

Chrysotile and the Canadian Position

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May 24, 2006

Thank you Mr. Chairman and Good afternoon

Ladies and Gentlemen.

Let me first thank the organizers of this conference for having invited me to talk about the Canadian position vis-à-vis chrysotile.

Special thanks to

Dr. Jacques Dunnigan, president of this conference, for his excellent work and to

Mr. Godbout and his fantastic staff, namely Louise Gagniere and Rejeanne Laplante.

During this conference, we have heard a good deal about the positive research results relating to chrysotile,

particularly in justifying the need to distinguish for purpose of regulation chrysotile from amphibole asbestos fibres. Science is increasingly demonstrating that chrysotile can be used safely.

For me speaking positively about the safe use of chrysotile is neither a task nor a duty but a passion that has been mine for over 25 years.

Le Chrysotile est un minéral extraordinaire. Imaginez qu'à partir d'un massif rocheux, on puisse extraire une substance qui peut jusqu'à être tissée pour devenir un élément de protection pour la sécurité humaine. Quel autre minéral peut servir à d'autres usages différents?. Le chrysotile n'est également pas fabriqué de main d'homme. Il se trouve tout naturellement, et en abondance, dans la croûte terrestre. It would be a shame not to make good use of such an abundant and useful natural resource that can safely

provide a practical value to the increasing global needs of society.

At this point, I would like to reiterate what Mr. Paradis already mentioned in his keynote address. The government of Canada supports the Chrysotile Institute and believes that its mandate is extremely important for the health and safety of workers and the public both domestically and internationally. Natural Resources Canada, in collaboration with its partners, continues to support the Chrysotile Institute and hopefully we will be able to do in a manner that will allow it to even better deliver its mandate.

C'est également important de souligner le fait que, par l'intermédiaire de l'Institut du chrysotile, le gouvernement du Canada appuie l'utilisation sécuritaire du chrysotile, au pays et à l'étranger. Il ne fait PAS la promotion de la vente de cette fibre.

The Government of Canada's role on the safe use of chrysotile is recognized nationally and internationally. Working in partnership with the Quebec government, the private sector and labour-unions representing the workers involved in chrysotile production, we have long played an active role in defending the health and safety of workers and the well being of the communities closely related to the Canadian chrysotile industry.

Canada, as a responsible country, has banned several years ago all products and practices that could generate unacceptable exposure to fibres. Two examples of this: 1) sprayed insulation was discontinued in the 1970s and 2) Patching compounds were also prohibited. Canada accepted the international agreement at the UN Conference on Sustainable Development in Rio de Janeiro not

to ban a substance unless it poses a risk that is both unreasonable and unmanageable. Most uses of chrysotile today do not fall into this category.

Il n'est pas nécessaire pour moi de revenir sur la différenciation entre les amphiboles et le chrysotile. Ceux qui ne sont pas convaincus à ce moment-ci, de la différence en terme de conséquences sur les êtres humains de l'utilisation de ces deux différents types de fibres, ne le seront probablement jamais.

Il se peut cependant, que certains pays ou certaines personnes refusent de voir la réalité pour des raisons politiques, économiques ou commerciales. Il se peut également que ceux-ci ignorent tout simplement l'aspect scientifique et les preuves irréfutables démontrant que le chrysotile peut être utilisé de façon sécuritaire et prennent des décisions ou prennent position de

façon toute arbitraire.

It is also interesting to note that even the International Agency for Research on Cancer (IARC) does not differentiate between chrysotile and amphibole fibres in its Overall Evaluations of Carcinogenicity to Humans. IARC uses the terminology “asbestos” in its listing of the agents classified, thereby not acknowledging that asbestos is not a mineral. It is a commercial term that refers to 6 different naturally occurring mineral fibres. I believe that at this moment I should say few words about the substitutes to chrysotile. Twelve substances identified as the most probable alternatives to chrysotile have been assessed lately by a panel of experts convened by the International Agency for Research on Cancer (IARC) and mandated by the World Health Organization–WHO.

