

## **REVIEW**

1. As part of the unveiling of its government-wide strategy for the management of asbestos, in December 2016 the Government of Canada published a *Notice of Intent to develop regulations respecting asbestos* in Part 1 of the *Canada Gazette*.
2. It also proposed a regulatory approach to prohibiting asbestos, which was the subject of consultation.
3. The consultation document dealt with the issue of mining residues as follows:

### *3.1.2.2 Mining residues*

*The regulations will not prohibit the processing of mining residues to extract metals such as magnesium or other valuable materials, or to produce products or materials that do not contain asbestos.*

*The mining residue could not be used to manufacture a product containing asbestos as the manufacture, sale, offer for sale and export of products that contain asbestos would be prohibited.*

*The use of mining residues for construction and landscaping activities would be prohibited.*

4. The wording of the third section was of the most concern—and with good reason—to communities in the asbestos region of Quebec where waste rock piles containing serpentine mining residues can be found.

## **OUR OBJECTIONS**

5. By making it illegal to use the raw residue that is found in waste rock piles in the chrysotile asbestos region, particularly in the towns of Asbestos and Thetford Mines, the government was ignoring a historic reality for the many generations that had used aggregates in construction and landscaping.
6. This approach risked creating a flood of costly lawsuits that would be paid for by citizens and organizations forced to absorb the exorbitant costs for carrying out remedial work on their properties (residences, buildings), the value of which would be significantly reduced.

7. In addition to the risk of inviting numerous denunciations and unjustified harassment by radical activists, this prohibition stood to seriously complicate the lives of citizens and organizations, disrupt the social climate of the communities concerned, and discourage interested companies from making use of mining residues. In short, it threatened to eliminate any possibility of revitalizing the regions.
8. In fact, aggregates produced from serpentine mining residues can only contain a negligible level of fibres with the potential to be harmful (i.e., free fibres longer than five [5] microns) or represent a significant risk to health, particularly when used responsibly and safely.
9. Furthermore, mining residues that are stored outside are very wet, reducing the potential for airborne fibre emissions.
10. Numerous briefs and comments submitted during the consultation period also expressed fierce opposition to the ban on chrysotile asbestos. Furthermore, they deplored the government's refusal to consider the significant difference between serpentine and amphibole fibres, despite the fact that this difference has been clearly demonstrated by science in recent years.
11. The first two subsections of section 3.1.2.2 are sufficiently clear and cover all aspects of the asbestos ban in Canada. Given the negative impacts that the third subsection could create in its current form, the government would be well advised to redraft it.
12. For those reasons, during the consultations we submitted wording on mining residues that differed from that initially proposed by the government:

*The use of mining residues found in waste rock piles for construction or landscaping purposes must respect the regulations, rules and standards enacted by public authorities (provincial and municipal) to protect human health and the environment.*

## THE DRAFT ORDER

13. On January 6, the government published a draft *Order Amending Schedule 3 to the Canadian Environmental Protection Act, 1999* in the Canada Gazette, Part I.<sup>1</sup>
14. This draft regulation expressly provides for including chrysotile asbestos in Part 3 of Schedule 3 to the Act, i.e., among the "Restricted Substances" in the "Export Control List."
15. The government is also proposing to adopt the draft *Prohibition of Asbestos and Asbestos Products Regulations*, whose provisions on mining residues read as follows:

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<sup>1</sup> *Canada Gazette*, Part I, Vol. 152, No. 1, January 6, 2018, p. 35 and following.

*Non-application**Mining residues, product or mixture**1 These Regulations do not apply*

*a) subject to section 5, to mining residues;*

*(...)*

*Prohibitions**Mining residues – landscaping or construction*

*5(1) A person must not sell, for use in construction or landscaping, asbestos mining residues that are located at an asbestos mining site or accumulation area unless the use is authorized by the province in which the construction or landscaping is to occur.*

*Mining residues – products containing asbestos*

*(2) A person must not use asbestos mining residues to manufacture a product that contains asbestos, including a product in which asbestos is incidentally present.*

