

# EPA Strategy to Address Mercury-Containing Products

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**September, 2014**

This strategy is part of EPA's effort to continue efforts to reduce mercury pollution, including as part of the obligations of the United States under the Minamata Convention on Mercury, an international environmental agreement to which the United States is a Party, and EPA's domestic commitment to continue to make efforts to reduce use of mercury in the United States.

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## **Background**

Over the past three decades, the United States has seen a strong downward trend of more than 97 percent in the domestic use of mercury in products. In 1980, the United States used more than 1,800 metric tons of mercury annually; in 2010, the continued annual use of mercury in manufactured or imported products (excluding dental amalgam) was approximately 33 metric tons. Likewise, the use of mercury in industrial processes has also fallen dramatically.

This shifting landscape can be attributed to a number of factors, including market trends leading to the voluntary reduction of use of mercury in products and processes; federal, regional, state, and local programs that encourage the use of effective and economically feasible non-mercury substitutes; state laws or regulations that prohibit or reduce the use of mercury in products; and Congressional actions that banned the sale of a range of mercury batteries and prohibited the export of mercury. Recently, the United States negotiated and joined a global mercury agreement called the Minamata Convention on Mercury, which also contains requirements aimed at reducing the use of mercury.

## **Purpose**

Despite reductions in the amount of mercury used in the United States, mercury from ongoing uses will eventually be released and create potential exposure and risk for human health and the environment. Building on demonstrated success for more than three decades of reducing mercury use in traditional product and process categories, the goal of the U.S. Environmental Protection Agency's (EPA) strategy is to further reduce mercury use in products and certain processes in order to prevent future releases to the environment. To better understand continuing uses of mercury in such products and processes, EPA will collect and assess information pertaining to mercury-containing products and, as appropriate, processes that use mercury as a catalyst. The strategy will also assist the United States in its sustained implementation of its obligations under the Minamata Convention.

## **Summary of Strategy**

### **Phase 1: Update EPA's information on mercury products and certain processes**

*EPA will update its data set of mercury quantities used in products and processes, including new products entering the market, with particular attention to switches and relays.* Phase 1 is designed to acquire a more robust baseline of mercury quantities used in products and processes. In addition to providing insight into the current marketplace, establishing a baseline will allow subsequent data collection to be used for purposes of comparison and for supporting U.S. implementation of the Minamata Convention. EPA will be looking to enhance data on manufacture, export, and import for certain product categories of mercury use, using information from stakeholders, international organizations and initiatives, including the Global Mercury Partnership, and available databases. Phase 1 may also include working with stakeholders to identify ways to discourage both existing and future uses of mercury.

It is our hope that information that is requested by the Agency from mercury manufacturers and importers, mercury processors, and others will be forthcoming without additional available regulatory steps being necessary. At this phase, the type of information sought will be different for each product category, and the questions may change from one group of stakeholders to another. As EPA considers what it believes the domestic landscape should be for the use of mercury in products and, as appropriate, certain processes, considerations such as

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unreported or underreported use categories, replacement purposes, market forces, and voluntary initiatives shall be taken into account. Phase 1 also will include outreach, which will likely continue throughout the implementation of this strategy and be refined by the information received by the Agency. In addition, the initiation of future phases may not necessarily be dependent on preceding phases.

**Phase 2: Analyze updated mercury use information**

*It will be necessary to analyze and organize the new information acquired from Phase 1 to inform the plan to be developed in Phase 3.* As an initial matter, EPA intends to organize the available information by product and process category, including what the Agency considers to be recent and niche mercury products. Utilizing the available information, EPA will identify potential data gaps and limitations that could impact the ultimate objective to further reduce mercury use in products and processes to prevent future releases to the environment.

The intent of this phase will be to illustrate the market forces at work in particular product categories, such as those listed in the Minamata Convention on Mercury; assess the success of voluntary initiatives; and signal whether underreporting or over-reporting is occurring.

**Phase 3: Plan and prioritize mercury reduction activities**

*Evaluate and develop appropriate actions to reduce the use of mercury.* After the data are collected and analyzed under Phases 1 and 2, the Agency will develop priorities for further action. These priorities will be established based on the information gathered, existing information on non-mercury alternatives, U.S. commitments under global and regional agreements, the prevalence of the use of mercury in non-essential products and processes, and the demonstrated cost-effectiveness of the action. This is the phase where voluntary and/or regulatory actions to reduce mercury use in products and processes, as appropriate, will be developed for consideration.

**Phase 4: Take non-regulatory actions to reduce use**

*Encourage manufacturers, importers, processors, distributors, and exporters to reduce or cease commerce in mercury-added products and processes, enlist help from government agencies, and conduct outreach.* The historical decrease in the use of mercury products and processes has shown that effective non-regulatory mechanisms can be successful. Where non-regulatory actions are viable, the Agency would consider how best to work with a broad array of public and private stakeholders to achieve reduction or cessation of the use of mercury in products and certain processes domestically and abroad.

EPA envisions opportunities to work with individual companies and organizations in a number of different ways to achieve reductions in the use of mercury in products and processes, which might include establishing memoranda of understanding or other written commitments to reduce or cease manufacture, import, or export; using existing technical assessments to foster use of alternatives; engaging the UNEP Global Mercury Partnership to identify opportunities to reduce U.S. manufacture, import, or export of products; showcasing successful federal, regional, state, and local phase-outs or bans; expanding EPA's voluntary program for the phase out/replacement of non-ferrous thermometers to other products and processes; or identifying new approaches to gathering future mercury use information. EPA is also interested in considering how to work with other federal agencies to decrease the number of mercury products available for purchase by federal agencies.

**Phase 5: Take regulatory actions to reduce use, if needed**

*If voluntary efforts do not adequately reduce mercury use, EPA will consider regulatory options.* It is possible that voluntary actions may not be sufficient to achieve the purpose of this strategy. If that is the case, EPA would

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develop regulatory options for consideration. Those options would stem from the available supporting data and be informed by the preceding phases of this strategy. While the phases do not necessarily need to proceed in the order presented, consideration of options in this phase would likely include those that support the international obligations accepted by the United States under the Minamata Convention, as well as those that are derived from stakeholder comments and public input.