

## EDITORIAL - Message to the World Health Organization (WHO)

The Chrysotile Institute shares the point of view of a Canadian scientist and toxicologist, Dr. Jacques Dunnigan, as expressed in a letter addressed to the Director General of the WHO earlier this year. Below are the major issues raised by Dr Dunnigan as they concern the sources of information which serve as the basis on which decisions may be taken by this prestigious international organization? Hence, if the information on which decisions are based are incomplete, the decisions are likely to be unfair. We share this expert's profound worry faced with and the evident and troubling changes in the traditional position of the WHO on the question of health and safety in the use of asbestos.

"In a recent document of the World Health Organization (WHO Assembly Resolution 58.22 on cancer prevention and control, 2005), citing a WHO publication (Concha-Barrientos et al, 2004), it is stated that: *"Currently, about 125 million people in the world are exposed to asbestos at the workplace. According to global estimates at least 90,000 people die each year from asbestos-related lung cancer.*

"In October 2006, the Director of the Department of Public Health and Environment of the WHO, in an address to the Conference of the Parties of the Rotterdam Convention on the Prior Informed Consent (PIC) for certain Hazardous Chemicals and Pesticides in International Trades, stated that : *"Chrysotile asbestos is a human carcinogen. No threshold has been identified for the carcinogenic risk of chrysotile. At least 90,000 people die each year from asbestos-related disease."* <sup>(1)</sup>

"In a press release <sup>(2)</sup> posted on the ILO website January 6, 2006 (Asbestos: The iron grip of latency), the Director of the ILO «in Focus Programme SafeWork» repeated the same numbers, and some people within the ILO are currently promoting a global ban of asbestos, regardless of the recognized differences in risk between chrysotile and the amphiboles varieties of asbestos. Not surprisingly, NGOs such as the Ban Asbestos group and many other pressure groups repeat the same numbers in their global campaigns to ban all forms of asbestos, including chrysotile.

"However, careful examination of the Concha-Barrientos <sup>(3)</sup> report will show that the above statements by some people inside the WHO, the ILO and others are grossly misleading, in that they represent only **selective parts** of the report.

"First, Concha-Barrientos et al acknowledge that there is a difference in risk between chrysotile asbestos and the amphibole varieties. In chapter 21, p.1687, the authors state: *"Currently, about 125 million people in the world are exposed to asbestos at the workplace. According to global estimates at least 90,000 people die each year from asbestos-related lung cancer."* But the authors also add: *"In 20 studies of over 100,000 asbestos workers, the standardized mortality rate ranged from 1.04 for chrysotile workers to 4.97 for amosite workers, with a combined relative risk of 2.00. It is difficult to determine the exposures involved because few of the studies reported measurements, and because it is a problem to convert historical asbestos measurements in millions of dust particles per cubic foot to gravimetric units. Nevertheless, little*

**excess lung cancer is expected from low exposure level.**

"The Concha-Barrientos report also comments on the specific risk of mesothelioma, and further underlines the differences between chrysotile and the amphiboles: *"Risks were calculated for malignant mesothelioma on the assumption that exposure commenced some time between the ages of 20 and 45 years and ceased at age 65 years. Assuming a mixed fibre type, the lifetime risk of death from malignant mesothelioma is approximately 100 / 100 000/fibre. year per ml. This combined estimate is based on best estimates of risk of 400/100,000/fibre.year per ml for crocidolite, 65/100,000/fibre.year per ml for amosite and 2/100,000/fibre.year per ml for chrysotile, and the changing mixture of amphiboles and chrysotile that has characterized exposure 20 and 50 years ago (Hodgson and Darnton, 2000).*

"Recently, a multicenter case-control study in Europe<sup>(4)</sup> has shown that occupational exposure to asbestos does not appear to contribute to the lung cancer burden in men in Central and Eastern Europe while in contrast the lung cancer risk in the UK is increased following exposure to asbestos. The authors suggest that differences in fiber types and circumstances of exposure may explain their results.

"It has thus become disturbing that inside both the WHO and ILO, some people in key positions are embarking on a campaign for a global ban of asbestos, based on a very selective and partial reading of the evidence as it appears in this chapter 21 of the Concha-Barrientos publication (2), which ironically is published under the aegis of WHO! Thus, the numbers (100,000 deaths/year...) quoted are not based on the complete scientific data base.

"We strongly feel that a major aspect of any serious and responsible discourse on asbestos must include **all** the scientific evidence. In particular, it should take stock of scientific studies published recently<sup>(3-14)</sup> that distinguish clearly the health risk between asbestos fiber types. Indeed, I would urge the WHO to consider the IPCS Monograph EHC No. 203 «Chrysotile

Asbestos», published in 1998, a document that must be revisited in order to take stock of the abundant new and pertinent evidence published in the last ten years. These studies bring powerful demonstration that chrysotile presents a vastly smaller risk than do the amphiboles. They also show that, at low exposure, pure chrysotile does not present a significant risk. Focusing on these studies must be an urgent task for both the WHO and ILO in order to preserve the necessary credibility that should be the first concern of these international organizations.

