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# CCME

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Canadian Council of Ministers  
of the Environment    Le Conseil canadien  
des ministres de l'environnement

## **Focus on environmental sustainability will increase Canada's competitiveness**

**Halifax, June 27, 2005** – Federal, provincial and territorial environment ministers released a draft statement on environmental sustainability today aimed at enhancing the health and well-being of Canadians, conserving and protecting the environment, and improving Canada's long-term competitiveness through intergovernmental cooperation.

"We are committed to work towards a shared vision of national outcomes in Canada through collaboration and equal partnerships among governments," said Nova Scotia Environment Minister Kerry Morash, who chaired the meeting of the Canadian Council of Ministers of the Environment (CCME). "We also recognize that all Canadians share responsibility for protecting the environment," he said.

The statement, supported by initiatives in a number of specific areas, will form a new framework for collaborative actions by governments on environmental sustainability. Governments will increase their efficiency and effectiveness by recognizing each other's jurisdictions, by collaborating to achieve shared outcomes, and streamlining approaches for Canadians. The statement is expected to receive final approval at the fall 2005 CCME meeting.

Ministers identified three priority areas where increased collaboration will lead to concrete results. They are Science/Technology & Research; Monitoring, Modelling and Information Management; and Streamlined Regulatory, Compliance Promotion, and Enforcement. Ministers emphasized the need to focus on human health considerations, and will undertake initiatives and cooperate in all of these areas.

As mercury has been linked to many health problems in both children and adults, ministers accepted in principle a draft Canada-wide standard (CWS) that would significantly reduce mercury emissions from the coal-fired electric power generation (EPG) sector. The draft CWS would reduce mercury emissions from coal-fired EPG plants by 58% from 2003-04 levels by 2010.

Governments will conduct public consultations on the draft standard as appropriate. Ministers anticipate final endorsement of the CWS at their fall 2005 meeting.

Ministers received a report on progress in achieving existing CWSs for mercury emissions (from hazardous waste, sewage sludge, municipal waste, medical waste incineration and base metal smelting), mercury-containing lamps, and mercury for dental amalgam waste. Significant reductions in mercury releases to the environment have been made in many of these sectors.

Ministers received a presentation on climate change adaptation. They agreed to take on a championship role on adapting to the effects of climate change, which are already being felt throughout Canada. They also committed to work together as Canada prepares for the upcoming United Nations Climate Change Conference 2005 -- Montreal, which will be held from November 28 to December 9, 2005.

Minister Morash will also chair the next meeting of the CCME in Nova Scotia in the Fall.

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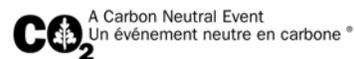
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The following information is also available:

- Draft Commitment Statement on Environmental Sustainability in Canada
- Backgrounder on Initial Areas for Action towards Environmental Sustainability
- Draft Canada-wide standard on mercury emissions from coal-fired electric power generation plants
- Backgrounder on Canada-wide standards for mercury emissions

CCME is the major intergovernmental environment ministers' forum in Canada for discussion and joint action on environmental issues of national and international concern. The CCME Business Plan and a progress report on three existing mercury CWSs are available on the CCME website at [www.ccme.ca](http://www.ccme.ca)



**Commitment Statement on  
Environmental Sustainability in Canada  
DRAFT**

In November 2004, the Canadian Council of Ministers of the Environment (CCME) agreed to work towards an environmental sustainability framework for Canada. This commitment statement encapsulates our shared vision of jurisdictions working together towards environmental sustainability. The parties hereby agree as follows:

**WHEREAS** governments agree that attaining the highest level of environmental quality provides a foundation that will enhance the health and well-being of Canadians, conserve and protect Canada's natural environment and advance our long-term competitiveness; and

**WHEREAS** environmental issues respect neither physical nor political boundaries and must be managed in an increasingly complex global arena thereby requiring collaborative actions from government; and

**WHEREAS** federal, provincial and territorial governments each have unique legislative authority enabling them to regulate matters relating to the environment; and

**WHEREAS** effective interjurisdictional cooperation based on collaboration among governments, respect for jurisdiction and consideration of local and regional conditions leads to certainty and predictability of environmental regulation and to environmental sustainability; and

**WHEREAS** all Canadians, individually and collectively, share responsibility for protection of the environment for use by present and future generations and have the right to participate in environmental decision making.

**THEREFORE, governments adopt the following principles to guide progress on environmental sustainability in Canada:**

**Shared Vision** Governments will work towards a shared vision of national outcomes in Canada through collaboration and equal partnerships among governments.

