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# Proposed Risk Management Instruments for Mercury- Containing Products

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# Mercury

- Is on the Canadian Environmental Protection Act, 1999 (CEPA, 1999) List of Toxic Substances
- Is a transboundary pollutant
- Is bioaccumulative
- Has impacts on wildlife & human health
- Responsible for 98% of fish consumption advisories for Canadian water bodies



# CEPA and Related Mercury Initiatives to Date

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- CEPA
  - Chlor-Alkali Mercury Release Regulations
  - Environmental Code of Practice for Non-Integrated Steel Mills
  - Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations
  - Export Control List Notification Regulations
  - Disposal at Sea Regulations
  - Pollution Prevention Plans for Base Metals Smelters and Refineries and Zinc Plants
  - Environmental Emergency Regulations
  - Environmental Code of Practice for Integrated Steel Mills
  - Environmental Code of Practice for Non-Integrated Steel Mills
  - Pollution Prevention Plan for Mercury Switches in End of Life Vehicles Processed by Steel Mills
  - National Pollutant Release Inventory
- Canada-wide Standards under Part 1 of CEPA
  - Mercury-Containing Lamps
  - Mercury Emissions (base metal smelting and incineration)
  - Dental Amalgam Waste
  - Coal-fired Electric Power Generation Plants
- CEPA - Related
  - Memorandum of Understanding between Environment Canada and The Canadian Dental Association



# Risk Management Process to Date

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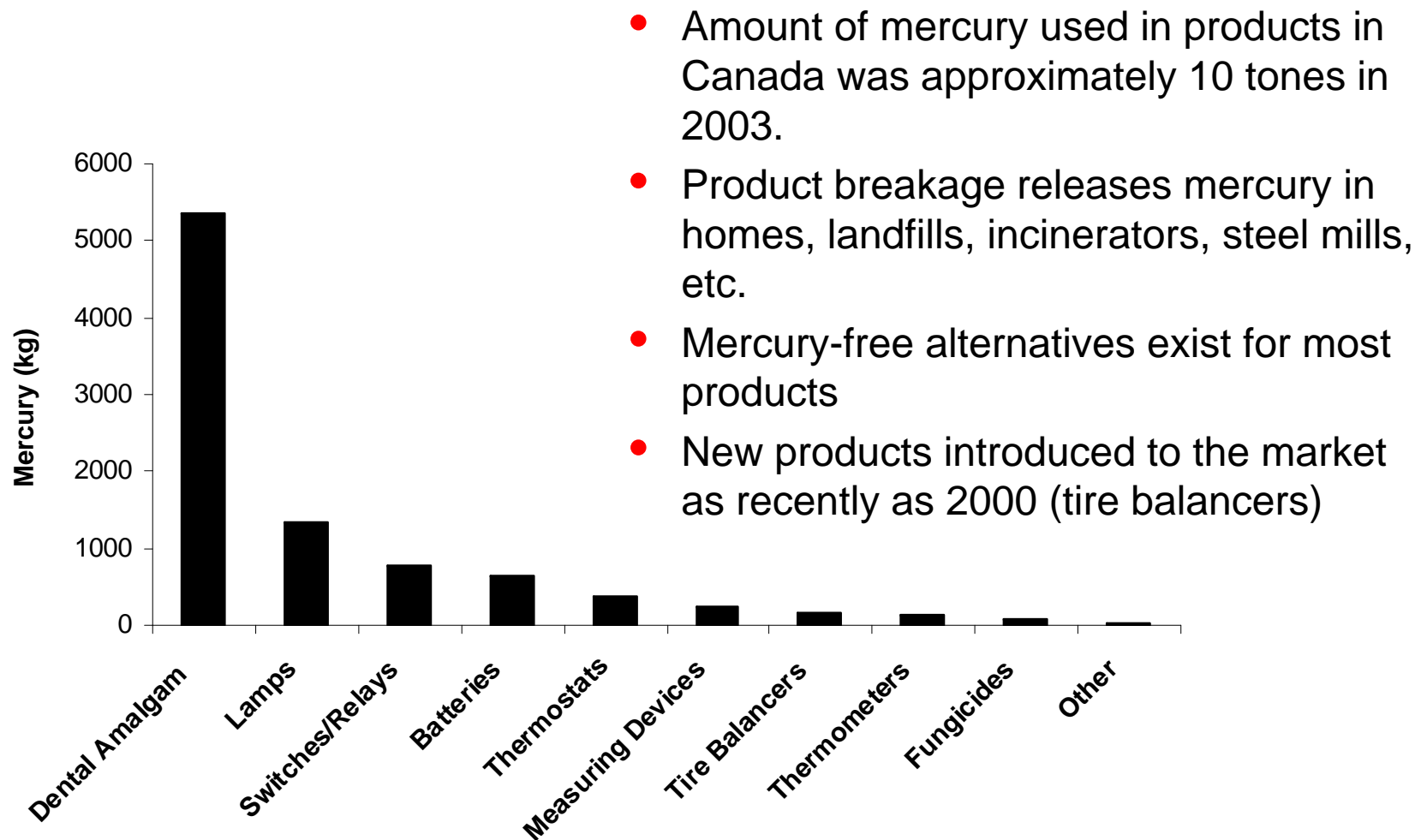
- A Risk Management Strategy (RMS) was published in December, 2006.
- The Risk Management Objective of the RMS is to:
  - reduce mercury releases to the environment from new and end-of-life consumer products to the lowest possible level
- A discussion document on Proposed Risk Management Instruments (RMI) for Mercury-Containing Products was published in December, 2007.
  - two consultation sessions were held in February 2008
  - input was received from 26 stakeholders and response to comments will be published in June 2008
- The discussion document recommends an instrument under section 93 of CEPA to attain objectives that should have provisions for:
  - prohibiting or limiting mercury use in products
  - controlling imports or exports
  - setting labelling requirements
  - preventing releases from end-of-life mercury-containing products

