



Submission to the Federal Environmental Minister on
The Order Adding PM₁₀ to Schedule 1 to the
Canadian Environmental Protection Act, 1999

August 8, 2000

On June 10th, 2000, the Governor in Council proposed adding PM₁₀ to Schedule 1 of CEPA 1999, pursuant to subsection 90(1) of the Canadian Environmental Protection Act (CEPA) 1999. Once placed on the List of Toxic Substances in Schedule 1 of CEPA 1999, the Government can regulate or enact instruments respecting preventive or control actions. Under section 333 of CEPA 1999 any person may, within 60 days of publication, file comments and objections with respect to the proposed Order with the Minister of the Environment.

Laws and policy procedures that must be followed during the creation of federal regulations include: CEPA 1999, the Cabinet Directive on Law-making; and the Government of Canada Regulatory Policy. We do not believe that these laws and procedures have been specifically followed with regard to the proposed order.

This submission contains our comments and objections to the proposed order adding PM₁₀ to Schedule 1 of CEPA 1999.

Inadequate consultation

Alberta has participated extensively in consultations on particulate matter through the CEPA-Federal Provincial Advisory Committee (CEPA-FPAC), and later the CEPA-National Advisory Committee (CEPA-NAC). Alberta submitted comments and suggestions during the science assessment, stakeholder consultation, and cost-benefit analysis processes. The lack of adequate and timely response to our comments is a major concern.

Alberta and other interested parties have expressed concerns that the provisions under Sections 6 and 69 of CEPA 1999 regarding consultation were not properly followed. We request that CEPA-NAC be given the opportunity to advise the Federal Ministers of the Environment and Health prior to decisions on declaring substances "toxic". The assessments conducted under CEPA are not based on science alone. Each assessment involves value-based decision making, such as determining what constitutes "significant effects", and whether there is "potential to contribute to the population failure of species." As such, jurisdictions should have an opportunity to provide their assessments to the Ministers.

Through the CEPA-NAC, Alberta voiced that the declaration of PM₁₀ as CEPA toxic seemed contrary to Section 64 of CEPA. A large portion of PM₁₀ is not entering the environment, which is a prerequisite for a substance to be declared toxic as per Section 64. The fraction of PM₁₀ that poses the greatest health concern (PM_{2.5}), for example, is formed largely in the atmosphere, not emitted directly. The Federal Government has not made a formal response to this concern.

Inadequate problem definition, Unclear solution

The federal, provincial and territorial governments are working together on Canada-Wide Standards (CWS) to protect Canadians from exposure to particles that may cause adverse health effects. The focus of environmental management measures set out in the CWS is to reduce particulate levels in the ambient atmosphere.

Alternatively, the CEPA declaration of "toxic" for PM₁₀ is not aimed solely at particulates that may cause harm. Many aerosols that fit the definition of PM₁₀ are beneficial to Canadians. Medicinal inhalers, for example, deliver their healing power by releasing aerosols (PM₁₀) that penetrate deep into the respiratory system. There are "good" particles, such as those used in molecular nanotechnology, catalysts, computer chips, ceramics, and advanced materials. Declaring all PM₁₀ "toxic" under a broad and vague definition without assessing their benefits is "unscientific" and does not serve the best interests of Canadians.

In our 1999 Review of the CEPA PSL Assessment Report on Respirable Particulate Matter Less Than or Equal to 10 Microns, Alberta pointed out that the definition for PM₁₀ is not specific enough to allow classification of PM₁₀ as a substance under CEPA. Defining PM as a substance based solely on its size is problematic. The definition of Particulate Matter Smaller than or Equal to 10 Microns covers a wide range of materials generally considered to be non-toxic, such as flour, milk powder, water and oxygen. Using such a broad definition for a "substance" directly contradicts the principle outlined in the Cabinet Directive on Law-making: "The power to make regulations must not be drafted in unnecessarily wide terms." The federal government's response repeated the definition of "substance" in the Act, but did not address these concerns.

