



June 14, 2006

Via E-mail and Express Mail

Secretariat of the Stockholm Convention

Attn: Mr. John Buccini and Members of the Ad Hoc Working Group of PFOS of the POPs Review Committee

United Nations Environment Programme

11-13 chemin des Anemones

CH-1219, Chatelaine, Geneva

Switzerland

Re: Comments on PFOS Working Draft Risk Profile

Dear Mr. Buccini:

On behalf of the Semiconductor Industry Association (“SIA”), the European Semiconductor Industry Association (“ESIA”), and Semiconductor Equipment and Materials International (“SEMI”), we write to provide comments on the May 2006 “Working Draft Risk Profile” on Perfluorooctane Sulphonate (“PFOS”) that was prepared by Sweden for the ad hoc working group on PFOS under the POP Review Committee (“POPRC”) of the Stockholm Convention. We are grateful for the continuing opportunity to share our views as a stakeholder in the Convention process given the critical role that PFOS plays in semiconductor manufacturing. (Our letter to you of 26 January 2006 provides more information about that process.)

We appreciate the effort that the Swedish Chemicals Inspectorate has devoted to the development of the draft risk profile. We offer the following general observations on the paper:

- First, the paper omits some key reference sources. For example, the paper does not appear to take account of the 2004 report by the Scientific Committee on Health and Environmental Risks (SCHER), titled “Opinion on ‘RPA’s report ‘Perfluorooctane Sulphonates: Risk reduction strategy and analysis of advantages and drawbacks.’” Because this report provides a comprehensive critique of the U.K. risk reduction strategy, upon which the draft risk profile heavily relies, we suggest that the SCHER report’s analysis should be reflected in the next version of the risk profile.
- We also wish to highlight one omission in the technical description of antireflective coatings found on page ten of the Working Draft Risk Profile. The text should reflect that the refractive index of the ARC must be aligned to the refractive index of the

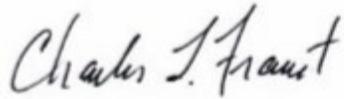
resist during photolithography. Any change to the chemical application in a resist cannot be achieved in isolation; it must be carefully considered in conjunction with viable alternative chemicals in ARCs that could precisely align with the substitute chemical in the resist. This is a complicated, symbiotic relationship, further highlighting the criticality of PFOS during photolithography across different applications.

- We remain concerned about what appears to be a proposal to list a group of PFOS-related chemicals as precursors. There continues to be ambiguity about the precise scope of the precursor chemicals being proposed and reviewed in this process. Furthermore, there continues to be a lack of data about these specific precursors. We understand that the issue of how to treat precursors raises general policy questions that the POPRC must address. Our immediate concerns relate to the difficulty in understanding (a) precisely which chemicals are subject to the ongoing review, and (b) how those chemicals fit within the Convention's criteria and procedures for reviewing candidate chemicals for inclusion.
- Finally, we are deeply concerned about the last sentence of the draft risk profile, which concludes that "[d]ue to the harmful POP properties and risks related to its possible continuing production and use, global action is warranted to eliminate the pollution caused by PFOS." Not only does this statement adopt a conclusion that we believe is unjustified given the low risks, the low exposure and the extremely small releases associated with certain critical semiconductor PFOS uses, but the statement also extends beyond the appropriate bounds of the risk profile drafting stage and strays deeply into the risk management stage under the Convention. As the Committee knows, the risk management stage under the Convention has not yet commenced. We therefore suggest that the statement be removed before the risk profile is finalized and formally transmitted to the POPRC.

Apart from these comments on the risk profile, we wish to draw attention to the May 11, 2006 announcement by the World Semiconductor Council, together with SEMI, of a major new agreement regarding the use of PFOS-based chemicals in semiconductor manufacturing. (The World Semiconductor Council comprises the trade associations representing the microchip industries of most of the world's leading semiconductor-producing countries, including trade associations in Asia.) Under the agreement, members have committed to end non-critical uses of PFOS by specific dates, will work to identify substitutes for PFOS in critical uses for which no other materials are presently available, will destroy solvent wastes from critical uses, and will take other steps to mitigate the potential environmental impacts of PFOS use in critical applications. These additional steps include the collection of PFOS use data within the industry as a whole for a mass balance model and the updating of that information on a biannual basis. The industry has also expressed its intention to make aggregated industry information available periodically with respect to the elements addressed in the global commitment. We anticipate that useful data will be collected going forward as a result of the global agreement. We look forward to sharing it with you as it becomes available, recognizing that it will take time for collection and processing.

Thank you for your help in circulating this letter to the members of the ad hoc working group of the POPRC. We look forward to participating as observers in the POPRC's ongoing review of PFOS.

Sincerely,



Chuck Fraust, PhD, PE, CIH
Director, ESH
Semiconductor Industry Association
181 Metro Drive, Suite 450
San Jose, CA 95110
p: 408.573.6609 - f: 408.436.6646
www.sia-online.org



Shane Harte
ESIA ESH Policy Advisor
"Diamant Building"
Boulevard A. Reyers, 80
B-1030 Brussels
Belgium
Tel: +32 2 706 86 00
Fax: 032 2 706 86 05
Email: sharte@eeca.be



Aimee Bordeaux
Senior Director, Environmental, Health and Safety Division
SEMI Global Headquarters
3081 Zanker Road
San Jose, CA 95134 USA
Tel: 1.408.943.6900
Fax: 1.408.428.9600