

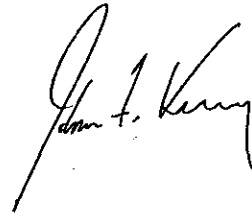
ACCEPTANCE ON BEHALF OF  
THE UNITED STATES OF AMERICA

I, John F. Kerry, Secretary of State of the United States of America, having seen and considered the Minamata Convention on Mercury, which was adopted on October 10, 2013, at Kumamoto, Japan, do hereby accept and confirm the said Convention and every article and clause thereof on behalf of the United States of America, subject to the following:

1. Attached to this instrument is a general notification of consent to imports pursuant to Article 3, paragraphs 6 and 7, setting out the terms and conditions under which the United States provides its consent, to be effective until revoked by the United States.
2. Pursuant to Article 3, paragraph 9, the United States elects not to apply Article 3, paragraph 8. The information required by Article 3, paragraph 9, is attached to this instrument.
3. The United States intends to act according to Article 4, paragraph 2. The required demonstration is attached to this instrument.
4. The United States hereby registers for an exemption, pursuant to Article 6, paragraph 1, from the phase-out date for the use of mercury in chlor-alkali production, as set forth in Annex B. A statement explaining the need for the exemption is attached to this instrument.
5. Attached to this instrument is a notification of the U.S. focal point for the Convention and for the exchange of information under the Convention pursuant to Article 17, paragraph 4.
6. Pursuant to Article 30, paragraph 4, attached to this instrument is information on the U.S. measures to implement the Convention.

7. The United States hereby declares, pursuant to Article 30, paragraph 5, that any amendment to an annex to the Convention shall enter into force for the United States only upon the deposit of its instrument of ratification, acceptance, approval, or accession with respect thereto.

DONE at Washington this eighteenth day of October, 2013.

A handwritten signature in black ink, appearing to read "John F. Kerry". The signature is written in a cursive style with a long, sweeping underline.


ACCEPTANCE ON BEHALF OF  
THE UNITED STATES OF AMERICA

I, John F. Kerry, Secretary of State of the United States of America, having seen and considered the Minamata Convention on Mercury, which was adopted on October 10, 2013, at Kumamoto, Japan, do hereby accept and confirm the said Convention and every article and clause thereof on behalf of the United States of America, subject to the following:

1. Attached to this instrument is a general notification of consent to imports pursuant to Article 3, paragraphs 6 and 7, setting out the terms and conditions under which the United States provides its consent, to be effective until revoked by the United States.
2. Pursuant to Article 3, paragraph 9, the United States elects not to apply Article 3, paragraph 8. The information required by Article 3, paragraph 9, is attached to this instrument.
3. The United States intends to act according to Article 4, paragraph 2. The required demonstration is attached to this instrument.
4. The United States hereby registers for an exemption, pursuant to Article 6, paragraph 1, from the phase-out date for the use of mercury in chlor-alkali production, as set forth in Annex B. A statement explaining the need for the exemption is attached to this instrument.
5. Attached to this instrument is a notification of the U.S. focal point for the Convention and for the exchange of information under the Convention pursuant to Article 17, paragraph 4.
6. Pursuant to Article 30, paragraph 4, attached to this instrument is information on the U.S. measures to implement the Convention.

7. The United States hereby declares, pursuant to Article 30, paragraph 5, that any amendment to an annex to the Convention shall enter into force for the United States only upon the deposit of its instrument of ratification, acceptance, approval, or accession with respect thereto.

DONE at Washington this eighteenth day of October, 2013.

A handwritten signature in black ink, appearing to read "John F. Kerry". The signature is written in a cursive style with a large, looping initial "J".

**United States of America**

**General Notification of Consent to Imports Pursuant to Article 3,  
Paragraphs 6 and 7, of the Minamata Convention on Mercury, Setting Out  
the Terms and Conditions under which the United States Provides its  
Consent**

The United States hereby notifies the Secretariat that any Party that wishes to export mercury to the United States may rely on this general notification as the written consent required by paragraph 6 of Article 3. The U.S. government does not object to any import of mercury as defined in Article 3 provided that import conforms to requirements under the Toxic Substances Control Act, 15 U.S.C. § 2601, and other applicable law. For additional information, please contact the U.S. Environmental Protection Agency at:

Karissa Kovner  
Senior Policy Advisor for International Affairs  
Office of the Assistant Administrator for Chemical Safety and Pollution  
Prevention  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Mailcode: 7101M  
Washington, DC 20430  
+1 (202) 564-0564  
Kovner.Karissa@epa.gov

## United States of America

### Notification of Application of Article 3, Paragraph 9

The United States hereby notifies the Secretariat that, pursuant to Article 3, paragraph 9, of the Minamata Convention on Mercury, it elects not to apply Article 3, paragraph 8, of that Convention. The United States has comprehensive restrictions on the export of mercury and has domestic measures in place to ensure that imported mercury is managed in an environmentally sound manner. Information describing the export restrictions, the domestic regulatory measures, and the quantities and countries of origin of mercury imported follows below. In addition, the United States has separately submitted a general notification of consent under Article 3, paragraph 7.

#### Information on U.S. Comprehensive Restrictions on the Export of Mercury

The United States has comprehensive restrictions on the export of mercury through the Mercury Export Ban Act, codified at 15 U.S.C. § 2611(c). Under the Mercury Export Ban Act, export of mercury from the United States, including when contained in a mixture, is generally prohibited. See 15 U.S.C. § 2611(c)(1) (“Effective January 1, 2013, the export of elemental mercury from the United States is prohibited”). The statute allows persons in the United States to petition for an exemption to allow export under very limited circumstances, but those circumstances are such that any exemption would necessarily be consistent with the provisions of Article 3. For example:

- The country where the elemental mercury will be used would have to certify its support for the export;
- The exported mercury would have to be reserved for use at an identified facility and not otherwise diverted for other uses;
- The mercury would have to be handled and managed in a manner that protects human health and the environment; and
- Any exemption would have to be consistent with U.S. international obligations intended to reduce global mercury supply, use, and pollution.