**USE OF MINING RESIDUES**

16. The Government of Canada is clearly reiterating its commitment to the principle of prohibiting the sale or use of asbestos mining residues in landscaping or construction.
17. We note, however, that the government indirectly agreed to our suggestion (see paragraph 12) to allow the use of these mining residues on condition that they respect regulations, rules and standards enacted by public authorities (provincial and municipal) to protect human health and the environment.
18. We welcome the government's recognition of the importance of using mining residues to support the revitalization and economic development of Quebec regions where there are significant accumulations of residue.
19. We agree with the approach adopted by the government in its draft regulations in which it clearly recognizes that *"risks of exposure from asbestos mining residues are addressed through provincial and territorial occupational and health legislation."*
20. Moreover, it is our fervent hope that the Quebec regulations will be drafted in such a way that they do not compromise the Government of Canada's openness to the economic development of our regions.

## USE OF AGGREGATES

21. On the other hand, we vehemently protest the federal government's decision to prohibit the use of mining residues (aggregates) containing such negligible amounts of fibre that there is no risk to human health, even if the provinces authorize their use.
22. We believe this prohibition to be unreasonable, as aggregates from piles of mining residue can be reused in a way that is totally safe and controlled. This prohibition should be quite simply removed from the text.
23. The economic players who reuse, or hope to reuse, aggregates from mining residues are responsible people who are aware that the CNESST (Quebec commission on occupational health and safety standards) believes these residues can be used without any real risk, i.e., safely.
24. It also seems unfair, because these aggregates are very important to the revitalization and economic development of Quebec regions whose communities were severely impacted by the closing of mines.

## BAN ON CHRYSOTILE ASBESTOS

### Confusion

25. We cannot subscribe to the government's decision to ban asbestos in all its forms, and in so doing, perpetuate the confusion that is knowingly fuelled by a powerful anti-asbestos lobby that refuses to acknowledge the difference between the two types of fibre (serpentine and amphibole).
26. This confusion is all the more deplorable given that numerous scientific studies published in recent years have demonstrated that chrysotile is far safer than other types of asbestos, particularly amphiboles.
27. In no way do these studies advocate the banning of chrysotile as THE solution. Rather, they promote—and clearly so—its responsible and controlled use as a realistic and reasonable avenue.
28. It is in fact known that chrysotile (white asbestos) is the only form of serpentine asbestos fibre, whereas there are five types of amphibole fibre that are considered toxic: anthophyllite, actinolite, tremolite, amosite (brown asbestos) and crocidolite (blue asbestos).
29. Chrysotile is the **only** type of asbestos that is still on the market, and its use is safe and controlled. Amphiboles have not been used for a long time, and no one is calling for a return to the old days.

30. It is therefore clear that there is an attempt to justify banning chrysotile asbestos by confusing non-toxic fibres (serpentine) and toxic fibres (amphibole), which are completely different in terms of chemical composition and the danger they pose. This is a trap that the government should avoid falling into.

#### Biopersistence

31. Biopersistence is the amount of time an inhaled particle remains in the lungs before being eliminated by the human body.
32. Numerous recently published scientific studies have demonstrated that because of their structure, their flexibility and their chemical composition, serpentine fibres (chrysotile) that are inhaled are less biopersistent in the lungs, i.e., they are quickly and easily eliminated; they have a low resistance to an acidic environment; and they are encased in magnesium (a light metal), unlike amphiboles, which are encased in quartz (a natural crystallized silica).
33. Science indicates that dose, durability and dimension (the three “Ds”) are of paramount importance for establishing the danger level of a breathable fibre.

#### Qualities

34. Chrysotile is known to be flexible, flame retardant and heat insulating. It is a thermal, electrical and acoustic insulator. In addition to being resistant to chemical and biological products, as well as friction, wear and tear, it is highly appreciated for its mechanical resistance.
35. For developing countries, chrysotile asbestos represents an available, efficient and economical resource they badly need.
36. It is precisely because of their many and undeniable qualities that these serpentine fibres are so popular, and are used for manufacturing many products sold around the world.
37. Furthermore, because they are mixed with other substances such as cement (for making rigid piping for water line and sewage systems, among other things) or resin, they are “trapped” and cannot become airborne.
38. That is why they are used around the world in the manufacture of high-density products, contrary to the friable products of a bygone era.