# Proposed RMI – General Information

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- Prohibition of Consumer Products Containing Mercury
  - Environment Canada's proposed regulation will prohibit the import, manufacture and sale of **all** mercury-containing products with the exception of dental amalgam and lamps.
- Exemptions will be considered and evaluated on:
  - Product purpose (i.e. critical use vs. novelty)
  - Availability of alternatives
  - Potential risk for human health and the environment
  - End-of-life management practices
- Exempted products will be required to establish:
  - Labelling
  - Reporting
  - End-of-life management practices.

# Mercury Use in Products Continues



# Mercury containing products – Summary Table

Products	Prohibition	Qty. used	Altern.*
• Batteries	Yes	<ul style="list-style-type: none"> <li>• 500 kg (but. cell) (2004)</li> <li>• 380 kg (merc. ox.) (2003)</li> </ul>	Yes
• Thermometers & other measuring dev.	Yes	• 350 kg (2003)	Yes
• Switches and Relays	Yes	• 772 kg (2003)	Yes
• Thermostats	Yes	• 880 kg (2003)	Yes
• Tire balancing products	Yes	• 744 kg (2000 – 2004)	Yes
• Lamps	No	• 1839 kg (2003)	No
• Dental amalgams	No	• 5352 kg (2004)	No

\* Comparable alternative





# Proposed RMI – Reporting

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- Reporting requirements will request submission of information such as:
  - Their name, civic and postal addresses of principal place of business, e-mail address, if any, telephone number and fax number, if any.
  - The name of the mixture or the product containing the mercury, if applicable.
  - The quantity manufactured/imported/sold.
  - The identification of each proposed use of the mercury and the mixture or product containing the toxic substance, if applicable.
  - The annual average concentration, if applicable.
  - The analytical method used to determine the concentration/amount of the toxic substance in the mixture or product, if applicable.

# Proposed RMI – Timing

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- The targeted date for publication in *Canada Gazette, part 1* (CG1) is fall 2008.
- The targeted date for final publication in *Canada Gazette, part 2* (CG2) is winter 2010.
- The targeted date for prohibition is January 1<sup>st</sup>, 2012
  - To allow enough time for replacement products to become available (e.g. button cell batteries)
  - To allow enough lead time for importers and exporters to comply with the regulation.



## Other RMI: P2 Plan for Switches and Relays

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- EC has published a “Final Notice Requiring the Preparation and Implementation of Pollution Prevention Plans in Respect of Mercury Releases from Mercury Switches in End-of-life Vehicles Processed by Steel Mills” in CG1 in December 2007
- It requires vehicle manufacturers and steel mills that process end-of-life vehicles to develop and implement a P2 plans to address mercury releases from switches found in cars.
- Targeted companies must prepare their plan by June 27, 2008 and submit a declaration 30 days later.



## Other Proposed RMI: P2 Plan for Dental Amalgams (1 of 2)

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- Existing Risk Management Measures:
  - A Canada Wide Standard (CWS) on Mercury for Dental Amalgam waste which is supported by a Memorandum of Understanding (MOU) between Environment Canada and the Canadian Dental Association was signed in 2002.
  - Target: 95% mercury release reduction through installation of certified amalgam separators by 2005 and implement best management practices (BMPs).
- Status in 2007: 70% of dentists had certified amalgam separators installed. It is estimated that 452 kg of mercury is released in the environment.



## Other Proposed RMI: P2 Plan for Dental Amalgams (2 of 2)

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- Since the target has not been achieved, EC is taking action, using pollution prevention planning.
- Targets persons who own or operate a dental office who have not met the risk management objective by the date of publication
- Preliminary consultations with the CDA were held in February 2008
- Environment Canada expect to publish a working document in June 2008, followed by first publication in CG1 during Fall 2008 and a Final Notice requiring the preparation and implementation of pollution prevention plans in 2009.

# End-of-life Management

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- The management of hazardous waste and hazardous recyclable material within Canada is a shared responsibility; all orders of government have a role to play.
- Environment Canada recommends the recycling of mercury recovered from end-of-life products.
  - Recycling discourages the mining of new mercury
- Environment Canada is evaluating options for the safe end-of-life management to recover and properly dispose of end-of-life mercury products
  - Potential end of life management programs will include requirements for importers and manufacturers of mercury-containing products to participate in the development and implementation of programs to recover and safely dispose of end of life products.
- Environment Canada will recommend a forum for discussion with provinces and territories.
- A document establishing the current state of mercury recycling in Canada will be produced in September, as a starting point for discussion.

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# QUESTIONS ?



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