

IPEN Views on a Global Mercury Treaty **- A Working Document -**

Mercury is a toxic substance of global concern that causes significant harm to human health and ecosystems. When mercury is released to the environment, it travels with air currents and then falls back to earth, sometimes nearby the original source and sometimes very far away. Mercury can drain from soils to streams, rivers, lakes and oceans and it can also be transported by ocean currents and migratory species.

When mercury enters the aquatic environment, it is transformed by micro-organisms into a more toxic form, methylmercury. In this form, mercury enters the food chain and accumulates and bio-magnifies in aquatic organisms including fish and shellfish, and also in the birds, mammals and people who eat them. In some fish species, concentrations of methylmercury can be up to a million times greater than what is present in the water that the fish inhabit.¹

While as much as one-third of the mercury that enters the global environment comes from natural sources such as volcanoes, two-thirds comes from human activities.² Moreover, since the start of the industrial era, the total amount of mercury circulating in the world's atmosphere, soils, lakes, streams and oceans has increased by a factor of between two and four.³ These unnaturally high levels of mercury in the environment disrupt ecosystems and cause significant injury to human health in all regions of the world.

Mercury, especially when it is in the form of methylmercury, is highly toxic to humans. Human embryos, fetuses, infants, and children are particularly vulnerable because mercury interferes with neurological development. When a pregnant woman or a woman of reproductive age eats food contaminated with methyl mercury, the toxic contaminant crosses the placental barrier and exposes the fetus. Studies indicate that concentrations of methyl mercury in the fetus are higher than those in the mother.⁴ Mercury is additionally present in human breast milk which exposes the infant early in life. Children who eat mercury contaminated foods during their early years are also affected.

Methyl mercury adversely affects the baby's growing brain and nervous system. This exposure can diminish the child's cognitive and thinking abilities, memory, attention,

¹ Health Canada: http://www.hc-sc.gc.ca/ewh-semt/pubs/contaminants/mercur/q47-q56_e.html

² U.S EPA http://www.epa.gov/mercury/control_emissions/global.htm

³ Health Canada: http://www.hc-sc.gc.ca/ewh-semt/pubs/contaminants/mercur/q1-q6_e.html

⁴ Stern AH, Smith AE (2003). An assessment of the cord blood: maternal blood methyl mercury ratio: implications for risk assessment. *Environ Health Perspect.* 111(12):1465-70.

language acquisition, fine motor skills and visual spatial skills.⁵ The human populations most affected by mercury exposure are often the poor and the most vulnerable.

Mercury is released to the environment from mercury-containing products, industrial processes, mining activities, combustion, wastes and other sources. Products that contain mercury are still widely produced and traded globally, but substitutes and alternatives are available for most of them including thermometers, blood pressure measuring devices, barometers, batteries, electrical switches and many types of electronic equipment. Cost-effective substitutes are not yet available for some other mercury-containing products such as fluorescent light bulbs, but there are opportunities to significantly reduce mercury releases by better controlling the amount of mercury used and released during their production and by better managing product disposal at the end of their useful life.

Mercury is still used in very large quantities in many industrial processes such as chlor-alkali plants and catalytic processes for which good alternatives exist. Large quantities of mercury are released to the environment from coal-fired power plants, incinerators, cement kilns, crematoria and other combustion facilities and from waste dumps and contaminated sites. Mercury is also used in gold mining, and is used extensively in small scale mines. Mercury is produced as a byproduct in certain metal refining processes. And finally, in some cultures, mercury is used in traditional medicines, religious ceremonies and/or works of art.

With the growth of medical and scientific knowledge about mercury and its significant harmful effects on human health and ecosystems, there is a growing international consensus on the need to take action to minimize and eliminate mercury exposure from anthropogenic sources. However, because mercury travels long distances in the environment, and is traded globally, no country or region acting alone can protect its people and its environment from the harms caused by mercury contamination. Developing countries can be especially impacted because they often lack the capability to control mercury-containing products, mercury surpluses, and mercury wastes that may enter their countries through trade.

An international, legally-binding treaty is therefore needed to develop and implement a fair and equitable global plan of action that can effectively control and minimize mercury releases to the environment, prohibit uncontrolled trade in surplus mercury, and minimize with the aim of eliminating production and trade of mercury-containing products.

The Treaty

The goal of the global mercury treaty should be to protect human health and ecosystems by minimizing with the aim of eliminating anthropogenic sources of mercury and methylmercury. The treaty should minimize mercury releases by controlling industrial

⁵ US EPA: <http://www.epa.gov/mercury/effects.htm>

processes that use and/or release mercury; phasing-out mercury-containing products; properly managing mercury wastes; and curbing mercury supply and trade. It should aim to reduce the total quantity of mercury circulating in the global environment to pre-industrial levels.