#### Level of risk

39. The Health & Safety Executive (HSE) of Great Britain has already indicated that chrysotile-induced lung cancer, like asbestosis, is a threshold phenomenon.

40. Numerous published scientific studies have also confirmed that very few cases of mesothelioma (cancer of the lung pleura) are attributable to chrysotile, and that it is in fact amphibole fibres that are largely responsible.
41. Indeed, modern technology and contemporary work practices provide for keeping the level of risk (if it exists) so low as to be technically non-measurable; this is what is known as the **practical threshold**.
42. We should point out that ambient air **naturally** contains 0.001 fibres per millilitre, or 1 fibre per litre, a concentration considered to be “acceptable,” “non-significant” or “perfectly safe” by numerous countries that have already taken a position on the subject.
43. Furthermore, it is clearly irrational to ban a product, substance, mix or natural resource based solely on the fact that it could be carcinogenic. Hundreds of elements known to be carcinogenic are currently being used all over the planet, including in Canada, with their negative effects and risks to health minimized through safe and controlled use.
44. In 2016, the U.S. Environmental Protection Agency (EPA), which is responsible for determining the scope of the risk evaluation for asbestos, established a panel to review the studies and literature on the subject. The panel members reached the following consensus:

*The experts also agreed that the available data suggest that the risk from fibres shorter than 5 microns is very low, and may even be null... There is strong evidence that asbestos (fibres) of fewer than 5 microns are unlikely to cause cancer in humans...*

45. As it all comes down to a question of dosage and control, the Government of Canada should, if it really wants to do something meaningful, ban the use of all amphibole fibres, and like our neighbours to the south, take the necessary time to seriously review and analyze the science, particularly the most recent studies, in order to make a well-informed and carefully thought-out decision.

#### Regulatory harmonization

46. In one section of the draft *Prohibition of Asbestos and Asbestos Products Regulations* dealing with “Regulatory cooperation,” the Government of Canada addresses the issue of “International cooperation,” stressing that:

*The importance of regulatory alignment between Canada and the United States and of ensuring a level playing field for Canadian and U.S. companies and enterprises is recognized. The United States is expected to publish a Problem Formulation document in December 2017 that will refine the scope of the risk evaluation for asbestos; a public consultation will follow. The risk evaluation is expected to be complete by 2019. If it*

*is determined that asbestos poses an unreasonable risk, the U.S. EPA must mitigate the risk within two years following the risk evaluation.<sup>2</sup>*

47. Given the foregoing, we find ourselves asking what is motivating the government's haste to immediately ban all types of asbestos, and in so doing, ignore the current American approach.
48. Furthermore, we are surprised to note that it is turning its back on a practice that was long promoted and defended—and justifiably so given the abundance of our natural resources.
49. Indeed, up until now, the government has favoured the policy of safe use for all minerals and metals that have **any** level of risk. It has always followed this policy as opposed to banning, except in the absence of any other way of countering an unacceptable level of danger; which, in our opinion, cannot apply to the case at hand.

## CONCLUSION

50. Projects to reuse serpentine mining residues, whether ongoing or in the planning stages, represent an approach to industrial reconversion that meets the requirements of sustainable development, and we welcome the Government of Canada's openness in this regard.
51. Any regulatory approach, whether federal or provincial, must facilitate the revitalization and economic development of regions whose communities were hard hit by permanent mine shutdowns.
52. These communities and regions are not asking to reopen mining operations. They simply want to use serpentine residue in such a way as to safely take advantage of the enormous potential of waste rock piles—a legacy that would lead to new businesses that could generate wealth and create quality jobs.
53. Given this enormous potential within their grasp, these communities are legitimately calling on the understanding and support of governments.
54. Preventing some activities inherent to the reuse of aggregates from mining residues would mean destroying a significant opportunity to benefit from our heritage.
55. Clearly, no government can claim to support the recovery of regions and simultaneously deprive them of the means to achieve it. Unfortunately, that is the trap that the new draft regulations fell into in prohibiting some uses of mining residues, and as we pointed out, banning chrysotile asbestos.

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<sup>2</sup> *Canada Gazette*, Part I, Vol. 152, No. 1, January 6, 2018, p. 81.