

US EPA ARCHIVE DOCUMENT

Risk Management Strategy for Mercury-Containing Products

Edwina Lopes

Environmental Protection Operations Division – Ontario

GLBTS Mercury Working Group Meeting

Chicago, IL

December 12, 2007



Purpose

To provide information on the *Risk Management Strategy for Mercury-containing Products*; a model approach for the management of toxic substances in products complementary to Canada's Chemicals Management Plan.



Managing the risks of mercury use in consumer products is a global concern

International jurisdictions are prohibiting or limiting the use of mercury in products.

- *The UNEP Governing Council has concluded that all governments should take prompt action to reduce mercury releases to the environment.*
- *The US Federal Roadmap for Mercury establishes the goal of reducing risks associated with mercury by promoting the reduction of mercury in products.*
- *The EU Mercury Strategy sets out a number of objectives including controls on exports and products. A number of EU Directives are currently in place which prohibit or limit the use of mercury in products.*
- *In recent years numerous US and Nordic States have prohibited, phased-out or placed content limits on mercury-containing products.*



Canada actively participates in international mercury management initiatives...

Canada plays a leadership role in the development and implementation of international mercury management initiatives including:

- *The Aarhus (Heavy Metals) Protocol under the United Nations Economic Commission for Europe Convention on Long-range Transboundary Air Pollution*
- *The Arctic Council*
- *The Great Lakes Binational Toxics Strategy*
- *The North American Regional Action Plan on Mercury*
- *Various national and bilateral monitoring programs*

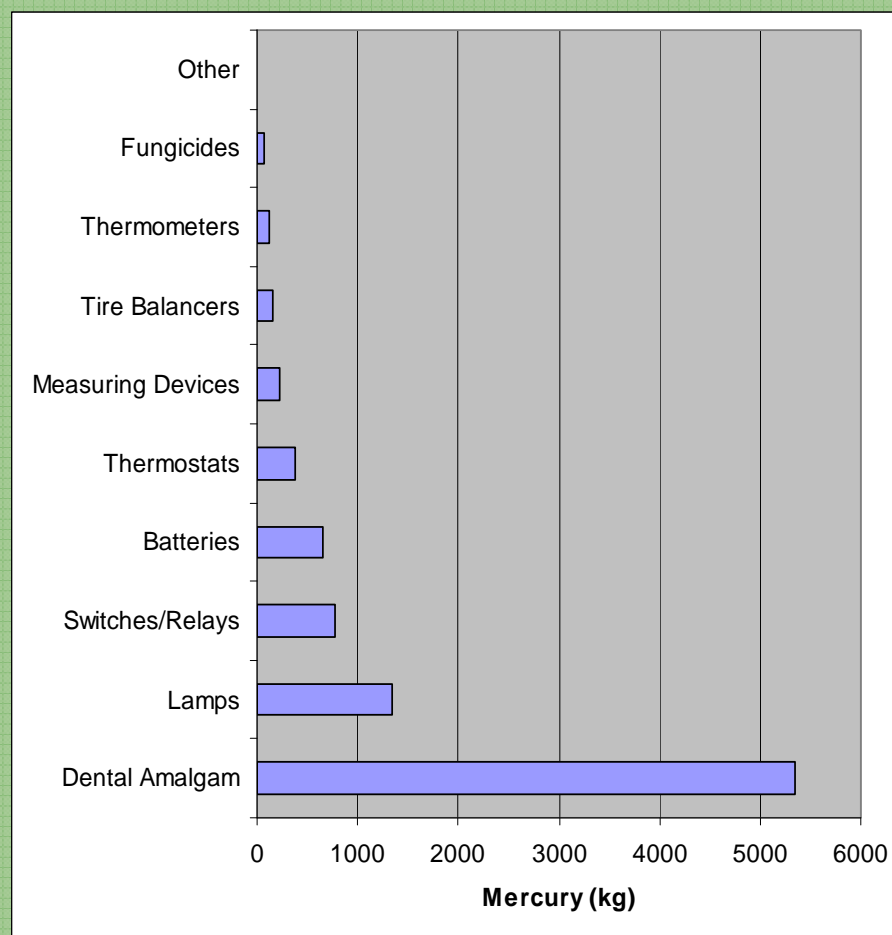


...however domestic mercury use continues in many products.

Approximately 10 tonnes of mercury was used in products in Canada in 2003 (mainly imports).

Mercury-free alternatives are commercially available for all products.

New mercury-containing products have been introduced to the Canadian market as recently as 2000 (Tire Balancers).