Moreover, the Administrator of the U.S. Environmental Protection Agency may prescribe other terms and conditions in the granting of any exemption. All of these provisions regarding exemptions can be found at 15 U.S.C. § 2611(c)(4). To date, the United States has not granted any exemptions. More information can be also found at <http://www.epa.gov/hg/regs.htm>.

#### Information on U.S. Measures to Ensure Imported Mercury is Managed in an Environmentally Sound Manner

Mercury in the United States must be managed in a manner that protects human health and the environment. The U.S. domestic approach to ensuring that mercury is managed in an environmentally sound manner – during its use, storage, and disposal – involves a range of statutes, including the Resource Conservation and Recovery Act, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Clean Water Act, the Pollution Prevention Act, and the Emergency Planning and Community Right-to-Know Act. A number of domestic agencies, including the Environmental Protection Agency, are involved in public education and outreach or are otherwise available to assist with understanding requirements for compliance with U.S. regulatory and other measures.

Several statutes provide authority to take measures to deter, control, or reduce releases of mercury during use. For example, the Clean Water Act prohibits the discharge of pollutants from any point source to waters of the United States except in compliance with that statute. Permits for point sources seeking to discharge pollutants must include effluent limitations reflecting technology-based requirements as well as more stringent limitations necessary to meet state and/or tribal water quality standards. Under section 307(a) of the Clean Water Act, the Environmental Protection Agency has promulgated technology-based effluent limitations for mercury discharges from different industries. There are also circumstances in which U.S. states may require effluent limits or monitoring requirements more stringent than technology-based standards. These standards are based on best available technology, either nationally or site-specific. States may also set water quality standards for pollutants including mercury. Facilities are assigned a specific mercury discharge limit and/or are required to monitor their discharge for mercury. Facilities that discharge "indirectly" – that is, to a publicly-owned wastewater treatment plant rather than directly to a water body – are also subject to guidelines and standards set under the statute. The Environmental Protection Agency has authority to take response measures to address releases of hazardous substances such as mercury.

With respect to releases to land, the Environmental Protection Agency has broad authority under CERCLA to respond to spills or mishandling that creates a substantial threat of release of mercury and mercury compounds. Mercury and mercury compounds are both designated as hazardous substances under CERCLA. The federal government may take a response action with respect to release or a substantial threat of a release of a hazardous substance into the environment. The government may also issue an order to abate a danger or threat upon determining that an actual or threatened release of a hazardous substance creates an imminent and substantial endangerment to the public health or welfare or the environment. Liability for cleanup costs of a release of a hazardous substance is strict, joint and several, and retroactive, on four broad classes of responsible parties, including the owner or operator of a facility from which the release occurred.

The Emergency Planning and Community Right-to-Know Act, the Pollution Prevention Act, the Clean Water Act, and CERCLA all require or authorize the Environmental Protection Agency to require reporting of releases of mercury, including mercury compounds, to the environment, above certain thresholds. The CERCLA definition of release, for example, is broad and includes "spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." Section 103 of CERCLA requires owners and operators to report on the amounts and types of hazardous substances to be found at their facilities and on any known, suspected, or likely releases of such substances from those sites. Elemental mercury and mercury compounds are both designated as hazardous substances for this purpose.

With respect to storage, the United States has authority under CERCLA and the Resource Conservation and Recovery Act to ensure that the interim storage of mercury and mercury compounds that are intended for a use allowed under the Convention takes place in an environmentally sound manner. See 42 U.S.C. §§ 9604, 9606, 9607(a); 42 U.S.C. §§ 6903(27), 7003.

As to disposal, imported mercury becomes a solid waste or hazardous waste if it is discarded (intentionally or as a result of mishandling, for example) under the statutory definition. In the United States, mercury wastes are required to be managed in a manner that protects human health and the environment against adverse effects. The Resource Conservation and Recovery Act establishes

requirements for storage, transport, treatment, and disposal or recycling of hazardous wastes and includes a graduated management program that requires different levels of management for waste depending on the hazards it poses. Under applicable regulations, waste containing mercury may be regulated as hazardous because it has been specifically listed as hazardous waste or based on the concentration of leachable mercury in the waste, or if it exhibits another hazardous "characteristic." 40 C.F.R. Part 261.

High concentration mercury wastes generally must be roasted or retorted and the mercury recovered for reuse before the wastes may be land-disposed. Low concentration mercury wastes may undergo stabilization treatment (to reduce mercury leaching) and can then be land disposed, although recycling to recover the mercury is allowed as an option. See 40 C.F.R. Part 268. There are additional waste treatment categories for radiologically-contaminated mercury wastes, including contaminated elemental mercury, because this mercury cannot be reclaimed for reuse. See 40 C.F.R. § 268.40.

Industrial or commercial mercury-containing wastes that are not regulated as hazardous waste may be disposed of in non-hazardous waste landfills, which are regulated by the 50 U.S. states and subject to federal minimum criteria. See 40 C.F.R. Parts 257-58. Household wastes, including those that may contain mercury (e.g., spent mercury lamps), must be disposed of in municipal solid waste landfills. See 40 C.F.R. Part 258.

The Universal Waste Program provides an alternative set of management standards for certain hazardous wastes that are widely generated and that may be difficult to collect into the hazardous waste management system when they are discarded. The universal waste regulations provide a streamlined framework for collection and management of specified wastes, including certain mercury-containing equipment and lamps. See 40 C.F.R. Part 273.

Releases of mercury inconsistent with any of these regulations would constitute unlawful disposal. The United States may issue an order or file a judicial action against any person contributing to the treatment, storage, disposal or handling of solid or hazardous waste to abate an imminent and substantial endangerment to human health or the environment resulting from mishandling of the waste.

Information on Quantities and Countries of Origin of Mercury Imported to the United States from Countries Not Party to the Minamata Convention on Mercury

Quantities of mercury imported to the United States in 2012 and their countries of origin are illustrated in the following table.