To protect human health and ecosystems, the treaty should:

- Have, as its objective, to protect human health and the environment from mercury by eliminating anthropogenic sources and releases of mercury.
- Recognize particularly vulnerable populations such as children, women of child bearing age, indigenous peoples, island dwellers, fisherfolk, the poor, workers, and others.
- Have a broad scope and address the entire mercury life-cycle;
- Aim to control all mercury sources and all human activities that release significant quantities of mercury to the environment;
- Mandate environmentally sound solutions for the management of wastes that contain mercury and mercury compounds including measures to prevent mercury from entering municipal, medical and industrial waste streams;
- Reduce and minimize global commercial demand for mercury;
- Reduce global mercury supply by banning primary mercury mining; mandating permanent, secure, monitored storage for existing mercury stockpiles and all mercury that is recovered from chlor-alkali plants; and establishing an appropriate hierarchy of sources for whatever mercury may remain in commerce;
- Address the remediation and reclamation of existing mercury-contaminated sites;
- Use elimination-based control measures that are subject to limited, time-bound exemptions to phase-out products and processes that contain or use mercury, and in the interim, establish standards and controls for those products and processes that remain;
- Ban mercury-containing pesticides;
- Expedite the phase-out of the use of mercury in the healthcare sector;
- Prohibit new uses of mercury;

- Establish Best Available Techniques (BAT) for combustion processes, including coal-fired power plants and cement kilns, that release mercury to the environment with an agreed schedule for implementation; phase-out these sources when good alternatives are feasible, available and affordable;
- Promote the use of renewable, alternative energy sources as a substitute for coal-fired power plants that release mercury to the environment;
- Institute effective measures to reduce and eliminate the use of mercury in gold mining, especially in small-scale gold mining;
- Promote research and development on mercury-free alternatives with special emphasis on the needs of developing countries and countries with economies in transition;
- Establish an adequately funded financial mechanism that will enable developing countries and countries with economies in transition to fulfill their treaty obligations without compromising their poverty reduction goals;
- Ensure that developing countries and countries with economies in transition do not become dumping grounds for mercury wastes and excess mercury supplies;
- Establish mechanisms for capacity-building and technology transfer;
- Require each Party to establish a National Implementation Plan to protect public health and the environment from mercury; include a national inventory of mercury supplies, sources, wastes and contaminated sites;
- Ensure that civil society has an active role in the development and implementation of the treaty including the opportunity to participate in the development and implementation of National Implementation Plans;
- Establish mechanisms to improve, provide and exchange knowledge and information about:
 - Mercury emissions, supply and use;
 - Human and environmental mercury exposure;
 - Environmental monitoring data;
 - Socio-economic impacts of mercury use, emissions and controls; and
 - Alternatives for mercury uses in products and other sources;
- Ensure that all scientific information about mercury is regularly updated and is made available and easily accessible to the public in a timely manner and in appropriate formats and languages;

- Establish a reporting mechanism that requires each Party to periodically update its national mercury inventory and report on its progress in implementing its National Implementation Plan and treaty obligations;
- Establish a mechanism for evaluating the effectiveness of the treaty including global monitoring of mercury in the environment and in humans;
- Establish effective and enforceable treaty compliance provisions.

Other Considerations

The reduction and elimination of mercury sources should be rapid, orderly, and just. Provisions may be phased-in over a period of time, but there should be no unnecessary delays.

Meaningful international action to reduce and eliminate mercury sources and supply should not be delayed until a global mercury treaty is adopted and enters into force. Rather, adequately funded international mercury control programs should be carried out starting immediately. There should also be resources for extensive environmental monitoring in all regions to establish a baseline and to expand the availability of regionally-relevant information.

Because mercury is a global problem that impacts all regions of the world, all countries have important roles to play in both the negotiation and the implementation of a global mercury treaty.

The mercury treaty and its implementation should be complementary to other relevant international instruments including the Stockholm Convention on Persistent Organic Pollutants; the Basel Convention on Transboundary Movements of Hazardous Wastes; the Rotterdam Convention on Prior Informed Consent; and others. Appropriate synergies with these treaties should be developed.

The mercury treaty should include provisions that will enable it to be expanded at a future date to also control other toxic metals such as lead and cadmium, or other pollutants of similar global concern.

Donor countries should commit to providing sufficient new and additional financial resources and technological assistance to enable developing countries and countries with economies to fulfill their treaty obligations.

The treaty negotiating process should be open and transparent. Provisions should be made to enable meaningful participation by relevant NGOs and other public interest stakeholders.

