

Canadian Council of Ministers of the Environment

CANADA-WIDE STANDARD

for

BENZENE

PHASE 1

CANADA-WIDE STANDARD for BENZENE

This Canada-Wide Standard (CWS) for benzene is established pursuant to the 1998 Canada-wide Accord on Environmental Harmonization of the Canadian Council of Ministers of the Environment (CCME) and its Canada-wide Environmental Standards Sub-Agreement.

RATIONALE

In selecting benzene as a Canada-wide environmental priority for development of a CWS, Ministers recognized that, on the basis of available data, benzene is classified as carcinogenic to humans. That is, benzene is a non-threshold toxicant - a substance for which there is considered to be some probability of harm for critical effects at any level of exposure. The development of this CWS for benzene will reduce Canadians' exposure to this known human carcinogen.

CONTEXT

This CWS represents a balance between the desire to achieve the best health and environmental protection possible and the feasibility and costs of reducing the emissions that contribute to elevated levels of benzene in ambient air. The primary long-term air quality management goal for non-threshold toxicants like benzene is to reduce exposure to the extent possible and practicable, thereby reducing the risk of the adverse effects of this pollutant on human health. This approach is also consistent with the Canada-wide Accord on Environmental Harmonization's precautionary principle, which states "where there are threats of serious or irreversible environmental damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation". In the short term, the implementation of the Phase 1 Canada-wide control strategy for benzene will reduce the exposure of Canadians to ambient levels of this pollutant. The phased approach being proposed by this CWS is indicative of the recognition that there are definite benefits, in terms of exposure reduction, to be gained from a Canada-wide control strategy for benzene. Ministers recognize that most of the Phase 1 emission reduction initiatives are currently underway, but by collating them under the CWS process they will be given more authority. Due to the ongoing nature of the initiatives of Phase 1, emission reductions will continue beyond the timeframe proposed under NUMERICAL TARGETS and TIMEFRAMES. In addition, emission reduction actions will improve air quality where ambient levels are elevated, and prevent or minimise deterioration of air quality in areas that currently have good air quality. Phase 2 of this CWS will develop the required future direction for setting ambient levels or further emission reduction targets as the science gaps are addressed.

The CWS levels and target dates have been selected regardless of the gaps and uncertainties in some of the information used to support them. The information available is sufficient to conclude that achieving the CWS within the selected target dates is technically and economically feasible. In this regard, jurisdictions will have considerable flexibility in the detailed design of jurisdictional implementation plans and sectoral emission reduction strategies as well as an opportunity to reduce information gaps and uncertainties. Initial actions towards achieving Phase 1 of the CWS are being identified at this time, to show that improvements in air quality are being achieved at the earliest opportunity.

PART 1:

NUMERICAL TARGETS and TIMEFRAMES

Ministers acknowledge that the CWS established here is related to protection of human health. They also acknowledge that other forms such as seasonal or annual average targets may be good surrogates for health effects and useful additions at a later date.

The CWS for benzene will include:

For Phase 1:

A national target of 30% reduction in total benzene emissions (from 1995 emission inventory levels) to be achieved by the end of year 2000.

For Phase 2:

The form and target of this phase will be developed through consultation with stakeholders. Phase 2 of this CWS will be presented to ministers in the spring of 2001.

PART 2:

IMPLEMENTATION

Sector-specific actions that will be taken towards the 30% reduction in total benzene emissions are summarized in the Companion Document that follows. Jurisdictional implementation plans will be developed and implemented to achieve this CWS.

Ministers recognize that demonstrating achievement of Phase 1 of the CWS will take time, and, as an interim measure, will ensure reporting on ambient air concentrations of benzene as an indicator of air quality with respect to benzene. This reporting will be accomplished using data from existing monitoring sites; these data are to be agreed to by all jurisdictions. Jurisdictions may also report any additional monitoring information as appropriate. The first report will be made public by September 30th, 2001. The requirement for an ongoing Canada-wide monitoring program will be assessed and developed during Phase 2 of this CWS.

REVIEW

The plan for review of the complete benzene CWS will be presented as part of the Phase 2 CWS package.

REPORTING on PROGRESS

Progress towards meeting the above provisions will be reported as follows:

- (a) to the respective publics of each jurisdiction on a regular basis, the timing and scope of reporting to be determined by each jurisdiction;
- (b) to Ministers and the public, with comprehensive reports at five year intervals beginning in year 2006 and reports on achievement and maintenance of the CWS annually beginning in 2001, in accordance with guidance provided in the following Annex.

ADMINISTRATION

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

Any party may withdraw from this Canada-Wide Standard upon three month's notice.

This Canada-Wide Standard comes into effect for each jurisdiction on the date of signature by the jurisdiction.

ANNEX

REPORTING PROTOCOL FOR CANADA-WIDE STANDARD FOR BENZENE

B.1 Introduction

It is intended under the Harmonization Accord and its Standards Sub-Agreement that all jurisdictions will report on a regular basis to their publics and to Ministers of the Canadian Council of Ministers of the Environment on their progress towards achieving the CWS for benzene.

This reporting protocol is intended to provide guidance for reporting on all provisions of the CWS for benzene. Its provisions are designed to help ensure consistency and comparability in the reporting by jurisdictions, and better understanding by the public on how jurisdictions plan to track and report on progress.

B.2 Frequency, Timing and Scope of Reporting

There will be two types of reporting by jurisdictions:

1) Annual Reporting on Achievement of the CWS

These reports will be completed by each jurisdiction in a standardized “report card “ format, the format to be developed and agreed to by all jurisdictions, and provided to Ministers and the public by 30 September of each year, beginning in 2001. These annual reports will be limited in scope containing mainly summary information on emission levels and trends, and, where available, ambient benzene concentrations using data agreed to by all jurisdictions. The annual reports may also note the reason for any significant change in emission or ambient levels or trends from previous years.

2) Five-Year Reports

These reports will be completed for the year 2005 and for every fifth year thereafter and provided to Ministers and the public by 30 September of the following year. The report for 2005 will be an interim report on progress towards meeting the CWS, and subsequent reports will focus on achievement of the CWS applicable at that time.

Five-year reports will be comprehensive, assessing progress on all provisions of the CWS. The format and general content will be determined and agreed to by all jurisdictions two years in advance of the reporting year.

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The CCME will co-ordinate the collation of the information from the various jurisdictional reports in (1) and (2) above into a national overview report for the public, CCME Ministers and international audiences by December 31 of each reporting year.

In addition to the reporting in (1) and (2) above, individual jurisdiction may report to their publics on a more frequent basis. The scope and timing of any such reporting would be determined by the jurisdiction.

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Signed by:

British Columbia	Honourable Joan Sawicki
Alberta	Honourable Halvar Johnson
Saskatchewan	Honourable Buckley Belanger
Manitoba	Honourable Oscar Lathlin
Ontario	Honourable Dan Newman
Environment Canada	Honourable David Anderson
New Brunswick	Honourable Kim Jardine
Nova Scotia	Honourable Michael Baker
Prince Edward Island	Honourable Kevin MacAdam
Newfoundland and Labrador	Honourable Oliver Langdon Honourable Walter Noel
Yukon	Honourable Dale Eftoda
Northwest Territories	Honourable Joseph Handley
Nunavut	Honourable Peter Kilabuk

Note: Québec has not endorsed the Canada-wide Accord on Environmental Harmonization or the Canada-wide Environmental Standards Sub-agreement.