**Table. U.S. Imports of Mercury and Amalgams<sup>1</sup> of Precious Metals in 2012**

Country of Origin	Imported Quantity in 2012, gross weight (kilograms)
<u>Mercury:</u>	
Argentina	130,360
Canada	46,401
Chile	51,730
France	32
Germany	11,034
Mexico	6,251
Switzerland	79



Ukraine	2,988
<b>Subtotal</b>	<b>248,875</b>
<b>Amalgams:</b>	
Argentina	1,646
Australia	280
Brazil	1,009
Canada	198
China	700
Czech Republic	1
France	20
Germany	6,163
Hungary	8
India	293
Italy	744
Japan	3,253
Korea	1
Mexico	2,595
Russia	785
South Africa	1,073
Switzerland	187
Taiwan	3
United Kingdom	1,914
<b>Subtotal</b>	<b>20,873</b>
<b>Total</b>	<b>269,748</b>

<sup>1</sup>An alloy of mercury with one or more other metals.

Source: U.S. Census Bureau.

## United States of America

### Notification Under Article 4, Paragraph 2, of Information on Domestic Measures and Strategies Implemented to Address Mercury-Added Products, Including those in Part I of Annex A to the Minamata Convention on Mercury

The United States remains committed to reducing the use of mercury in products. The purpose of this notification is to demonstrate, consistent with Article 4, paragraph 2, of the Minamata Convention on Mercury, that the United States has already reduced to a *de minimis* level the manufacture, import, and export of a large majority of the products listed in Part I of Annex A and that it has implemented measures and strategies to reduce the use of mercury in additional products not listed in Part I of Annex A.

#### 1. Products Listed in Part I of Annex A

Through a multifaceted approach, including federal and state legislation, regulation, and public-private partnerships, use of mercury in products in the United States has been dramatically reduced by over 97% between 1980 and 2007, and the projected demand for and use of mercury in products remains in decline. Data<sup>1</sup> on domestic and global use of mercury in products support the conclusion that the United States has already reduced to a *de minimis* level the manufacture, import, and export of at least eight of the nine covered product categories, specifically: batteries; compact fluorescent lamps; linear fluorescent lamps; high pressure mercury vapor lamps; cold cathode fluorescent lamps and external electrode fluorescent lamps; cosmetics; pesticides, biocides, and topical antiseptics; and listed non-electronic measuring devices. A variety of domestic measures have been employed to reduce mercury use in the ninth category – switches and relays – and the most recent data available from 2007 estimated that the use of mercury in the manufacture of all switches and relays in the United States had fallen by more than 50% from 2001 to 2007. While significant domestic reductions have been made in this ninth category, there are insufficient data available to us at this time to fully assess whether U.S. manufacture, import, and export of covered switches and relays is or is not *de minimis*.

Specific measures and strategies the United States has employed for products listed under the Convention include federal regulatory action under the Toxic Substances Control Act (automobile switches, barometers, hygrometers, manometers), 15 U.S.C. § 2604(a), 40 C.F.R. § 721.10068; the Mercury-Containing and Rechargeable Battery Act of 1996 (batteries), Pub. L. 104-142; the Federal Insecticide, Fungicide, and Rodenticide Act (paint, pesticides), 7 U.S.C. § 136a; the Energy Independence and Security Act of 2007 (lamps), Pub. L. 110-140, 16 C.F.R. § 305.15; the Energy Policy and Conservation Act (lamps), 42 U.S.C. § 6291, 10 C.F.R. Part 430, 74 Fed. Reg. 34080, 34170 (2009); the Energy Policy Act of 2005 (lamps), 42 U.S.C. § 6295(ee); and the Federal Food, Drug, and Cosmetic Act (skin-bleaching agents and other non-eye area cosmetics, topical antiseptics), 21 U.S.C. §§ 352, 355, 361(a), 21 C.F.R. §§ 310.545 and 700.13. Other measures to address mercury use in products have included voluntary programs such as the Energy Star Program co-sponsored by the Environmental Protection Agency and the Department of Energy, under which participating manufacturers agree to limit the mercury content of lamps, and the National Vehicle Mercury Switch Recovery Program and follow-on

---

<sup>1</sup> Unless otherwise indicated, the domestic use numbers in this notification are based on data compiled by the Interstate Mercury Education and Reduction Clearinghouse and the global use numbers are based on data compiled by the UN Environment Program.

initiatives, under which more than 5 million mercury switches have been removed from the environment. The Environmental Protection Agency also leads initiatives such as one to phase out use of mercury in industrial and laboratory thermometers. See <http://epa.gov/mercury/thermometer.htm>

The following product-by-product description lays out in additional detail U.S. actions and statistics with respect to individual product categories:

#### Batteries

In the United States, the Mercury-Containing and Rechargeable Battery Act of 1996 has prohibited all domestic sale of a range of mercury-containing batteries, which in practical effect also eliminates imports. In addition, state laws whose objectives are reducing availability of mercury-containing batteries and steps taken by U.S. industry in the context of a voluntary commitment to phase out manufacture in the United States have led to further reductions. By 2007, U.S. use of mercury in mercury-added batteries was estimated at 1.9 metric tons of mercury, which was less than 1% of global use in the category, and much of that was in batteries excluded from the Convention, namely silver oxide and zinc air batteries with less than 2% mercury content and batteries for civil protection and military uses. The National Electrical Manufacturers Association, whose members include the major U.S. battery producers, indicates that a full transition to non-mercury battery manufacture is feasible and on track for 2016.

#### Compact fluorescent lamps (CFLs)

CFLs are among many products included in the U.S. “Energy Star” program. This program, established under the authority of the Clean Air Act in 1992 and codified by the U.S. Congress in the Energy Policy Act of 2005, is a voluntary program backed by the Environmental Protection Agency and the Department of Energy. With respect to CFLs, the program requires participating manufacturers to commit to reduce mercury content of lamps below certain thresholds in order to qualify for a label. Energy Star labels are a lucrative, value-added mark that both manufacturers and consumers recognize. Consequently, there is a significant and market-driven incentive for manufacturers to conform to Energy Star standards. The required content limits under the program are already below the thresholds established in the Convention – 4mg of mercury for lamps up to 25 watts and 5mg of mercury for lamps from 25-40 watts. On August 28, 2013, new standards requiring greater efficiency were announced under which lamps up to 23 watts would be limited to no more than 2.5mg of mercury and lamps of higher wattage would be limited to no more than 3mg of mercury. Manufacturers seeking certification of their products under the Energy Star program after September 30, 2014, must meet this new standard.