Based on the Report of the WHO Workshop on *Mechanisms of Fibre Carcinogenesis and Assessment of Chrysotile Asbestos Substitutes* that took place in Geneva from 8 to 12 november 2005, it can be summarized that some substitutes were assessed as highly hazardous. Some were assessed as exhibiting a low hazard , despite limited data or evidence of genotoxicity. Most were assessed as indeterminate, because there is insufficient credible data to determine their potential effect on humans. The panel did not consider chrysotile or directly compare the risk or potency of chrysotile with any of these 12 substitute substances nor with any other potential substitutes. The panel did what was called a *Hazard Assessment and not a risk assessment*.

Before going further let me clear a very common misunderstanding that creates very often confusion in people's minds. Hazard

identification is different from risk assessment: hazard identification is used to describe, using the available evidence, the potential of an agent, mixture or activity to cause adverse effects: the risk assessment on the other hand, refers to the probability of adverse effects under actual conditions of exposure.

This being said one can conclude that the preliminary classifications of these substitutes resulting from the workshop mentioned before are to say the least UNCERTAIN.

In short, these substitute fibres have not been subjected to the same rigorous scientific studies or likely to comparable regulatory controls. Yet, these substitutes could effectively pose equal or higher risk than chrysotile. For example, cellulose fibre, and glass wool are recognized as dangerous to human health. However, given the uncertainty, one must question the wisdom of accepting

substitutes without knowing the risks they pose .

IARC indicates that processes producing “wood dust” and “furniture and cabinet making” are Group 1 carcinogenic activities. However, while I accept that under proper controls, risks may be mitigated, it was curious to me to see a European workers union associated with wood products demonstrating against the use of chrysotile a few weeks ago.

Laissez-moi ajouter que je crois légitime de se poser la question, considérant la position intransigeante de l’Europe au sujet du chrysotile, pourquoi l’Union Européenne a soutenu l’approche de l’utilisation sécuritaire du chrysotile jusqu’au moment où son industrie a été en mesure de commercialiser des produits substitués à ceux utilisant le chrysotile comme fibre de

reinforcement? Another aspect that caught my attention was how the European Commission responded to the issue of silica.

As you are well aware, crystalline silica is classified in Group 1 of the IARC classification as being carcinogenic to humans.

Following consultations by the Health and Safety Commission, the European Commission indicated that the “European Social Dialogue Agreement on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products containing it” is “EXTREMELY SATISFACTORY” and a model to be followed.

In brief, according to this agreement, the “employers and employees and the workers representatives will jointly make their best endeavours to implement the good practices at site level in as far as applicable”. It is felt that this agreement will protect

workers exposed to crystalline silica dust, which can lead to silicosis, a potentially fatal lung condition. Silicosis is also linked to other dangerous lung conditions, such as emphysema and lung cancer.

The agreement aims at reducing worker's exposure to crystalline silica dust through good practices in the workplace. This approach is similar to the Government of Canada's safe use approach to chrysotile.

Finally, let me add that as a result of the previously mentioned agreement, crystalline silica has been officially taken off the European Commission list of carcinogens under the Carcinogens at Work Directive (Directive 2004/37/EC). However, this substance remains a Group 1 carcinogen according to the IARC

classification.

Why is crystalline silica dust treated differently by the Commission from chrysotile? Both can lead to respiratory diseases if exposure is not controlled.

The European Union accepts that it is possible to manage exposure to silica. I wonder if sand blasting of concrete or stone structures is included? Clearly, if the technology exists to manage airborne silica, then why not for chrysotile.

The consultation document of the UK Health and Safety Commission states “that if the exposure limits to crystalline silica dust were set at a very low level, a level at which the risk to human health diseases would be minimal, there is the potential for the closure of parts of some industry sectors. The quarrying

industry, for example, is based in predominantly rural sites where alternative employment may be difficult to find”.

In view of this statement, it may be reasonable to ask if the European Union placed emphasis in its decision on commercial, socio-economic or political interests and less on scientific evidence.

Chrysotile is facing opposition by many different groups. Some NGOs are definitively very active in suggesting the ban of all forms of “asbestos” globally. Questions arise as to what interests are represented by the NGOs that oppose to chrysotile? Do they have major interests that fund them? One certainty is that they do not represent workers of the chrysotile mining industry, who work with chrysotile every day or of the communities that have lived

among the chrysotile mines for generations.

