Semiconductor Industry Statement to the
UN Stockholm Convention POP-Review Committee on Phase-Out of PFOS

Semiconductor Industry Association (SIA) in China
SIA in Chinese Taipei
SIA in Europe
SIA in Japan
SIA in Korea
SIA in the United States

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The associations of the global semiconductor industry appreciate the outreach from the Secretariat on behalf of the POPs Review Committee (POP-RC) of the Stockholm Convention for information on the continued need for specific exemptions and acceptable purposes for the use and production of perfluorooctane sulfonic acid (PFOS), its salts and perfluorooctane sulfonyl floride (PFOSF) as listed in Annex B to the Convention.

The associations are pleased to report that the semiconductor industry globally has successfully completed the phase-out of PFOS, and therefore the industry no longer have a need for use exemptions in our industry. A global industry entity, the World Semiconductor Council (WSC), announced last year that the industry completed the phase-out of PFOS (see pp. 6-7, and Annex 1 on pp. 24-26). The industry's ability to eliminate the use of PFOS was the result of a concerted effort by semiconductor companies over many years and required a significant investment of resources and technical expertise to identify, qualify, and integrate alternative chemicals that met our demanding performance requirements. We appreciate the POP-RC for working with the industry to provide appropriate exemptions over time that enabled the industry to achieve this result in an orderly fashion. This result demonstrates that the global semiconductor industry and the POP-RC, working in a coordinated manner, can achieve shared environmental goals.

As the POP-RC continues its work on other chemicals of potential interest to the semiconductor industry, including the ongoing work on PFOA and related substances, we are hopeful the POP-RC and the semiconductor industry are able to work together again in a similar fashion to achieve environmentally beneficial results in a manner consistent with our technological and business needs.

As we have informed the Secretariat and the POP-RC previously, the semiconductor industry relies on chemicals (such as perfluorinated chemicals) that possess specific chemical and physical properties and functional attributes required to manufacture advanced semiconductor devices. There currently are no known alternatives to many of these chemicals for use in our manufacturing processes. To the extent that specific chemicals are determined to pose potential environmental or health risks, the industry has a demonstrated record of achievement in working to reduce use of these chemicals, minimize emissions, and identify and implement substitutes when possible. We will continue this work in the future. When considering taking action on future chemicals that may be critical to the semiconductor industry we recommend the POP-RC to take into account a variety of factors in their reviews of chemicals, such as criticality of specific chemicals, the availability of proven substitutes, the time needed to qualify and transition to substitute chemicals if available, the limited potential risk of exposure to workers, the small quantity of chemicals used in manufacturing processes or contained in articles, and the fact that

these chemicals are not intended to be released from the finished product under normal conditions of use.

We further suggest that if taking action in the future on chemicals of concern, the POP-RC continue to work cooperatively with the semiconductor industry to ensure use exemptions are established and remain in place to provide the time necessary for the industry to identify and qualify alternatives and integrate these new replacement chemicals in our manufacturing processes. Adopting this approach will enable the industry to identify whether and when specific chemicals can be replaced and if so, eliminate the use of substances of concern in an orderly manner while continuing to innovate in semiconductor technology.

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