

It will take an international solution to curb the world's mercury pollution problem—and the process for creating the solution has now begun.

Mercury is a toxic metal harmful both to human health and the environment. In humans, it particularly targets the developing nervous system and hence is very dangerous to the fetus and young children. Mercury is also harmful to ecosystems and wildlife populations. Mercury pollution has no respect for national or regional boundaries. It travels long distances through the atmosphere and can deposit both near and far from its original source of emission. Once deposited, it transforms and travels up the food chain, contaminating fish, birds, and marine mammals, including animals that are important global food sources. Even the Arctic, which has no sources of mercury pollution, is experiencing dangerous levels of contamination in its marine mammals and other species that are part of the food supply. Consumption of mercury-contaminated fish and other marine food sources places billions of people, especially women of childbearing age and children, at risk of mercury poisoning.

An International Approach for an International Problem

In February 2009, the United Nations Environment Program (UNEP) Governing Council agreed to convene an Intergovernmental Negotiating Committee (INC) to develop a global treaty to reduce mercury pollution, with a deadline of 2013 to complete its work. The first INC is in June 2010; this will be the first of five meetings scheduled to negotiate the details of the international agreement. People around the world look to the INC to develop a comprehensive and ambitious treaty that will rapidly decrease mercury pollution from all man-made sources and dramatically reduce the risk from this toxic metal in our environment and from the food we eat.

What are the sources of mercury pollution that must be addressed in the treaty?

Coal-fired power plants and industrial boilers are the largest sources of mercury pollution globally. Coal naturally contains mercury, and when it is burned, the mercury is released into the air. Similarly, mercury is also emitted as a by-product of metal mining and processing, cement production, and the incineration of mercury-bearing wastes.

Significant mercury pollution also comes from its intentional use in industrial processes. The largest intentional uses are in small scale gold mining, one type of polyvinyl chloride production, and one type



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of chlorine/caustic soda (chlor-alkali) production. Other significant uses include the manufacture of various products such as switches and relays, batteries, measuring devices (thermometers, blood pressure cuffs, barometers and others), and mercury containing lights, among other products and some pharmaceuticals. These intentional uses are facilitated by the unrestricted trade of mercury, typically from the industrialized to the developing world, resulting in greater mercury exposures to vulnerable populations.

What are the Solutions?

The mercury treaty should include binding measures to reduce the supply of mercury, its intentional use in products and processes, and releases of mercury from burning or heating materials that contain mercury impurities, such as coal or mercury containing wastes. Additionally, mercury that is already in circulation should be placed in safe, long-term storage facilities.

No time to waste

While the treaty discussions are underway, governments and others are already taking action to reduce important sources of global mercury pollution:

- The E.U. enacted a ban on the export of mercury into global trade beginning in March 2011, and a similar ban in the U.S. will take effect in 2013. These steps will reduce the global supply of mercury in trade by an estimated 40% or more. We urge other governments, such as Japan, to take similar action without waiting for the treaty to be finalized.
- Several countries, including those in the E.U. and some states in the U.S., have already restricted the use of mercury in products. In the last several years, a growing number of countries (e.g., India, Philippines, and Argentina) are requiring the purchase of non-mercury health care measuring devices. There is no reason to wait for a treaty; other governments should take similar action now.
- Spain and Algeria have already closed two of the three mercury mines operating for export. Efforts are underway to close the third mine in Kyrgyzstan by providing alternative development and employment to the region. The International Council on Mining and Metals, an association of the world's leading mining companies, has already committed publicly to not open any new mercury mines.
- UNEP has created the Mercury Partnership Programme, through which governments, industry, NGOs and other stakeholders are already collaborating on other voluntary actions to reduce mercury from a range of sources.

http://www.chem.unep.ch/mercury/partnerships/new_partnership.htm

Ratchet down the supply and demand of metallic mercury.

Mercury is a commodity metal used in a number of commercial products and industrial processes for which comparable or better non-mercury alternatives are already available. Where these alternatives are available, the treaty should reduce the demand for mercury in products and processes through clear, time-defined phase outs of these uses.

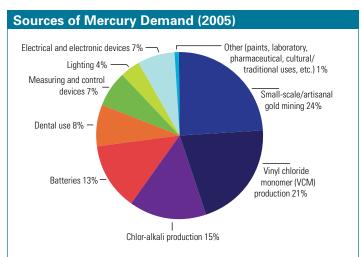
At the same time, the amount of mercury commercially available to supply such uses should be restricted, through the phase out of mercury mining and restrictions on the global trade in mercury. The reduction in supply will increase the price and ready availability of mercury and thus foster the transition to mercury-free technologies, products and processes. Excess elemental mercury already in circulation must be taken out of commerce and placed in safe, long-term storage and disposal repositories where it will not threaten either human health or the environment anywhere in the world.

Control of mercury atmospheric emissions from priority sources.

The treaty should require strict controls on mercury emissions from these sources with appropriate air pollution control devices, including mercury-specific capture devices where necessary. Similar measures should also be required for ore processing facilities emitting significant quantities of mercury.

How can we be sure these measures are working?

Effective implementation of the treaty will rely on accurate and verifiable data on the phase out of uses, reductions in emissions, and appropriate management of elemental mercury and mercury containing waste. Routine monitoring of our natural environment, including regular monitoring of fish and marine mammals, will be needed to demonstrate that the provisions of the treaty are working and achieving the ultimate goal of reducing risks to our health and environment.



Based on: United Nations Environment Programme Chemicals Branch, DTIE, Summary Of Supply, Trade And Demand Information On Mercury, Requested by UNEP Governing Council decision 23/9 IV, November 2006, Table 2.