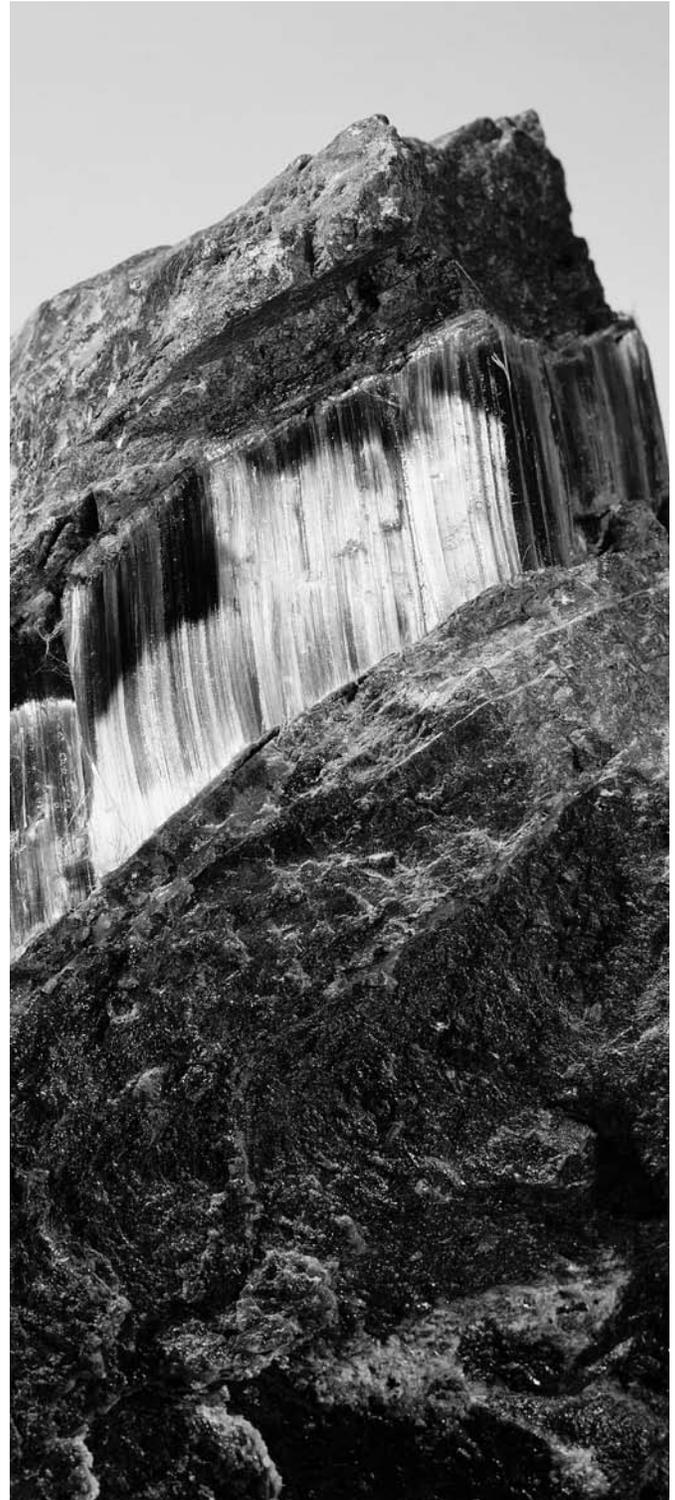
"We wish to take this opportunity to offer my congratulations on your recent nomination as Director-General of the World Health Organization. No doubt that your long service of commitment to the cause of health and safety will serve you well in the objectives and priorities you have set forth for your mandate as Director-General of this important institution."

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## WHAT SCIENCE SAYS ON CHRYSOTILE

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For all natural and man-made fibrous respirable materials, fibre dimensions (length & diameter) and selective retention times (biopersistence) must be considered in assessing health hazard and risk.

Adverse effects are associated with fibres that are retained in the lung rather than with those which are cleared.

Chrysotile is cleared rapidly from the lung, whereas amphiboles (crocidolite and amosite) are characterized by extremely long biopersistence.

The “hit-and-run” hypothesis is at odds with the evidence from biopersistence studies.

Evidence from morbidity, mortality and lung burden studies support the concept of a much lower pathogenic potential for chrysotile compared to the amphiboles.

These differences should be considered when setting workplace threshold limit values (TLV).

Recent updates of epidemiological studies are consistent with a practical threshold level of exposure below which no adverse effects are detectable.

The health risks associated with chrysotile exposure concern the workplace; risks for the general population, if they exist, are “below detection limit.”

With normal use and maintenance, fibre emission from modern, high-density asbestos composites, such as friction and chrysotile-cement materials is minimal, and does not constitute a measurable risk to the general population or to the environment.

The potential of risk to human is associated with inhalation, not ingestion. Thus, chrysotile-cement pipe materials are safe, as many epidemiological studies have failed to show demonstrable risks.



