

Comments of the
Semiconductor Industry Association
On the
“Mercury; Reporting Requirements for the TSCA Mercury Inventory”
82 Fed. Reg. 49,564 (October 26, 2017)
Docket EPA-HQ-OPPT-2017-0421

Submitted January 11, 2018

The Semiconductor Industry Association (SIA)¹ appreciates the opportunity to submit these comments on the Environmental Protection Agency (EPA) proposal on “Mercury; Reporting Requirements for the TSCA Mercury Inventory.” 82 Fed. Reg. 49,564 (October 26, 2017).

SIA supports EPA’s efforts to implement the 2016 amendments to TSCA in an effective and efficient manner. SIA supports EPA’s proposal to coordinate the reporting requirements of the Mercury Inventory Rule with the existing requirements of the Interstate Mercury Education and Reduction Clearinghouse, the TSCA Chemical Data Reporting (“CDR”) rule, and the Toxics Release Inventory (“TRI”). We agree with EPA’s intention of drawing on information captured by existing mechanisms to collect and compile the information needed to accomplish EPA’s statutory and international obligations.

In these comments, SIA requests that EPA clarify certain aspects of the rule. SIA’s focus is on the reporting requirements governing the import and export of mercury-added components in semiconductor manufacturing equipment. As discussed below, the semiconductor industry utilizes complex manufacturing equipment in its processes, and some of these products may contain mercury-added components. Because of the expensive nature of these pieces of equipment and their long lifespan, there is an active market in buying and selling these pieces of equipment among semiconductor manufacturers, both internationally and domestically. Accordingly, the reporting requirements applicable to these transactions are important to SIA member companies.

A. Background on the Use of Mercury-Added Components in Semiconductor Manufacturing Equipment

The fabrication of semiconductors is conducted in specialized buildings (“fabs”) utilizing complex, specialized equipment (known in the industry as “tools”) that conduct the hundreds of additive, subtractive, photolithography, and cleaning steps to construct billions of transistors on a single silicon wafer. The advanced manufacturing equipment to achieve this level of manufacturing complexity and precision are expensive, highly engineered pieces of equipment comprised of many thousands of parts and costing millions of dollars. These tools may include mercury-added components. Figure 1 (below) shows manufacturing tools aligned along one of

¹ SIA is the trade association representing leading U.S. companies engaged in the design and manufacture of semiconductors. Semiconductors are the fundamental enabling technology of modern electronics that has transformed virtually all aspects of our economy, ranging from information technology, telecommunications, health care, transportation, energy, and national defense. The U.S. is the global leader in the semiconductor industry, and continued U.S. leadership in semiconductor technology is essential to America’s continued global economic leadership. More information about SIA and the semiconductor industry is available at www.semiconductors.org.

many corridors within a typical 300mm fab. Semiconductor manufacturers do not manufacture mercury-added products or otherwise intentionally use mercury in a manufacturing process.

Figure 1. Photo of typical 300mm wafer manufacturing cleanroom.



Because of the expense of these tools, their sophistication, and their lengthy period of useful operation, companies may move them from one fab to another, or sell them to another company. Many of these transactions may result in the import or export of the equipment. Accordingly, SIA's comments focus on clarification of the requirements for importing or exporting manufacturing equipment that may contain mercury-added components.

B. Imports and Exports of Products Containing Mercury-Added Components

SIA applauds EPA for exempting from reporting requirements imported products that contain mercury-added components.² SIA agrees that importers of products that may contain mercury-added components, such as batteries, would have difficulty determining whether, and how much, mercury the products contain and the source of the mercury.

SIA requests that EPA clarify the language in proposed 40 CFR § 713.1(c)(1)(B) to make it clear that all products that contain mercury-added components are exempt from the requirements of the regulation, including the export of products containing mercury-added components. The

² 82 Fed. Reg. at 49,574 - 49,575.

proposed rule ensures that a domestic producer or an importer of a mercury-added component already will be required to submit information about the amount of mercury contained in the mercury-added component. Thus, requiring exporters to also report information regarding the amount of mercury in a product (e.g., a piece of equipment) which includes such mercury-added components would result in the double-counting of some mercury that is being used or traded in the United States. Exporters of products containing mercury-added components are unlikely to know the amount of mercury contained in a particular component of their product, or the origin of that mercury, and therefore are unlikely to be well-positioned to report useful information to EPA.

EPA also should clarify throughout the rule which reporting requirements are applicable to exporters of mercury-added products. The language of the proposed rule suggests that only those entities that manufacture mercury-added products or otherwise intentionally use mercury in a manufacturing process will be required to report information regarding the export of mercury-added products. Accordingly, our understanding is that parties who solely export a product that contains a mercury-added component, such as a tool used in a fab plant, but who does not manufacture the tool, or the mercury-added components contained therein, are exempt from the reporting requirements of the proposed rule. However, to avoid ambiguity, SIA requests that EPA explicitly exempt parties who only export mercury-added products from the final rule.

The same reasoning that led EPA to propose exempting parties that import products containing mercury-added components should apply in exempting parties who solely export such products from the requirements of this proposed rule. First, these parties should be exempt to avoid double-counting. Parties that manufacture mercury-added products or use mercury in a manufacturing process will already be required under the terms of the proposed rule to submit information to EPA about the amount of mercury contained in the products or used in the manufacturing process. Requiring parties that only export products that contain mercury-added components to report the amount of mercury in the mercury-added products within the products that they export would lead to the double-counting of the mercury being used and traded in the United States. Second, such parties may not have information about the amount of mercury in a mercury-added product or, in particular, the amount of mercury used in a manufacturing processes. Accordingly, SIA asks that EPA clearly exempt from the reporting requirements those entities that only export products containing mercury-added components.

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SIA appreciates the opportunity to comment on this proposal.