



Via E-mail
Dr. Rolph Payet, Executive Secretary
Ms. Kei Woodall
Secretariat of the Stockholm Convention
Att: POPs Review Committee
United Nations Environment Programme
11-13 chemin des Anémones
CH-1219, Châtelaine
Geneva, Switzerland

10 February 2018

Re: Submission of information on alternatives for PFOS, its salts and PFOSF in imaging products manufactured by members of I&P Europe Imaging & Printing Association

Dear Dr. Payet:

On behalf of I&P Europe Imaging & Printing Association we are pleased to respond to a request for information on alternatives for perfluorooctane sulfonic acid (PFOS).

Introductory statement

The request for information was received by email from the Secretariat of the Stockholm Convention on January 22, 2018.

In said email it is explained that the POPs Review Committee of the Stockholm Convention (POPRC) is mandated by the Conference of the Parties to the Stockholm Convention (COP) to assist it, among others, in the evaluation of the continued need for specific exemptions and acceptable purposes for the use and production of PFOS, its salts and PFOSF listed in Annex B to the Convention and that this evaluation takes place every four years, the next one being scheduled at COP-9 in May 2019.

It is further explained that the POPRC, as part of the evaluation process, is currently undertaking an assessment of alternatives to PFOS in accordance with the terms of reference adopted at its last meeting in October 2017.

Hence, the Committee invited Parties and observers to submit information on alternatives to PFOS by 15 February 2018, and provided a dedicated submission form.

In addition the POPRC requested the Secretariat to reach out to industry and private sectors individually to collect further information that would assist the Committee in preparing the assessment of alternatives to PFOS, its salts and PFOSF. Furthermore, relevant industry associations/organizations are requested to reach out to their member companies to provide input to the Secretariat directly.

In reply to the mail of the Secretariat of January 22, 2018 we are pleased to confirm that as Director of I&P Europe and as Chairman of a dedicated Issue Group on PFOS and PFOA, we

were able to reach out to the member companies of I&P Europe Imaging & Printing Association and therefore herewith provide a response on behalf of I&P Europe based on newly updated feedback from member companies.

Response

Despite the fact that PFOS, its salts and PFOSF are listed in Annex B to the Convention with photo imaging specified as an acceptable purpose, member companies of I&P Europe Imaging & Printing Association have pursued further elimination of PFOS where possible, thereby demonstrating their commitment to act as a responsible industry.

Results of a recent internal inquiry of I&P Europe, conducted in November and December of 2017, indicate that PFOS is forecasted to be completely phased out in 2018 or 2019 at the latest – i.e. that as of then PFOS is foreseen to be no longer used by its member companies.

The forecasted complete elimination of PFOS in photo imaging products manufactured by member companies of I&P Europe will predominantly be a result of the combined effects of a continued technology shift towards digital techniques replacing conventional photographic coatings and a continued search for alternatives in the few remaining conventional photographic materials that still required PFOS.

Substances to be used in photographic coatings require properties inherent to the manufacture of imaging materials, e.g. lack photoactivity and thus do not interfere with the imaging process, do not interfere with a number of other intrinsic properties of conventional photographic coating solutions such as colloidal stability. As a consequence, some known possible alternatives for PFOS that have been identified in other areas – such as silicone products and siloxane compounds – are hence in practice not usable as alternatives in the manufacture of conventional photographic products.

The search towards alternatives for perfluorinated C8 substances or fluor telomer based C8 substances typically involved a “preferred replacement hierarchy” favouring non-fluorinated hydrocarbon alternatives, followed by non-perfluorinated substances, further followed by per-fluorinated substances with short chain lengths (C3 or C4).

PFOS (and PFOA) substances are “unique” in that they combine a number of properties required in state of the art photographic coatings into one molecule. Sustained research resulted for some remaining applications in finding combinations of two or more hydrocarbon substances demonstrating a super-additive effect that resulted in performance characteristics comparable to PFOS (or PFOA).

It should be noted that these findings resulted from sustained elaborate and often product specific research the results of which are clearly in the domain of confidential business information.

Also specific information regarding substitution products for PFOS outside the preferred category of non-fluorinated hydrocarbon alternatives is considered to be confidential and is not shared between member companies of I&P Europe.

Summary and conclusion



Continued commitment of member companies of I&P Europe Imaging & Printing Association resulted in a forecasted complete elimination of PFOS by 2018 or 2019 at the latest in photo imaging products manufactured by member companies of I&P Europe.

This achievement will predominantly be a result of the combined effects of a continued technology shift towards digital techniques and a sustained search for alternatives in the few remaining conventional photographic materials that still required PFOS.

Research for alternatives typically involved a preferred replacement strategy favouring non-fluorinated hydrocarbon alternatives.

However concrete detailed information on alternatives for PFOS identified and used in imaging products cannot be provided because it is considered confidential business information.

Sincerely,

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