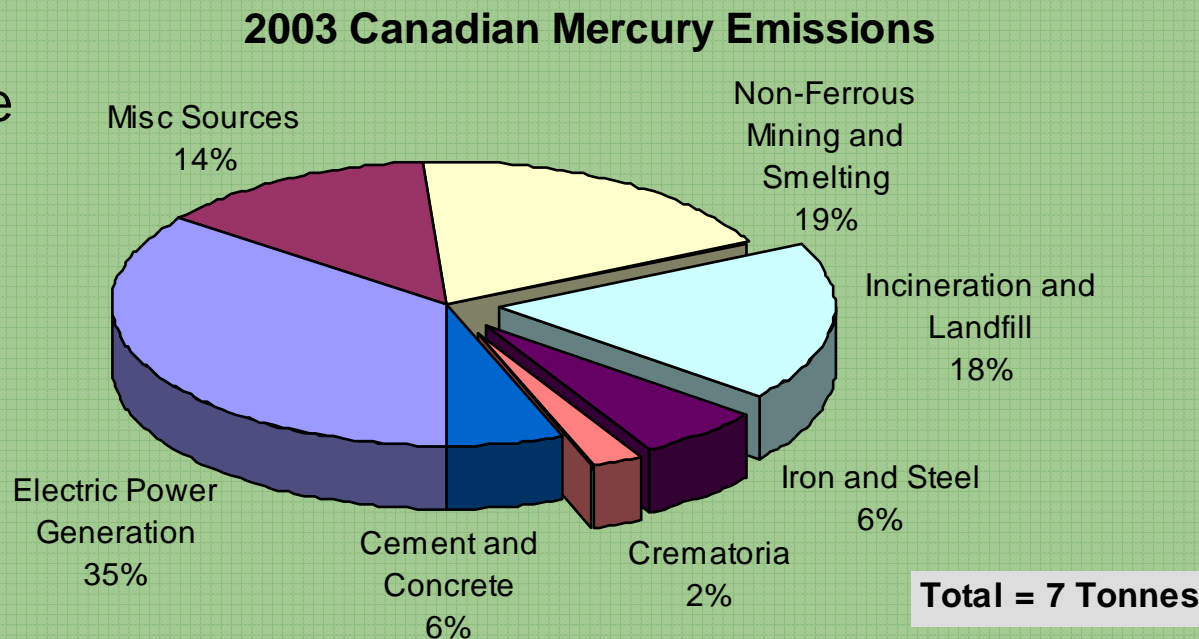
While some mercury management measures exist for products in Canada, gaps remain

Product Measure	Target	Progress
Canada-wide Standard for Mercury-Containing Lamps	A 70% reduction by 2005 and an 80% reduction by 2010 in the average content of mercury in all mercury-containing lamps sold in Canada.	Domestic manufacturers have voluntarily met 2005 targets. However, 80% of lamps sold in Canada are imported from the U.S., Europe and Asia.
Canada-wide Standard on Mercury for Dental Amalgam Waste	All dental offices install separators to achieve a 95% mercury release reduction from dental amalgam waste discharges by 2005 and implement best management practices.	As of 2003, 27% of dental practices had certified amalgam separators installed. A CCME survey, with support from EC, is planned for this fiscal year to assess effectiveness of the CWS.
Voluntary Producer Action on Batteries	Canadian Household Battery Association (CHBA) members voluntarily stopped adding mercury to batteries in 1996.	CHBA members are subject to U.S. Battery Act mercury limits in the U.S. market. Mercury-containing button cell, alkaline and mercuric oxide batteries continue to be imported from other countries where no regulations exist.
Regulation of mercury containing pesticides under the Pest Control Products Act.	Prohibition of mercurial fungicides.	The sale of mercurial fungicides was discontinued in 1995.



Emission inventory estimates only reflect the fate of a fraction of mercury from products

Products in circulation in Canada will continue to release mercury through breakage in homes and landfills as well as incineration long after the end of their useful life.



A study to evaluate the quantity of mercury in products already in circulation and to examine the ultimate fate of mercury from products used in Canada is underway.



Risk management process to date

Our Risk Management Objective is to reduce mercury releases to the environment from new and end-of-life consumer products to the lowest possible level.

- *Technical and Socio-Economic Studies have been completed.*
- *A Qualitative Screening of Management Tools was completed with input from our risk management team.*
- *A draft of the Jurisdictional Scan for Mercury-Containing Products was completed by ToxEcology Environmental Consulting Ltd in December 2006 and is now being reviewed and has revealed that there are several key global trends in the risk management of mercury-containing products.*

Key global trends in the management of mercury-containing products

- Increasing use of mandatory tools, less use of voluntary approaches.
- Increasing use of comprehensive mercury action plans that target each stage of the product lifecycle.
- More recently overall prohibitions on mercury-containing products (with specified exemptions in some cases) being introduced, rather than individual prohibitions for specific products.
- Some jurisdictions are now introducing prohibitions (phase-in) on products that were previously exempt.
- More emphasis on taking mercury out of global circulation via export bans and long-term retirement.
- More emphasis on co-ordinated global action.

Risk Management Team reached consensus that a CEPA 1999 instrument is required

The Risk Management Strategy identifies instruments that can be used to achieve the risk management objective.

Further analysis and dialogue with stakeholders, including other government departments and provinces, will be required to determine the instrument mix with the best cost-benefit.

Selected Instrument/Tool	Components of Instrument/Tool
Regulation <i>Primary CEPA 1999 Instrument under section 93</i>	Prohibition of mercury use in products for which mercury-free alternatives exist. Prohibition of mercury use in new products with possible exemptions.
	Limit mercury content to best available technology limits in products for which mercury-free alternatives do not exist.
	Extended producer responsibility for end of life mercury-containing components.
	Labeling requirements for all mercury-containing products.
Pollution Prevention Plan <i>Complementary CEPA 1999 Instrument</i>	Addressing reservoir issues with specific product types (i.e. Pollution Prevention Plan for autoswitches).
Codes Of Practice <i>Complementary CEPA 1999 Instrument</i>	Addressing disposal issues related to specific product types.
Long-term Storage <i>Complementary CEPA 1999 Instrument</i>	Addressing ultimate fate of mercury removed from products.
Inventory of Mercury-Containing Products <i>Complementary CEPA 1999 Instrument</i>	Information provision for compliance monitoring and promotion.

Next Steps

- Consultations
 - *Face-to-face consultations with stakeholders will be held in February 2008.*
 - *Comments received during the 90-day comment period (ended March 31, 2007).*
- Development and Implementation of Instrument
 - *Lessons learned will inform broader chemical management approach to Products.*