<b>Commitment to Action</b>	Governments will act on environmental matters in their areas of jurisdiction while respecting the jurisdiction of other governments.
<b>Shared Responsibility</b>	Governments will maximize efficiency and effectiveness, by recognizing each other's strengths and by collaborating to achieve shared outcomes.
<b>Consensus Based Decision Making</b>	In defining shared outcomes by consensus, governments will recognize the contributions of all parties, draw on their creativity to define appropriate outcomes, and promote their acceptance of the result.
<b>Flexibility</b>	To achieve the desired outcomes, governments will use place-based approaches that recognize variation in ecosystems, jurisdictions and regions.
<b>Openness, Transparency and Accountability</b>	Governments will be open, transparent, and accountable to their citizens and provide opportunities for effective participation in their environmental decision-making processes.
<b>Informed Decision Making</b>	Government decisions will be informed by science and risk-based approaches and will give consideration to traditional knowledge in order to achieve environmental outcomes.
<b>Continuous Improvement</b>	Governments will continuously improve environmental performance, encourage actions beyond minimal compliance and will lead by example to encourage environmental sustainability.

**THEREFORE, in light of these principles, governments agree to work together, through a strengthened CCME to contribute to the achievement of:**

- a systems approach for environmental management in which jurisdictions collaborate to achieve greater efficiency and effectiveness;
- nationally consistent environmental outcomes that support a high level of environmental quality, improved health and quality of life, and a strong economy;

- streamlined, single-window/single-process regulatory approaches with delivery by the best placed jurisdiction and clearly defined roles and responsibilities;
- the continued development of nationally consistent strategies on emerging environmental issues of national, international and global significance;
- bilateral and/or multilateral agreements to promote environmental cooperation among and within governments;
- a national science agenda focused on shared priorities required to support sound environmental decision making;
- improved international and domestic linkages in the handling of environmental issues and the development of environmental standards;
- increased investment in the development and broader deployment of environmental technologies;
- enhanced public awareness and participation on environmental issues;
- improved sharing of information to ensure sound decisions, accurate predictions and accountability.

## **Backgrounder**

### **Initial Areas for Action towards Environmental Sustainability**

Federal, provincial and territorial environment ministers have identified three initial issues for action under the Commitment Statement on Environmental Sustainability in Canada.

#### **Science Technology and Research**

To align science and the policy development process more closely, jurisdictions will work towards a common set of science objectives. This will involve the establishment of clearly expressed scientific and research priorities of common jurisdictional interest, better collaboration with other science based stakeholder networks and a better alignment of research and technical development with governments' priorities.

Possible outcomes include a coordinated Canada-wide research and information sharing agenda, and better communication and collaboration among scientists, policy makers, stakeholders and the public.

The Forest Research Extension Partnership (FORREX) illustrates the benefits of this kind of collaborative approach, and how people can be empowered to make more informed decisions when knowledge is shared. The non-profit organization was established in 1998 to help people develop science and knowledge-based solutions to complex forest management challenges.

#### **Monitoring, Modelling and Information Management**

Establishing key environmental indicators (benchmarks) and developing appropriate modeling tools to support decision-making is essential to measuring and reporting on the state of the environment. Effective monitoring of environmental parameters is essential to gather the data for measuring progress against these indicators and models. Finally, environmental data gathered should be based on common standards and the information shared for a multitude of potential purposes.

Possible outcomes include the establishment of national environmental quality and sustainability indicators covering biodiversity, air, land and water; predictive and adaptive models to set long-term priorities and support informed decision making; and common sets of standards for environmental data and its management, localized as required. Other possible outcomes include the development of a standardized system of indicators that reflect progress toward environmental sustainability, improved operation of monitoring and information sharing between jurisdictions, and reporting by governments to their publics.

The National Air Pollution Surveillance (NAPS) Network is an example of what can be accomplished when jurisdictions work together. The NAPS Network was established as a joint program of the federal, provincial and territorial governments to monitor and assess the quality of the ambient air in Canadian urban centres. Under NAPS, uniform databases have been created through the deployment of standardized instrumentation and adoption of nationally consistent standards and methodology for instrument operation, calibration materials, station location criteria and quality assurance programs.

### **Streamlined Regulatory Compliance Promotion and Enforcement Regimes**

Today's fast-paced, increasingly complex and competitive world requires a new environmental management approach that reflects the integration of economic, health, and environmental considerations across the public policy spectrum. By working together, governments will be able to develop and implement modernized compliance promotion and regulatory regimes that better reflect the complexity of current business and environmental realities, while continuing to protect the health and well-being of Canadians.

While joint outcomes should be consistent across all governments, roles and responsibilities could be considered on an issue-by-issue, region by region basis, recognizing the need for variability, and taking into consideration the relative capacities and responsibilities of each jurisdiction. A range of mechanisms would be available, with each government making its own decision on how to interact with others to achieve shared outcomes.

Administrative and equivalency agreements to regulate wastewater effluent from the pulp and paper industry illustrate the benefits possible from regulatory streamlining.