Market research shows that at least 77% of the U.S. market in CFLs is now Energy Star-qualified. That percentage is expected to continue under the new standards, as many U.S. manufacturers already meet the tougher standards and major U.S. retailers such as Wal-Mart have committed to only selling Energy Star-qualified CFLs.

The Energy Star content limits are similar to those required by the European Union in its Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (the “RoHS Directive”), Directive 2011/65/EU (June 8, 2011). Some U.S. states have restricted the sale of lamps that do not meet RoHS content standards. See, e.g., California Health and Safety Code § 25210.9. This has further reduced the use of mercury in CFLs in the United States.

The vast majority of mercury use for CFLs in the United States, therefore, is not only consistent with, but well below Convention requirements. The United

States estimates that mercury use in CFLs covered by the Convention is at most less than half a ton of mercury and 1.6% of global use in this category, and likely far less.

#### Linear fluorescent lamps (LFLs)

The Convention addresses two types of LFLs – halophosphate phosphor and triband phosphor. Halophosphate phosphor technology, which is older, is used mostly in large, long fluorescent lamps (of the size T12) and requires significant amounts of mercury. Department of Energy regulations implementing the Energy Policy and Conservation Act, 42 U.S.C. § 6291, have resulted in the phase-out of these lamps in favor of new, more efficient triband phosphor lamps. Moreover, in meeting these Department of Energy standards, manufacturers have reduced the size (now mostly T5 and T8) and mercury content of their lamps. The mercury content standards targeted by U.S. manufacturers are consistent with those required by the European Union in the RoHS Directive, which also meet the Convention’s requirements, and, as noted above, some U.S. states have restricted the sale of lamps that do not meet RoHS content standards. See, e.g., California Health and Safety Code § 25210.9.

According to the most recent estimates available from the U.S. Geological Survey, prior to the effective date of the Department of Energy regulations, 63% of mercury use in the United States in the LFL category was in size T12 lamps. The remaining uses would amount to no more than 2.6% of global use in this category, but in any event those uses – in size T5 and T8 lamps – are for lamps with an average mercury content of 3.5 mg, well under the limits established in the Convention. Thus, with the implementation of the regulations mentioned above, the United States is not aware of any mercury use in lamps in this category that exceed the content limits established in the Convention.

#### High pressure mercury vapor lamps

Mercury vapor lamps are one type of “high intensity discharge” lamp, a category that includes metal halide and high pressure sodium lamps, both of which also use mercury (although they are not covered by the Convention). The Energy Policy Act of 2005 prohibited the manufacture or import of mercury vapor lamp ballasts—the piece of equipment that regulates the current to mercury vapor lamps and provides sufficient voltage to start the lamps – as of January 1, 2008. Without such ballasts, mercury vapor lamps cannot function, and the lamps will no longer be manufactured as equipment is replaced.

Among all high intensity discharge lamps, prior to the effective date of the mercury vapor lamp ballast prohibition, mercury vapor lamps accounted for less than 7% of mercury use in this category in the United States. Figures from the U.S. Geological Survey show that mercury use in the entire category was 1.8 tons. Mercury use in covered lamps, therefore, can be estimated at one-eighth of a ton, a fraction that is already *de minimis* and, in light of the statutory prohibition on the ballasts, is itself in rapid decline.

#### Cold cathode and external electrode fluorescent lamps

With respect to cold cathode and external electrode fluorescent lamps (CCFLs and EEFLs) for electronic displays, reporting from the National Electrical Manufacturers Association confirms that these lamps make up such a small and declining percentage of the U.S. lamp market that production and use of them is no longer tracked separately. Rather, in the U.S. Geological Survey reporting, they fall within a category of “miscellaneous” mercury-containing lamps. By the most recent estimates, the entire “miscellaneous” category – which was distinguished from the other categories of lamps already described above, and by definition includes far more than just these CCFLs and EEFLs - consumed

eight-tenths of a metric ton of mercury in the United States. Moreover, these estimates preceded the rise of light-emitting diode (LED) technology as the dominant technology in this sector. LEDs moved from 1% of the market in 2007 to 44% of the market in 2010, all at the expense of CCFLs and EEFLs. Information and experience from EPA's Energy Star program indicate that CCFLs and EEFLs are now obsolete for common applications such as TVs and computers, having been replaced with LED technology. Thus, CCFLs and EEFLs make up no more than a trivial fraction of the already *de minimis* miscellaneous category.

#### Cosmetics

Regulations promulgated by the Food and Drug Administration prohibit the marketing of cosmetics, including skin lightening soaps and creams, containing mercury, with certain exceptions. Those exceptions mirror the exceptions in the Convention - eye area cosmetics in which mercury is used as a preservative and no effective and safe substitute preservatives are available, and cosmetics with trace contaminants of mercury (i.e., under 1ppm mercury content). See 21 C.F.R. § 700.13. Covered cosmetic products containing mercury would be deemed to be "adulterated" or "misbranded," and the Food and Drug Administration has the authority to enjoin and criminally prosecute offenses relating to such products. See 21 U.S.C. §§ 331(a), 332, 333. There are no such products registered in the Voluntary Cosmetic Registration Program operated by the Food and Drug Administration.

#### Pesticides, Biocides, and Topical Antiseptics

Mercury is not registered in the United States for sale and distribution as a pesticide. By 1995, all U.S. registrations for mercury-containing pesticides, including for use as a preservative in paint (e.g., as a biocide), were cancelled. It is therefore unlawful to sell or distribute such a product in the United States, and a recent search of pesticide production reports has not revealed evidence of mercury pesticides being produced for export. EPA has the authority to take action to deny a proposed registration, were an application for registration to be made in the future, if the pesticide would result in unreasonable adverse effects on the environment, taking into account economic, social, and environmental costs. See 7 U.S.C. § 136a.

