

Background Information on short-chain chlorinated paraffins (SCCPs)

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October 2012

The chemical

Short-chain chlorinated paraffins (SCCPs) are industrial chemicals used as metalworking lubricants, in paints, adhesives and sealants, in plastics and rubber, flame retardants and in fracking fluids. There are concerns for worker exposures in these uses. They are found in air, sediment, water, wastewater, fish and marine mammals, and in remote areas such as the Arctic. China is a major global producer and in less than 20 years, chlorinated paraffins production in China has increased by 30-fold to over 600,000 tons in 2007. If China continues to increase production at the current rate, the amount will soon exceed the entire historic worldwide usage of PCBs.

Concerns about SCCPs

SCCPs are persistent organic pollutants (POPs) – chemicals that build up in the food chain, travel long distances, and harm human health and the environment. Information on SCCPs includes:

- Persistent in sediment and air
- Bioaccumulates in fish, beluga whales and ringed seals; food for Arctic peoples
- Found in Arctic lakes and animals and in the breast milk of Arctic Indigenous women; measured in walrus, ringed seal and beluga at concentrations similar to PCBs, DDT and toxaphene
- Dietary exposure to SCCPs in Beijing, China has increased by ~two orders of magnitude in sixteen years
- Very toxic to aquatic organisms that are important in ecosystems; in the same range as listed POPs such as lindane and chlordane
- Commercial preparations of chlorinated paraffins can be contaminated with PCBs

UN evaluation of SCCPs

The European Union nominated SCCPs for listing in the Stockholm Convention in 2006. That same year, the Stockholm Convention expert committee (POP Review Committee or POPRC) decided that SCCPs met the screening criteria for POPs. The substance then passed to a more detailed evaluation of its POP properties (outlined in Annex E of the Stockholm Convention). Since then, the POPRC has not been able to decide what to do about SCCPs. This surprised some Members and Observers to the Committee since the document analyzing POP properties of SCCPs does not signal any disagreement among Committee Members regarding persistence, bioaccumulation, long-range transport, and adverse effects.

In 2012, the POPRC discussed SCCPs at a face to face meeting in Geneva. Three possibilities for a decision confronted Members: 1) Pass the substance to the next stage of evaluation which examines alternatives and risk management measures; 2) set the proposal aside, concluding that the substance does not warrant global action, despite being a POP; or 3) delay decision and take up the matter at a future POPRC meeting. To facilitate a decision, the Committee Chair invited proponents of options 1 and 2 to develop and present short papers justifying their position. China and Japan prepared a short paper outlining reasons to set the proposal aside. Canada, France, and Netherlands prepared a comprehensive paper outlining reasons to move forward to the next step of evaluation. On 19 October 2012, after discussion of the papers, the POPRC decided to delay decision on SCCPs for three years to wait for more data. The Committee took this decision despite clear evidence that SCCPs, as a result of their long-range transport, will likely lead to significant harm to health and the environment on a global scale. In addition, the Stockholm Convention instructs the POPRC what to do in cases of scientific uncertainty stating that, “Lack of full scientific certainty shall not prevent the proposal from proceeding.” The POPRC decision

allows continued global production and use of a toxic chemical that builds up in the food chain and travels long distances for at least five more years.

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