I would like now to make a few comments on the the importance of chrysotile fibre to many economies in transition. As you know, about ninety three percent (93%) of the worldwide chrysotile consumption is used for chryso-cement products. In a great many countries, cement can be produced locally to be used in the final chryso-cement product. Chrysotile fibres on the other hand, only represents a small percentage to be used in the final product. Such products offers manufacturing opportunities and often less expensive products for such economies. In comparison, some alternatives products either cannot be produced locally or would require significant increases in import costs likely reducing local socio-economic benefits. And if there are decisions to use substitute fibres for such products, one hopes that there are stringent controls at least as similar as for chrysotile.

Moreover, there are growing needs in many countries in transition for infrastructures such as for water supply, sewer facilities or construction. Even if they are willing to use more expensive substitute materials, then they should also be assured that the technical efficacy of these substitute products is equal to chrysotile-based products.

Au début de mon exposé, j'ai mentionné que je ne pouvais rien ajouter sur l'aspect scientifique qui n'ait déjà été dit, hier et aujourd'hui, par des conférenciers émérites. Je me dois cependant, avant de conclure, de vous rappeler quelques constatations importantes découlant de preuves scientifiques validées par la communauté internationale.

- Scientific evidence is increasingly showing a weak

relationship, IF ANY AT ALL, between chrysotile and mesothelioma. Dr. Bernstein presentation on the behavior of chrysotile fibres in the lungs, and its biopersistence - half time clearance being between 3 to 11.4 days depending on the grades types of chrysotile fibres contributes to the validation of this position. Indeed, some members of the US EPA Blue Ribbon stated in 2003 that “epidemiology literature provides no scientific support for chrysotile having a role in causation of mesothelioma”.

- Professor John Bridle showed that chrysotile is transformed both structurally and chemically when bonded within a cement matrix, i.e., in cement products. The same circumstance has been shown when heat is applied to chrysotile containing brake pads where chrysotile is

converted to fosterite.

- Chrysotile is eliminated very rapidly from the lung, given today's exposures. Its biopersistence is below the threshold for classifying synthetic fibres as carcinogenic according to the EU. In contrast, the amphiboles and a number of synthetic fibres are eliminated far more slowly.

During the conference, we heard that chrysotile exposures at today's workplace low levels is very unlikely to cause any disease.

Indeed, as far as I know, there is no quantitative evidence to show the contrary.

J'aimerais également vous demander de retenir certains énoncés de ma présentation car ils méritent de ne pas être oubliés.

- Contrary to the perception that Canada promotes the sale of chrysotile, it has only promoted its safe use through the work

of the Chrysotile Institute.

- The government of Canada supports the Chrysotile Institute and believes that its mandate is extremely important for the health and safety of workers and the public both domestically and internationally.
- If certain substitute fibres are not controlled to at least the same degree as chrysotile, they could pose equal or higher risk.
- The chrysotile industry, particularly the chryo-cement manufacturing, generates socio-economic benefits to the economies in transition's local communities as long as they use chrysotile safely

Let me conclude this presentation by making few

recommendations to the workers, their unions, companies and the

scientific community and the public.

- Efforts to demonstrate that chrysotile can be used safely must continue.
- The scientific community should continue to make every effort to show the difference between chrysotile, the amphiboles and other industrial fibres. And those who reject or question the science do so in a mature and civil manner and quit the unprofessional name calling which only tends to denigrate their arguments.
- Companies that do not properly protect the health of their workers should not be allowed to purchase chrysotile fibre supplies. Why, because it was some companies historically that ignored the dangers by allowing inappropriate practices.

This past behavior associated with legacy of asbestos related

diseases is why industry today is currently targeted. An enlightened long term approach to protect workers would have been a good business decision for the industry and not for many in the legal community. We can't afford to let this happen again, hence the reason for the creation of the Chrysotile Institute. As you will appreciate, the ineffective implementation of good practices in one company will affect the reputation of all. Companies that care for their employees; for their community; for having allies in the industry; and for their reputation will ensure the use of best practices.

Je vous remercie de votre attention. Je considère cette conférence comme un succès évident et je remercie à nouveau, tous les organisateurs en général et Messieurs Jacques Dunnigan et Clément Godbout de façon toute spéciale.

Gary Nash