For topical antiseptics, which are regulated as pharmaceuticals, the Food and Drug Administration issued a rule determining that mercury and mercury compounds that had been used as active ingredients in such products are not generally recognized as safe and effective. 21 C.F.R. § 310.545(a)(27). It is therefore unlawful to market a topical antiseptic containing such a mercury compound in the United States.

For this entire category, therefore, the United States is not aware of any manufacture, import, or export, let alone any over a *de minimis* level.

#### Measuring Devices

The Convention covers five types of measuring devices – barometers, hygrometers, manometers, thermometers, and sphygmomanometers – except when installed in large-scale equipment or when used for high precision measurement. Generally applicable exclusions in Annex A are also particularly relevant to this category. Thus, products for civil protection and military uses, products for research, calibration, or reference standard, and products for which no feasible mercury-free alternative for replacement is available are all excluded as well.

Use of mercury in measuring devices has declined dramatically in the United States over the recent past. Mercury use in new barometers, hygrometers, or

manometers is non-existent and prohibited without prior notification to the Environmental Protection Agency. See 40 C.F.R. § 721.10068. Numerous states have prohibited the sale of mercury-containing thermometers and sphygmomanometers, and the United States participates in a partnership – Hospitals for a Healthy Environment, now administered by the NGO Practice Greenhealth – to encourage the healthcare industry generally to reduce and eliminate reliance on mercury-containing devices. Thousands of hospitals, pharmacies, and medical device purchasers have eliminated use of mercury-containing thermometers and sphygmomanometers. The National Institutes of Health have established a policy restricting procurement of mercury-added products with its funds and requiring elimination of mercury-containing devices previously in use in its facilities. EPA has worked in partnership with ASTM International to update some of its ASTM standards that previously required use of mercury-containing thermometers to allow for alternatives to mercury-containing thermometers in certain field and laboratory applications and has updated its own regulations accordingly. Further, the National Institute of Standards and Technology has ceased providing calibration services for mercury thermometers, further accelerating the transition to non-mercury alternatives. An October 2012 report by the Environmental Council of the States, a coalition of U.S. state environmental agencies, indicates that mercury-containing thermometers are close to being entirely phased out nationwide. See Quicksilver Caucus, Third Compendium of States’ Mercury Activities (2012) (“Third Compendium”), at 199, available at [http://www.ecos.org/section/committees/cross\\_media/quick\\_silver/third\\_compendium\\_of\\_states\\_mercury\\_activities/](http://www.ecos.org/section/committees/cross_media/quick_silver/third_compendium_of_states_mercury_activities/).

According to the most recent estimates, U.S. production of measuring devices (including not only those covered by the Convention but also those excluded or otherwise not addressed) used approximately 1 metric ton of mercury, less than a third of one percent of global consumption.

#### Switches and Relays

As mentioned above, the United States does not currently have sufficient data to demonstrate *de minimis* qualification in this category. In the United States, however, a variety of measures have been employed to reduce mercury use in switches and relays. The most recent estimates – from 2007 – suggest that the use of mercury in the manufacture of switches and relays in the United States dropped by more than 50% from 2001 to 2007. Comparison of domestic and global use figures does not allow for a conclusive determination of *de minimis* because the figures are calculated including products excluded from the scope of the Convention, namely products for use in refurbishment and replacement parts and other excluded uses from the Convention. While data are currently insufficient, additional information in the future may confirm that the United States can also meet the *de minimis* standard for switches and relays. The United States will continue to work with industry to further reduce or eliminate the use of mercury in switches and relays and will report on these measures to the Conference of the Parties as required in the Convention.

#### 2. Products Not Listed in Part I of Annex A

In addition to measures and strategies implemented for products covered by the Convention, the United States has implemented a variety of regulatory and other measures to address mercury demand, availability, and use in other products not covered by the Convention. Mercury use in specific products has been regulated federally under the Toxic Substances Control Act (e.g., flow meters, pyrometers), 15 U.S.C. § 2604(a), 40 C.F.R. § 721.10068; the Federal Hazardous Substances Act (toys, fireworks), 15 U.S.C. § 1261(q)(1); the Consumer Product Safety Act (toys, children’s jewelry), 15 U.S.C. § 2051; and the Federal Food, Drug, and Cosmetics Act (food additives, color additives), 21

U.S.C. §§ 348, 379e; e.g., 21 C.F.R. §§ 73.35, 73.125, 73.350, 172.105. At the state level, mercury use in specific products has also been prohibited or otherwise regulated. Many states, for example, have prohibited the sale, limited the mercury content, or required the phase-out of mercury-added thermostats, medical devices, measuring devices, balancers and wheel weights, novelty items, toys, and cosmetics. See Third Compendium at 63-64.

**United States of America**

**Registration for an Exemption Pursuant to  
Article 6, Paragraph 1, of the Minamata Convention on Mercury**

Pursuant to Article 6, paragraph 1 of the Minamata Convention on Mercury, the United States hereby registers for an exemption from the phase-out date listed in Annex B for the use of mercury in chlor-alkali production. The United States also provides the following statement explaining the need for the exemption:

The United States supports the phase-out of mercury use in chlor-alkali production facilities. It has implemented domestic strategies to encourage a timely transition to mercury-free alternative technologies with a view to phasing out all mercury use in domestic chlor-alkali production facilities. New or reconstructed chlor-alkali production facilities in the United States are already effectively prohibited from using mercury under section 112 of the Clean Air Act. See 40 C.F.R. § 63.8190. Most mercury cell chlor-alkali facilities in the United States have already closed or converted. While there were 14 such facilities in 1998, only two remained as of late 2013. The United States will, pursuant to Article 6, paragraph 7, withdraw this exemption if that becomes possible prior to its expiration date.