Mercury-related phase-out transitions should proceed through a planned and orderly regime that is designed to keep economic and social costs to a minimum and to avoid disruptions and dislocations. In some cases, there may be need for transition assistance and/or other aid to specific groups of workers or communities who currently depend for their livelihood on activities that release mercury to the environment.

Wherever possible, the responsibility for mercury-related phase-outs and clean-ups should be consistent with the Polluter Pays Principle where costs are shared by responsible parties with special attention to the private sector.

Action on mercury should be consistent with the Precautionary Principle. It should rely on a weight-of-evidence approach with special consideration given to the risks to fetuses, children, and other vulnerable populations.

The treaty should incorporate other relevant Rio Principles including: Right to Development (3); Environmental Protection in the Development Process (4); Eradication of Poverty (5); Priority for the Least Developed (6) Capacity Building for Sustainable Development (9); Public Participation (10); Compensation for Victims of Pollution and other Environmental Damage (13); State Cooperation to Prevent Environmental Dumping (14); Internalization of Environmental Costs (16); Women have a Vital Role (20); Indigenous Peoples have a Vital Role (22); and others.

Monitoring and oversight of treaty implementation and financing should be conducted by independent bodies that are publically accountable.

Regional specialized centres and a network of specialized facilities should be set up to provide assistance in the collection and management of mercury-containing wastes. There should be a ban on the disposal of these wastes in landfills and solid waste dumps. A uniform system should be established for registering and reporting on their collection, transportation and processing.

A clearing-house mechanism for mercury should be established. It should provide direct access to relevant information about mercury including: practical experiences, scientific and technical information; and other information that can help facilitate effective scientific, technical and financial cooperation and capacity-building. Civil society groups should be considered partners and an important source of information for the clearing-house.

The treaty should give special attention to the needs of small-scale artisanal gold miners. It should facilitate their access to effective and appropriate technologies that minimize or

avoid the use of mercury. Where that proves to be impractical, the treaty should promote the establishment of programs to assist them in securing alternative livelihoods.

The treaty should include provisions to enable and promote the effective participation of public interest, health and environmental stakeholders in treaty implementation.

The treaty should have provisions on public information, awareness and education, especially for women, children, Indigenous Peoples, Islanders who depend on deep sea fish, Fisher Folk, poor people, marginal people and the least educated. New research should be supported, as needed, to expand knowledge about sources of mercury and about the transport mechanisms that carry mercury to remote locations. The public should receive timely access to relevant governmental and private sector data on mercury hazards, mercury sources, and alternatives to mercury-containing products.

A mechanism should be established to identify, manage and remediate mercury contaminated sites. This may include appropriate compensation for affected workers and communities.

Sensitive testing technologies and methodologies should be made readily available for identifying mercury contamination of environmental media, food, and people.

IPEN Engagement in the Intergovernmental Negotiating Process

IPEN will participate in the Treaty process and its subsequent implementation. In order to help IPEN address issues relating to mercury and lead, IPEN has established a Heavy Metals Working Group (HMWG). The IPEN HMWG will support the network's effective participation in the mercury treaty negotiations and also in treaty implementation after it enters into force. All IPEN Participating Organizations (POs) with an interest in global mercury treaty negotiations are encouraged to join the IPEN HMWG and contribute to its work.

During the negotiations, IPEN will:

- Facilitate the active engagement of its POs in the negotiating process and maintain close, cooperative working relations with other relevant international NGOs and NGO networks including the Zero Mercury Working Group, Health Care Without Harm, the Basel Action Network, the Global Alliance for Incinerator Alternatives; the International Society of Doctors for the environment, and others.
- Develop IPEN policy positions relating to the mercury negotiations and build understanding and support for those policies among NGOs and organizations of civil society in all regions;

- Develop strategies and resources to promote and enable mercury-related activities in all regions;
- Promote efforts to educate and engage the general public in all regions about the toxic threats posed by mercury and about the importance of a mercury treaty with the aim of building international civil society support for an effective mercury treaty;
- Facilitate strategic, on-the-ground, NGO mercury-related activities and the collection of information that supports global IPEN interventions in the global negotiating process;
- Facilitate dialog in all regions between NGOs and representatives of their governments aimed at securing international support for a strong and effective mercury treaty;
- Cooperate with other NGOs, academics, and others with common goals;
- Work to expand and build the base for a diverse and informed global NGO and civil society coalition;
- Work to secure consensus agreements on major issues both within IPEN and also with the Zero Mercury Working Group, Health Care Without Harm; the Basel Action Network and other engaged NGOs and academics;
- Secure NGO endorsements of both the *IPEN Toxics-Free Future Declaration* and *IPEN Views on a Global Mercury Treaty*; and
- Continue to build and strengthen IPEN.

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