Wastewater effluent from the pulp and paper sector is regulated by the federal government and an assortment of provincial acts and regulations. Jurisdictions have worked together to eliminate duplication. For example, Quebec and Saskatchewan have entered into administrative agreements with the federal government on roles and responsibilities for managing regulatory requirements for the industry. Alberta has also struck a similar equivalency agreement with the federal government. The agreement effectively suspends the administration of the identified federal regulations in Alberta, resulting in a true one-window delivery approach.

# **DRAFT**

Canadian Council of Ministers of the Environment

## **CANADA-WIDE STANDARDS for MERCURY EMISSIONS from COAL-FIRED ELECTRIC POWER GENERATION PLANTS**

### **PREAMBLE**

The Canadian Council of Ministers of the Environment (CCME) has determined that mercury levels in fish and wildlife across Canada warrant efforts to reduce mercury emissions in order to protect not only fish and wildlife, but also human health.

Mercury is a toxic, persistent, bioaccumulative substance. It converts in water to the highly toxic form, methylmercury, which accumulates in fish and other species, damaging the central nervous system and causing reproductive failure among loons and river otters.

Human exposure to mercury – primarily by eating contaminated fish – may cause neurological and developmental damage. Low exposure to mercury may cause problems, such as learning disabilities in children. Women of childbearing age, pregnant women, children, and populations who depend on fish as a traditional food source are most at risk.

CCME is committed to reducing mercury releases to the environment. Since 1998, CCME has set Canada-wide Standards (CWSs) for mercury emissions from base-metal smelters and from waste incinerators, as well as CWSs for mercury-containing lamps and dental amalgam waste.

Canada has also negotiated and signed a number of regional and international agreements with the U.S. and the United Nations Economic Commission for Europe that reduce emissions to the global pool of mercury, since Canada receives ten times more mercury from the global pool than it emits each year.

In 2003, the coal-fired electric power generation (EPG) sector emitted an estimated 2,695 kilograms of mercury from an estimated 3,725 kilograms of mercury in coal burned. The EPG sector is the largest single remaining man-made source of mercury emissions in Canada. Therefore, CCME has agreed to set a mercury CWS for this sector, with the goal of reducing mercury emissions from existing plants and ensuring new plants achieve emission levels based on best available technologies economically achievable, or equivalent.

## PART I: NUMERICAL TARGETS and TIMEFRAMES

### 1. Nature and application

This Canada-wide Standard (CWS) consists of two sets of targets:

- provincial caps on mercury emissions from existing coal-fired electric power generation (EPG) plants, with the 2010 provincial caps representing a 65% national capture of mercury from coal burned, or 70% including recognition for early action; and
- capture rates or emission limits for new plants, based on best available control technology, effective immediately.

A second phase of the CWS may explore the capture of 80% or more of mercury from coal burned for 2018 and beyond.

### 2. Existing facilities

Existing coal-fired EPG plants will meet the following provincial caps for annual mercury emissions:

Province	Estimated Emissions <sup>1</sup> (kg/yr)	2010 Cap (kg/yr)
Alberta	1,180 <sup>2</sup>	590
Saskatchewan	710	430 <sup>3</sup>
Manitoba	20	20
Ontario	495	0
New Brunswick	140	25
Nova Scotia	150	65
<i>Total</i>	<b>2,695</b>	<b>1,130</b>

<sup>1</sup> Based on 2002 to 2004 utility monitoring program results.

<sup>2</sup> Alberta's commitment is through the implementation of the Clean Air Strategic Alliance Electricity Project Team recommendations. Alberta emissions are based on a 90% capacity factor.

<sup>3</sup> Saskatchewan's early actions, between 2004 and 2009, will be used to meet its provincial caps for the years 2010 to 2013. Examples of early actions include a mercury switch collection program and early mercury controls at the Poplar River Power Station.

The 2010 national total represents mercury emission reductions from 2003/04 levels of approximately 52%, or 58% including recognition for early action.

For the purposes of this CWS, existing facilities include units in place at the time of endorsement at the following coal-fired power plants:

Manitoba	Brandon
Saskatchewan	Boundary Dam Poplar River Shand
Alberta	Sheerness Battle River Genesee Sundance Keephills Wabamun H.R. Milner
New Brunswick	Belledune Grand Lake
Nova Scotia	Lingan Point Tupper Trenton Point Aconi
Ontario	Atikokan Nanticoke Thunder Bay Lambton

### *3. New facilities*

This section applies to any coal-fired EPG unit not identified above as an existing facility. A new facility includes any coal-fired steam generating unit, including a unit which replaces an existing coal-fired steam generating unit with equivalent technology or with any other steam generating technology which is based on coal combustion, for which first permit approval occurs after the signing of this standard.

Mercury emissions from new facilities are not included in the provincial caps for existing facilities.