**United States of America**

**Designation of the U.S. National Focal Point to the Minamata Convention  
on Mercury**

The Secretariat and Parties to the Minamata Convention on Mercury are notified that that the primary United States National Focal Point to the Minamata Convention on Mercury is:

Ms. Sezaneh Seymour  
Chief for Chemicals, Waste, and Air Pollution  
Office of Environmental Quality and Transboundary Issues  
Bureau of Oceans, International Environmental, and Scientific Affairs  
The United States Department of State  
2201 C Street, N.W., Room 2727  
Washington, DC 20520

SeymourSM@state.gov  
+1 (202) 647-1123

The United States Focal Point for the purposes of information exchange under Article 17, paragraph 4, is:

Office of International and Tribal Affairs  
United States Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

Bailey.Marianne@epa.gov  
+1 (202) 564-6402

## United States of America

### Measures to Implement the Minamata Convention on Mercury

Pursuant to Article 30, paragraph 4, of the Minamata Convention on Mercury, the United States provides the following information on its measures to implement the Convention. Some of the listed measures go beyond what would be required simply to implement United States obligations under the Convention. All laws and regulations cited in this document are publicly available on the Internet.

#### Article 3: Mercury supply sources and trade

There is no primary mercury mining in the United States and there have been no active mercury mines since the early 1990s.

The United States has information on existing stocks and supply sources of mercury and can obtain more information as needed under the Chemical Data Reporting Rule, *see* 40 C.F.R. § 711.8(b), and the Emergency Planning and Community Right to Know Act, 42 U.S.C. § 11022.

The United States has taken measures through the Resource Conservation and Recovery Act and the Mercury Export Ban Act of 2008 to ensure the proper disposal of excess mercury from the decommissioning of chlor-alkali facilities. *See* 42 U.S.C. § 6939f(g)(2)(B); 15 U.S.C. § 2611(c).

Under the Mercury Export Ban Act, export of mercury from the United States is generally prohibited. *See* 15 U.S.C. § 2611(c). Although any person may petition for an exemption to the export restriction, the criteria for granting such exemptions are consistent with the provisions of this Article, including that the country where the mercury will be used must certify its support for the export. *See* 15 U.S.C. § 2611(c)(4).

The United States will act under paragraph 9 of this article and has submitted a separate statement outlining its domestic measures to ensure that imported mercury is managed in an environmentally sound manner.

#### Article 4: Mercury-added Products

The United States will act under paragraph 2 of this Article and has provided a separate statement demonstrating that it has reduced to a de minimis level the manufacture, import, and export of the large majority of the products listed in Part I of Annex A and that it has implemented measures or strategies to reduce the use of mercury in additional products that are not listed in Part I of Annex A.

The United States will implement at least two measures listed in part II of Annex A under the Public Health Service Act, 42 U.S.C. § 241(a), and the Clean Water Act. *See* <http://water.epa.gov/scitech/wastetech/guide/dental/index.cfm>.

#### Article 5: Manufacturing processes in which mercury or mercury compounds are used

The United States has no acetaldehyde production in which mercury or mercury compounds are used as a catalyst. With respect to chlor-alkali production, all but two facilities in the United States that previously used mercury have closed or converted to non-mercury processes. The United States has registered for an exemption from the phase-out date to cover those two facilities, although they may also close or convert to non-mercury processes prior to the phase-out date.

New or reconstructed facilities are effectively prohibited from using mercury under section 112 of the Clean Air Act. See 40 C.F.R. § 63.8190. Emissions and releases from existing facilities are controlled under the Clean Air Act, see 40 C.F.R. §§ 63.8190 and 63.8192, and Clean Water Act. See 40 C.F.R. Part 415, Subpart F.

With respect to processes listed in part II of Annex B, the United States is not aware of any facilities using mercury for vinyl chloride monomer production; sodium or potassium methylate or ethylate production; or polyurethane production. It can endeavor to identify such facilities under measures including the Toxics Release Inventory established by the Emergency Planning and Community Right to Know Act, 42 U.S.C. § 11023. Were the United States to identify any such facilities, it would be able to take the measures outlined in the appropriate section of Annex B under authorities including the Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act, and Comprehensive Environmental Response, Compensation, and Liability Act.

#### **Article 7: Artisanal and small-scale gold mining (ASGM)**

The United States has no data or other evidence indicating that there is more than insignificant mercury use in ASGM in the United States.

The United States nevertheless has attempted to identify instances of mercury use in recreational or hobby mining and to raise awareness about mercury risks, although to date it has not identified a specific instance of intentional use of mercury in ASGM. The United States disseminates information on non-mercury ASGM techniques, emissions reduction techniques and technologies, and measures to prevent releases to the environment from ASGM mining. The United States also has authority, if necessary, to take action to prevent and respond to releases or substantial threats of releases of mercury to the environment. See, e.g., 42 U.S.C. § 9604.

The United States engages in cooperation designed to reduce the use of mercury in ASGM and emissions of mercury from that activity, both bilaterally and multilaterally through entities such as the UNEP Global Mercury Partnership, under various authorities including the Clean Air Act, 42 U.S.C. § 7403.

#### **Article 8: Emissions**

The United States has taken measures under the Clean Air Act to control emissions of mercury and mercury compounds in the United States. Mercury and mercury compounds are hazardous air pollutants listed in section 112 of the Act, 42 U.S.C. § 7412, and the United States has issued numerous standards that regulate mercury emissions from various industrial source categories. See 40 C.F.R. Part 63. These technology-based standards must be reviewed every eight years and revised if necessary to account for developments in practices, processes, and control technologies. In addition, eight years after the standards are set, an evaluation of the remaining risk must be undertaken and additional standards applied if necessary to protect public health and the environment.

Section 129 of the Act, 42 U.S.C. § 7429, provides authority for EPA to set national standards for a set of pollutants, including mercury and mercury compounds, from new solid waste incinerators and emissions guidelines for existing solid waste incinerators. The standards and guidelines are required to be reviewed, and potentially revised, every five years. U.S. states are required to submit plans to implement and enforce the guidelines. A federal plan is developed as a backstop for units in states that have not submitted approvable

plans. The standards and guidelines are codified at 40 C.F.R. Part 60, and federal plans are codified at 40 C.F.R. Part 62.