The May 27, 2000 Gazette notice identifies PM₁₀ as "ubiquitous". In fact, just about everything on Earth is made of "particles". With this broad definition for PM₁₀, the PSL review is far from complete. The proposed order will send a confusing message to the public and stakeholder groups. The federal government has not provided a clear set of solutions to the broadly defined "problem".

Cost and benefit analysis

The Government of Canada Regulatory Policy 1999 requires that the benefits of regulatory requirements be greater than their costs. The federal government has not conducted a cost-benefit analysis on the proposed order.

Provincial and territorial governments have adopted ambient air quality guidelines on particulate matter in the forms of Total Suspended Particulate (TSP), PM₁₀ and PM_{2.5}. Alberta has an extensive management system to regulate primary PM emissions and the emissions of PM precursors from various sectors. The federal government is part of a CCME process that developed the CWS for PM. Environment Canada is satisfied that the level of the proposed PM_{2.5} CWS is a challenging target, yet achievable (Canada Gazette Part I, May 27, 2000). Preliminary indications are that CWS implementation activities will be used as equivalent measures under CEPA 1999. Since the federal government is already involved in the CWS process, and jurisdictions are working together to implement PM control measures, it is not clear what benefit will be gained from the proposed order.

The potential impact of the proposed order is significant. Not only may unilateral actions under CEPA create duplications, the broad definition for PM₁₀ may also add significant costs to the control measures that may not benefit the environment and human health.

Following the declaration of PM₁₀ as CEPA toxic, many consumer products would require evaluation and management. We tested the following three consumer products using a "suspension chamber": flour (Robin Hood Keynote 39 Unbleached), baby powder (Johnsons), and skim milk powder (Seven Farms). Approximately 2.5 grams of material was suspended in the chamber for each test. Suspended PM₁₀ were collected using an ambient PM sampler. For these three substances significant amounts of PM₁₀ were collected: flour (580 ug), baby powder (26060 ug), and skim milk powder (14820 ug). The costs and burdens on both government and the private sector due to the proposed order have not been assessed by the federal government.

Intergovernmental agreements

This proposal was announced after CCME had reached an agreement on the CWS for Particulate Matter and Ozone at their June 5-6, 2000 meeting. The CWS development process involved extensive participation by all stakeholders, many of whom indicated that the consultative process was successful with improvements to the process made along the way. After the Gazette announcement, stakeholders expressed concerns that the federal government will take unilateral actions under CEPA and disregard the commitments made under the CWS process. The timelines for the development of management policies under CEPA are distinct from the timelines that are being considered under the CWS process. This will create duplicative efforts among jurisdictions and undermine the progress made through collective efforts during the CWS process.

Cabinet Directive on Law-making

The Cabinet Directive on Law-making states that "Law should be used only when it is the most appropriate. When a legislative proposal is made to the cabinet, it is up to the sponsoring Minister to show that this principle has been met, and there are no other ways

to achieve the policy objectives effectively". This is clearly not the case for PM. Reductions in PM_{2.5}, and hence PM₁₀, will occur as a result of the implementation of the Canada-Wide Standard ratified in 2000. The proposed order adding PM₁₀ to the List of Toxic Substances will result in a duplication of efforts.

The June 10, 2000 Gazette notice states that, "If the proposal (for declaration of PM₁₀ as a CEPA toxic) is accepted, the Government will be able to take preventive action to ensure the preservation of human life, health, or protection of the environment, as appropriate." However, the federal government is able to take control measures on PM in the areas of federal responsibility without declaring PM₁₀ CEPA toxic. This is demonstrated by the federal government's participation in the CWS process. Preventive actions on PM are currently being considered by jurisdictions in implementing the CWS for PM_{2.5} which was finalized by CCME at the June 5-6, 2000 meeting.

Summary

As a federal regulation, the proposed order does not meet the requirements set out by the federal laws and policy procedures such as CEPA 1999, Cabinet Directive on Law-making, and the Government of Canada Regulatory Policy.

We request that an appropriate board of review and committee(s) be established to review the proposed order in accordance with CEPA 1999, the Cabinet Directive on Law-making, and the Government of Canada Regulatory Policy.



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