A new coal-fired EPG unit will achieve a capture of mercury from coal burned no less than specified below or an average annual mercury emission rate no greater than specified below:

<b>Coal type</b>	<b>Percent capture in coal burned* (%)</b>	<b>Emission rate* (kg/TWh)</b>
Bituminous coal	85	3
Sub-bituminous coal	75	8
Lignite	75	15
Blends	85	3

\* These rates are based on best available technologies economically achievable.

## **PART 2**

### **IMPLEMENTATION**

Jurisdictions will undertake the following implementation actions:

- implement jurisdictional implementation plans to achieve the CWS (see Annex A);
- establish and maintain testing in accordance with a Monitoring Protocol to be developed by CCME no later than 2006; and
- the federal government, with support from the provinces and territories, will aggressively pursue further reductions in the global pool of mercury.

### **REPORTING on PROGRESS**

Ministers will receive reports from jurisdictions in 2008, 2009, and 2010 and every two years thereafter until 2016 on the results of testing in accordance with the Monitoring Protocol. Ministers will ensure that a single report is prepared and posted on the CCME web site for public access.

These reports may be accompanied by other information on additional outcomes, activities, research, or other issues relevant to the standards and/or the coal-fired electric power generation sector.

### **REVIEW**

Based on reports on progress, the CWS may be reviewed by 2012 to explore the capture of 80% or more of mercury from coal burned for 2018 and beyond.

## **ADMINISTRATION**

Jurisdictions will review and renew Part 2 five years from coming into effect.

Any party may withdraw from this CWS upon three months' notice.

This CWS comes into effect for each jurisdiction on the date of signature by the jurisdiction.

## **MINISTERS of ENVIRONMENT**

*[Signature block]*

## **BACKGROUNDER: MERCURY**

### **CANADA-WIDE STANDARDS FOR MERCURY EMISSIONS FROM COAL-FIRED ELECTRIC POWER GENERATION PLANTS**

Mercury is a toxic, persistent, bioaccumulative substance. It converts in water to the highly toxic form, methylmercury, which accumulates in fish and other species, damaging the central nervous system and causing reproductive failure among loons and river otters.

Human exposure to mercury - primarily by eating contaminated fish - may cause neurological and developmental damage. Low exposure to mercury may cause problems, such as learning disabilities in children. Women of childbearing age, pregnant women, children, and populations who depend on fish as a traditional food source are most at risk.

Environment ministers have determined that mercury levels in fish and wildlife across Canada warrant efforts to reduce mercury emissions to protect not only fish and wildlife, but also human health.

Since 1998, through the CCME, Environment ministers have set Canada-wide standards (CWSs) for mercury emissions from base-metal smelters and from waste incinerators, as well as CWSs for mercury-containing lamps and dental amalgam waste. The CWS on dioxins and furans from conical incinerators in Newfoundland and Labrador will also reduce mercury emissions (see page 2 for more information).

In 2003, the coal-fired electric power generation (EPG) sector emitted an estimated 2,695 kilograms of mercury. Electric power generation is the largest single remaining source of mercury emissions in Canada from human activities. Therefore, Environment Ministers have agreed to set a mercury CWS for this sector, with the goal of reducing mercury emissions from existing plants and ensuring new plants achieve emission levels based on best available technologies economically achievable, or equivalent.

The proposed CWS consists of two sets of targets:

- provincial caps on mercury emissions from existing coal-fired EPG plants, with the 2010 provincial caps representing a 65% national capture of mercury from coal burned; and
- capture rates or emission limits for new plants, based on best available technologies economically achievable, effective upon final endorsement of the standard.

A possible second phase of the CWS may explore the capture of 80% or more of mercury from coal burned for 2018 and beyond.

For the full text of the *Canada-wide Standards for Mercury Emissions from Coal-fired Electric Power Generation Plants*, see [www.ccme.ca](http://www.ccme.ca) under “What’s new.”

## **CANADA-WIDE STANDARDS FOR MERCURY: A REPORT ON PROGRESS**

*Canada-wide Standards for Mercury: A Report on Progress* presents updates on the status of the implementation of the three Canada-wide standards for mercury endorsed to date by CCME:

- Mercury Emissions (hazardous waste, sewage sludge, municipal waste, and medical waste incineration; as well as base-metal smelting);
- Mercury-Containing Lamps; and
- Mercury for Dental Amalgam Waste.

A Canada wide standard is also in place for dioxins and furans from conical incinerators in Newfoundland and Labrador, which will see these facilities phased out by 2008. This phase out will reduce mercury emissions in addition to the reduction of dioxins and furans.

For the full text of *Canada-wide Standards for Mercury: A Report on Progress*, see [www.ccme.ca](http://www.ccme.ca) under “What’s new.” A progress report on the conical incinerators can also be found on the CCME web site. Additional information is also available on the web sites of member jurisdictions.