the octanol and water surface interface, $\log K_{ow}$ values are either not measurable or suspect. In addition, like PFOS, PFOA accumulates through a protein binding bioaccumulation mechanism rather than fat partitioning. Data examining trophic biomagnification and monitoring of humans indicates that PFOA bioaccumulates. PFOA disrupts endocrine function in fish and causes a variety of tumors in rodent studies. In humans, PFOA is associated with high cholesterol, inflammatory diseases, ulcerative colitis, thyroid disease, immune effects, pregnancy-induced hypertension, endocrine disruption and impaired neuro- as well as reproductive development. PFOA is transferred to the fetus through the placenta and to infants via breast milk. PFOA-related compounds must be included in actions designed to eliminate PFOA releases since they can degrade to PFOA and contribute to environmental pollution. PFOA-related compounds include fluorotelomer alcohols, fluoropolymers and fluorotelomer-based polymers.

> PFOA meets Annex E screening criteria should move forward to Annex F evaluation.

Short-chained chlorinated paraffins (SCCPs)

At POPRC11, the Committee concluded that SCCPs are likely, as a result of long-range environmental transport, to lead to significant adverse human health and environmental effects, such that global action is warranted. SCCPs are primarily used as lubricants and coolants in metalworking and in PVC plastics as a flame retardant. Analyses of new products in countries where SCCPs are banned found the continued presence in such articles as children's toys and clothing, sports wares, childcare articles, kitchen utensils, electronics, and bathroom articles, some in high concentrations and above permitted levels. Technically feasible, cost-effective, alternatives are available for all known uses. Non-chemical alternatives for metalworking include bio-based alternatives such as non-chlorinated canola, sunflower and soybean oils. Alternative techniques include supercritical CO_2 , dry machining, and cryogenic machining. Non-chemical alternatives for SCCPs as flame retardants include inherently flame-resistant materials, flammability barriers and product re-design. The most effective control measure is listing SCCPs in Annex without exemptions and with an additional remark that would require Parties to restrict SCCPs in other CP mixtures, and to import and export in accordance with the provisions of paragraph 2 of the Convention. In order to prevent regrettable substitutions, MCCPs and LCCPs, as well as other chemical alternatives that exhibit POPs or other hazardous properties should not be considered as alternatives to SCCPs.

> SCCPs should be recommended for listing in Annex A with no specific exemptions along with an additional remark in note "i" of Annex A requiring limitation of SCCPs in other CP mixtures.

DecaBDE

The three groups of c-decaBDE exemptions proposed by the auto industry for legacy spare parts have no independent verification of need and include a very large number of individual parts. More seriously, the basis of the auto industry's exemption request is to reduce their costs of testing and does not represent barriers to actual substitution. The Stockholm Convention should not be misused for providing subsidies to

permit production and use of POPs. The auto industry should use retrofitting and generic spare parts that do not contain c-decaBDE, particularly for wires, hoses, cables, pipes, and fabric. If five-year specific exemptions are considered, then the auto industry should provide data demonstrating a need for flame retardancy, proof of inability to substitute, and a time-frame for removal from the market for specific parts in the following categories: powertrain, exhaust manifold bushings, under hood insulation, fuel tank, and fuel tank under body. No information has been presented to the Committee to justify widening c-decaBDE production and use exemptions to include military vehicles and aircraft, and these proposals should be denied. Boeing is a major civilian and military aircraft manufacturer and has signaled a phase-out of c-decaBDE by 2018 indicating that an exemption for aircraft is not needed. If the POPRC recommends any exemptions for c-decaBDE, it should also recommend labeling of new products that contain c-decaBDE so that Parties can identify c-decaBDE -containing wastes to fulfill requirements under Article 6. This would be similar to what was agreed upon when listing HBCD (SC-6/13).

> DecaBDE should be recommended for listing in Annex A with no specific exemptions.

Hexachlorobutadiene (HCBD)

HCBD is unintentionally formed and released from industrial processes including the production of certain chlorinated hydrocarbons, production of magnesium, and incineration. A variety of techniques can be utilized to minimize and eliminate these releases including alternative production processes, improved process control, emission control measures, or by substitution of the relevant chlorinated chemicals. Application of BAT/BEP techniques obligated by an Annex C listing would help reduce and eliminate HCBD releases.

> HCBD should be recommended for listing in Annex C.

PFOS alternatives

The Guidance on PFOS Alternatives should be accompanied by a clear recommendation for full release of health and safety information on alternatives so that Parties can prevent costly regrettable substitution. Alternatives with POP characteristics should be clearly identified in the Guidance. In addition, it would be useful to include the POPRC recommendations on PFOS risk reduction from decision POPRC-6/2. The section on products in waste streams would benefit from restoring the original text on wastes since the Stockholm Convention has different goals and objectives than the Basel Convention and a brief section on wastes is entirely appropriate and helpful in this document. The Guidance should be a living document and updated as information becomes available.

> The PFOS guidance should be made available to parties and observers and submitted to COP8.

Evaluation of PBDEs

The draft report provides very important information for Parties. Restrictions or bans are in place in countries where largest amounts of articles containing BDEs have been used. However, the largest challenges with PBDE elimination involve wastes and recycling, particularly in developing and transition countries. In POPRC-6/2, the Committee recommended Parties to generate and collect information on releases of polybrominated dibenzodioxins and polybrominated dibenzofurans (PBDD/PBDF) in connection with PBDEs elimination. This information, if available, would be useful to add to the secretariat report. The same decision also recommended assessment of PBDEs exposure during storage, sorting, treatment, recycling, recovery, or disposal and this information would be useful to add to the secretariat report if available.

> The Draft report for the evaluation and review of brominated diphenyl ethers provides very useful information to Parties. Some updating with additional information on PBDD/PBDF releases and exposures during storage, sorting, treatment, recycling, recovery, or disposal will provide a robust basis for decision-making on the issues the report raises.

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