Maximum Achievable Control Technology (“MACT”) standards set under these authorities represent the maximum degree of reduction in emissions taking into consideration the costs of achieving such emission reduction and any non-air quality health and environmental impacts and energy requirements. For new (and substantially reconstructed or modified) major sources, these standards must be at least as stringent as is achieved by the best-controlled similar source. MACT standards for existing sources are to be at least as stringent as the average level of emission reduction already achieved by the best performing 12% of sources in the same category. Many of the mercury-specific standards applicable to new sources in the United States are expressed as emission limit values.

With respect to the specific source categories identified in Annex D, the United States has promulgated the following relevant regulations (that collectively apply both to new and existing sources):

Coal-fired power plants - 40 C.F.R. Part 63 Subpart UUUUU; 40 C.F.R. Part 60 Subparts D and Da; 40 C.F.R. Parts 72-76; 40 C.F.R. Part 51 Subpart P, Subpart G, and Subpart I; and 40 C.F.R. Parts 96 and 97.

Coal-fired industrial boilers - 40 C.F.R. 63 Subpart DDDDD and Subpart JJJJJ.

Smelting and roasting processes used in the production of non-ferrous metals - 40 C.F.R. 63 Subpart EEEEEEE (gold); 40 C.F.R. Part 63 Subparts QQQ, EEEEE, and FFFFFFF (copper); 40 C.F.R. 63 Subparts TTT and X (lead); and 40 C.F.R. Part 63 Subpart GGGGGG (zinc).

Waste incineration facilities - 40 C.F.R. Part 60 Subparts Ea, Eb, Cb, AAAA, and BBBB and 40 C.F.R. Part 62 Subparts FFF and JJJ (municipal waste combustors); 40 C.F.R. Part 60 Subparts CCCC and DDDD (commercial and industrial waste incinerators); 40 C.F.R. Part 60 Subparts Ec and Ce and 40 C.F.R. Part 62 Subpart HHH (hospital, medical and infectious waste incinerators); 40 C.F.R. Part 60 Subparts LLLL and MMMM (sewage sludge incinerators); and 40 C.F.R. Part 63 Subpart EEE (hazardous waste combustors).

Cement clinker production facilities - 40 C.F.R. Part 63 Subpart LLL.

The regulations described above have reduced or will significantly reduce mercury emissions from relevant sources in the United States.

The United States has a well-developed inventory of mercury emissions from relevant sources. The National Emissions Inventory is a national compilation of emissions sources collected from U.S. state, local, and tribal air agencies as well as from information from regulatory programs. In addition, section 313 of the Emergency Planning and Community Right-to-Know Act, 42 U.S.C. § 11023, requires certain facilities to annually report information on emissions of toxic chemicals, including mercury.

#### **Article 9: Releases**

In the United States, the Emergency Planning and Community Right-to-Know Act, the Pollution Prevention Act, the Clean Water Act, and the Comprehensive Environmental Response, Compensation, and Liability Act all require or authorize the Environmental Protection Agency to require reporting of releases of mercury, including mercury compounds, to the environment. These statutes

would ensure that the United States would be able to identify releases contemplated by this Article (releases from significant anthropogenic point sources not addressed in other provisions of the Convention), were any to occur, and to create an inventory of such releases. See, e.g., 42 U.S.C. § 9603; 40 C.F.R. § 302.4 and table.

If a relevant source were identified in the United States, authority exists to take measures to deter, control, or reduce releases to water and land from that source, for example, under the Clean Water Act (33 U.S.C. §§ 1317, 1321, 1342), the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. §§ 9602, 9604, 9606), and the Resource Conservation and Recovery Act (42 U.S.C. §§ 6903, 6944).

#### **Article 10: Environmentally Sound Interim Storage of Mercury, Other Than Waste Mercury**

The United States has authority under the Comprehensive Environmental Response, Liability, and Compensation Act and Resource Conservation and Recovery Act to ensure that the interim storage of mercury and mercury compounds that are intended for a use allowed under the Convention takes place in an environmentally sound manner. See 42 U.S.C. §§ 9604, 9606, 9607(a); 42 U.S.C. §§ 6903(27), 7003.

#### **Article 11: Mercury wastes**

In the United States, mercury wastes are required to be managed in a manner that protects human health and the environment against adverse effects. The Resource Conservation and Recovery Act establishes requirements for storage, transport, treatment, and disposal or recycling of hazardous wastes and includes a graduated management program that requires different levels of management for waste depending on the hazards it poses. Under applicable regulations, waste containing mercury may be regulated as hazardous because it has been specifically listed as hazardous waste or based on the concentration of leachable mercury in the waste, or if it exhibits another hazardous “characteristic.” 40 C.F.R. Part 261.

High concentration mercury wastes generally must be roasted or retorted and the mercury recovered for reuse before the wastes may be land-disposed. Low concentration mercury wastes may undergo stabilization treatment (to reduce mercury leaching) and can then be land-disposed, although recycling to recover the mercury is allowed as an option. See 40 C.F.R. Part 268. There are additional waste treatment categories for radiologically-contaminated mercury wastes, including contaminated elemental mercury, since this mercury cannot be reclaimed for reuse. See 40 C.F.R. § 268.40. Releases of mercury inconsistent with these regulations would constitute unlawful disposal.

Industrial or commercial mercury-containing wastes that are not regulated as hazardous waste may be disposed of in non-hazardous waste landfills, which are regulated by the 50 U.S. states and subject to federal minimum criteria. See 40 C.F.R. Parts 257-58. Household wastes, including those that may contain mercury (e.g., spent mercury lamps), must be disposed in municipal solid waste landfills. See 40 C.F.R. Part 258.

The Universal Waste Program provides an alternative set of management standards for certain hazardous wastes that are widely generated, and which may be difficult to collect into the hazardous waste management system when they are discarded. The universal waste regulations provide a streamlined framework

for collection and management of specified wastes, including certain mercury-containing equipment and lamps. See 40 C.F.R. Part 273.

