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

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 work performed by the Secretariat on behalf of the POPs Review Committee (POP-RC) of the Stockholm Convention regarding specific exemptions and acceptable purposes for the use and production of perfluorooctanoic acid (PFOA), its salts, and PFOA-related compounds, as listed in Annex A to the Convention.

A global industry entity, the World Semiconductor Council (WSC), announced in June 2024 that, as of 2023, all associations have successfully completed the phase-out of intentional uses of PFOA in photolithography and etch processes, and therefore the industry no longer has a need for such exemption. We are glad to report this successful elimination of this use of PFOA in our industry two years prior to the 2025 restriction under Part X of Annex A.

The industry's ability to eliminate these uses of PFOA, its salts, and PFOA-related compounds was the result of a concerted effort by semiconductor companies and their suppliers 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 other PFAS substances, we are hopeful the POP-RC and the semiconductor industry are able to continue to work together 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 short-chain PFAS) that possess specific chemical and physical properties and functional attributes required to manufacture semiconductor devices. There currently are no known alternatives to many of these chemicals for use in our manufacturing processes. For this reason, replacing these chemicals may prove

to be more difficult even than the PFOS and PFOA challenges. The industry has a demonstrated record of responsible chemical use and management, including minimizing emissions, identifying and implementing substitutes, and reducing use of these chemicals when and where 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, 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 to provide the time necessary for the industry to identify and qualify alternatives.

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