



COMPENDIUM OF CANADA'S ENGAGEMENT IN INTERNATIONAL ENVIRONMENTAL AGREEMENTS AND INSTRUMENTS

UNECE Protocol on Heavy Metals (Protocol to the UNECE Convention on Long-Range Transboundary Air Pollution (LRTAP))

SUBJECT CATEGORY:

Chemicals & Wastes

TYPE OF AGREEMENT / INSTRUMENT:

Multilateral

FORM:

Legally-binding treaty

STATUS:

- Signed by Canada June 24, 1998
- Ratified by Canada December 18, 1998
- In force in Canada December 29, 2003
- In force internationally December 29, 2003
- Amended in 2012

LEAD & PARTNER DEPARTMENTS:

Lead: Environment and Climate Change Canada

Partners: Natural Resources Canada, Health Canada, Crown-Indigenous Relations and Northern Affairs Canada, Global Affairs Canada

FOR FURTHER INFORMATION:**Web Links:**

- [Text of the Protocol](#), including 2012 amendments
- The [Minamata Convention on Mercury](#) (global treaty)
- [Emissions of harmful substances to air](#)
- The [National Pollutant Release Inventory](#)

Contacts:

[ECCC Inquiry Centre](#)

COMPENDIUM EDITION:

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PLAIN LANGUAGE SUMMARY

Canada is a Party to the Protocol on Heavy Metals under the United Nations Economic Commission for Europe's (UNECE) Convention on Long-range Transboundary Air Pollution (LRTAP). This protocol requires Parties to reduce their emissions of lead, cadmium and mercury below 1990 levels.

Canada engages in the Protocol to protect the health of Canadians and their environment and to encourage other countries to take measures to control emissions of these substances.

Canada has reduced its air pollution of lead, cadmium, and mercury by about 90% since the 1990s. However, air pollution from other countries has an impact on Canada's air quality. Heavy metals are still a risk to Canadians, in particular, Indigenous populations and consumers of country foods.

LRTAP and its Protocols are unique. The organization is a leading scientific and policy forum for air pollution and closely links science and policy. This cooperation has been very effective and key to its success.

OBJECTIVE

The Protocol aims to reduce emissions of heavy metals from industrial sources, combustion processes and waste incineration. At present, the Protocol has specific requirements to reduce emissions of lead, cadmium, and mercury.

KEY ELEMENTS

The LRTAP Convention developed this protocol to address heavy metals, including leads, cadmium and mercury. This leadership paved the way for a global approach to these problems and inspired the Minamata Convention on Mercury. While the Minamata Convention addresses the full life cycle approach to mercury, it is expected that LRTAP will continue to play an important role, particularly as a centre of expertise with a focus on sharing technical knowledge in terms of best available techniques, emission inventories, modelling and monitoring.



The Protocol is a regional agreement requiring Parties to reduce their emissions of lead, cadmium and mercury below 1990 levels, or for an alternate year between 1985 and 1995, inclusive. It sets limits for emissions from listed stationary sources, sets standards for mercury content in products and requires countries to phase out leaded petrol (gasoline). Under the Protocol, guidance has been developed on best available techniques to control and reduce heavy metal emissions from the listed stationary sources. The Protocol also provides guidance on product management measures.

Amendments were made to the Protocol in 2012 to provide flexibility and encourage ratification from countries with economies in transition, notably countries in Eastern Europe, the Caucasus and Central Asia (EECCA) and South Eastern Europe (SEE).

EXPECTED RESULTS

Implementation of the Protocol has resulted in decreasing levels of lead, cadmium and mercury entering the environment from industrial sources in the EU, Canada and the US. Further decreases are expected upon ratification and implementation of the Protocol by the EECCA and SEE countries.

CANADA'S INVOLVEMENT

Canada engages in the Protocol on Heavy Metals to protect the health of Canadians and their environment and to encourage other countries to take measures to control their emissions of lead, cadmium and mercury.

Canada implements its commitments through existing federal, provincial, and territorial instruments, such as the *Canadian Environmental Protection Act, Hazardous Products Act and Regulations*, the *Food and Drugs Act, Products Containing Mercury Regulations, Pollution Prevention Planning Notices*, and the [Canada Wide Standards for Mercury](#).

RESULTS / PROGRESS

Activities

Major recent accomplishments for the Convention that have implications for its protocols include undertaking a scientific assessment of the Convention; developing a policy response to the recommendations of the report of the scientific assessment and updating the Long-term Strategy for the Convention based on that policy response. This work forms the basis for future work on the Heavy Metals Protocol under the Convention.

Canada participated in negotiations to amend the Heavy Metals Protocol in 2012.

In December 2013, the LRTAP Executive Body adopted a principled approach whereby future action under the Protocol will focus on full implementation and further ratifications, and before proposing any new measures, parties would first consider the potential benefits within the UNECE region beyond those provided by the global agreement on mercury – the Minamata Convention on Mercury.

Reports

Canada submits inventory reports for the pollutants covered by the Heavy Metals Protocol, including comprehensive emissions inventories of mercury, lead and cadmium, in its annual submission to the UNECE. Canada will continue to report on these pollutants and meet its annual reporting requirements. Canada's most recent air pollutant inventory can be viewed on the [Air Pollutant Emissions Inventory: overview page](#). Its latest official submission to the UNECE can be found [on their website](#).

Results

Current air emissions of lead, cadmium and mercury are well below Canada's 1990 emissions levels (reduction of 89% in lead, 95% in cadmium and 90% in mercury, based on 2019 emissions). Note that by 2008, Canada had reduced its emissions of lead, cadmium and mercury by more than 50% from its reference year (1990). For this reason, Canada is exempted from having to apply the emission limit values for new and existing stationary sources and best available techniques for existing stationary sources.