In general, export of hazardous wastes from the United States is prohibited unless the exporter has submitted a notification with details of the proposed shipments and received confirmation that the receiving country and any transit countries have approved the export. See 42 U.S.C. § 6938(a). Where an international agreement exists addressing notice, export, and enforcement procedures for the transportation, treatment, storage, and disposal of hazardous wastes, U.S. law allows exports in compliance with such an agreement. See 42 U.S.C. § 6938(a)(2) and (f). In addition, U.S. Department of Transportation hazardous materials regulations have been harmonized with international recommendations on transport of dangerous goods. See 49 C.F.R. Part 172.

#### **Article 12: Contaminated Sites**

The United States has a well-developed framework for identifying, priority-ranking, and remediating abandoned contaminated sites. See 40 C.F.R. Part 300. Regulations under the Comprehensive Environmental Response, Compensation, and Liability Act include detailed guidance for conducting site-specific risk assessments and remediation techniques. In addition, the Resource Conservation and Recovery Act requires owners and operators of facilities managing hazardous waste to clean up any site contamination resulting from current and past practices.

Technical guidance is available on contaminated site assessment, risk assessment, and remediation methods. See <http://www.epa.gov/superfund/policy/index.htm>. In particular, site remediation guidance provides for the first activity after identification of a potentially contaminated site to be a preliminary assessment and site inspection. This process identifies whether there are hazardous substance releases from the site requiring immediate or short term response actions. An emergency response is performed in those instances where there are immediate dangers to human health and the environment. Where an emergency response is not needed, the site may be evaluated for cleanup priority based on site data and the Hazard Ranking System. Once the site cleanup begins, a series of steps to fully assess the site, identify and select appropriate cleanup methods, and implement the site cleanup are performed.

#### **Article 13: Financial Resources and Mechanism**

The United States has been one of the largest donors to the Global Environmental Facility and a permanent member of its governing Council and expects to continue to support the Global Environmental Facility as well as other mercury-related programs through multilateral and bilateral entities that provide financial assistance.

#### **Article 14: Capacity-building, technical assistance and technology transfer**

The United States has provided and expects to continue to provide technical assistance on mercury-related issues through a variety of bilateral and multilateral aid, assistance, and cooperation mechanisms, including programs administered by the U.S. Agency for International Development and the Environmental Protection Agency as well as work through the UNEP Global Mercury Partnership. The United States has supported work under the Partnership through both financial and in-kind contributions.

#### **Article 16: Health aspects**

In the United States, the Centers for Disease Control and Prevention conduct research to provide estimates of U.S. population exposures to mercury and define safe levels of mercury in blood through its National Report on Human Exposure to Environmental Chemicals. The Environmental Protection Agency provides health information on its mercury website. The Environmental Protection Agency and the Food and Drug Administration provide consumer advice on consumption of fish and shellfish. The Occupational Safety and Health Administration regulates occupational exposure to mercury and mercury compounds in its standards, directives and guidelines to establish work-place requirements for minimizing occupational exposure to mercury and mercury compounds, *see, e.g.*, 29 C.F.R. § 1910.1000, and has provided information to the general public about this topic on its website. *See* Safety and Health Topics: Mercury at [www.osha.gov](http://www.osha.gov). And the Agency for Toxic Substances and Disease Registry maintains a toxicological profile on mercury, which includes the examination, summary, and interpretation of available toxicologic information and epidemiologic evaluations on mercury, specifically relating to human exposure to mercury and mercury compounds, and setting targets for mercury exposure reduction. The Agency for Toxic Substances and Disease Registry also develops and disseminates medical management guidelines to aid healthcare professionals involved in emergency response to effectively decontaminate patients, protect themselves and others from contamination, communicate with other involved personnel, efficiently transport patients to a medical facility, and provide competent medical evaluation and treatment to exposed persons.

#### **Article 17: Information exchange**

The United States makes extensive information available on government websites, through direct sharing, and through entities such as the UNEP Global Mercury Partnership. For example, the Environmental Protection Agency has a specific web page dedicated to mercury ([www.epa.gov/mercury](http://www.epa.gov/mercury)) that includes the types of information referenced in this Article as well as links to other governmental and non-governmental information sources. The United States has numerous statutes that authorize information exchange, including the Clean Air Act, 42 U.S.C. § 7403, the Clean Water Act, 33 U.S.C. § 1254, the Toxic Substances Control Act, 15 U.S.C. § 2609, the Resource Conservation and Recovery Act, 42 U.S.C. § 6981, the Comprehensive Environmental Response, Liability, and Compensation Act, 42 U.S.C. §§ 9604(e) and 9660, and the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. §§ 136o and 136r.

#### **Article 18: Public information, awareness and education**

The Environmental Protection Agency web site described above promotes public awareness of the health and environmental effects of mercury and its compounds. In addition, the Environmental Protection Agency, through its engagement with the UNEP Global Mercury Partnership and related bilateral activities, contributes to education, training, and public awareness efforts around the world. Other agencies of the U.S. Government such as the Agency for Toxic Substances and Disease Registry, the Food and Drug Administration, the Occupational Safety and Health Administration, the National Oceanic and Atmospheric Administration, the Fish and Wildlife Service, the National Park Service, the U.S. Geological Survey, and the National Institute of Standards and Technology also provide relevant information to the public.

The United States has an existing pollutant release and transfer register, the Toxics Release Inventory, that collects and makes publicly available information on the releases, emissions, disposal, and other transfers of mercury and mercury

compounds. See 42 U.S.C. § 11023. Toxics Release Inventory information and mapping capability are publicly accessible at [www.epa.gov/triexplorer](http://www.epa.gov/triexplorer). In addition, the United States uses other mechanisms, such as the National Emissions Inventory and reports under the Clean Water Act and Comprehensive Environmental Response, Compensation, and Liability Act to collect and disseminate information on releases and emissions of mercury. See, e.g., 42 U.S.C. §§ 9602, 9603; 40 C.F.R. § 302.6.

**Article 19: Research, development and monitoring**

In addition to programs described above, relevant information in the United States is collected and disseminated by federal agencies such as the National Oceanic and Atmospheric Administration, the Department of Health and Human Services, the Food and Drug Administration, the Centers for Disease Control and Prevention, the Fish and Wildlife Service, the National Park Service, the Department of Energy, the International Trade Commission, and the U.S. Geological Survey.