**With the numerous and recent data and scientific evidence demonstrating that it does not pose a measurable health risk, chrysotile is entitled to fair and balanced treatment**

Chrysotile is a victim, not only of the heritage of past misuse of the different types of asbestos fibres, including amphiboles, but also of incredible pressure by some multinationals producing other fibres and the ban asbestos movement and its allies calling for a global ban of asbestos. An increasing number of scientists are expressing their concerns faced with the potential harmful health effects of replacement fibres. It is evident that the burden of proof now rests with the producers of replacement fibres found on the marketplace.

It is to be hoped that the activists for a total ban of chrysotile understand that their position is not based on scientific evidence and we would hope that they will be courageous enough to admit their error. We invite them to reconsider and revise their position, this time based on recent and relevant studies.

Buoyed by the results of the numerous studies, such as the ones on the biopersistence of chrysotile, the focus must be on the following aspects:

- disseminate the results of these studies to international bodies;

- demand in-depth studies of all industrial replacement fibres;
- ensure that regulations applying to chrysotile are extended to all respirable fibres;
- urge competent governmental authorities to attentively examine all the recently published studies and their results. And, based on these results consolidate the implementation of the safe and responsible-use policy.

The overall efforts the Chrysotile Institute (CI) have always been aimed at the promotion of prevention and responsible-use. Whether it is working with chrysotile, managing past errors related to the use of amphiboles, or handling replacement products or other fibre types, CI believes that we must raise international awareness to the importance of the safe and responsible-use. CI also firmly believes that an outright ban resolves nothing. On the contrary, it is useless as a measure of control in the workplace. Banning asbestos is not banning exposure.

## CHOOSING THE RIGHT PATH

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Between the two extremes, “controlled-use” or “ban”, the responsible approach is that of controlled-use. And, for years now, this is what the Chrysotile Institute has proposed and supports. It is also good sense when applied to occupational safety and health.

This controlled-use must not only be applied to chrysotile, but to all other products, substances and fibres, which may potentially pose a health risk.

NO CONTROL	CONTROLLED-USE	BAN
Hazard not recognized	Recognition of hazard	Recognition of hazard
Irresponsible approach way	Responsible approach involving all parties : industry, governments, workers.	Lazy man’s
<u>All fibrous materials</u> long, thin, durable natural, synthetic, mineral, organic, are biologically active (eg. crystalline silica)	Based on scientific evidence, Responsible use implies: <ul style="list-style-type: none"> <li>• regulations,</li> <li>• implementation of good work practices and appropriate controls</li> <li>• dust controls at source</li> <li>• medical surveillance</li> <li>• monitoring of work environment</li> <li>• education &amp; training of workers, Company representatives &amp; others</li> </ul>	Incentive to resort to uncontrolled alternatives
Society at risk.	Allows society to benefit from cost-efficient, needed materials used in a responsible safe manner.	Deprives society of needed materials.

## **THE INSTITUTE DEMANDS A RETRACTION FROM THE ILO**

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In a letter to the Director-General of the International Labour Organization, the Chrysotile Institute voiced its concern about the adoption of a Resolution on the use of chrysotile and the subsequent distribution of a news release on June 14, 2006. Using legal arguments to denounce what can be considered a misapplication of procedure, the Institute points out to many irregularities and inaccuracies in the Resolution itself and in the process that led to its adoption.

What is obvious is that this Resolution aimed at eliminating the use of asbestos or any product containing it, without any distinction between chrysotile and amphibole fibres, cannot be validated because it contradicts an international Convention adopted by the ILO's member states. Convention 162 sets out the preventive and protective measures required for a safe and responsible use of asbestos which have been in force since 1986. This convention clearly overrides any other resolution, including the one adopted hastily and without prior notice in June 2006.

Unfortunately, in a news release issued in the spur of the moment right after the adoption of the

Resolution, the ILO implies that it is in favour of banning the use of any asbestos fibre. It is important to demand that the ILO clarifies its position, which is what the Institute requested in its letter to the Director-General. The ILO's member states, that have democratically adopted International Convention 162, must also demand a retraction; and, it is the ILO's duty to comply with such a demand.

Such tactics aimed at disparaging chrysotile by ignoring all scientific evidence making a clear distinction between this type of fibre and amphiboles, are generally used by some labour activists, mostly in Europe, with the support of NGOs like the Ban Asbestos Movement. Using and producing countries must be vigilant and demand that such distortions of the truth be corrected because they have no basis, neither in science nor in reality. Nowadays, chrysotile is used responsibly and regulated by strict safety standards. More than 20 years after the approval of International Convention 162, the ILO and its member states must face these facts and exercise sound judgement.

## **FACTS WHICH BEG REFLECTION**

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According to report "Fast Facts" and signed by Mr. Mark Mallock Brown, Administrator of UNDP " More than a billion people lack access to clean drinking water and over 2.4 billion people lack access to proper sanitary facilities. The result is that there are more people in the world's hospitals suffering from water-borne diseases than any other ailment. Some two million children die every year – 6,000 a day – from such infections."

Chrysotile cement pipes are perfectly suited to conduct water as a very affordable solution to

sanitary infrastructure problems and a solution which does not pose a measurable risk to human health when used properly. Knowing this, we ask what motivates supporters of a total ban of asbestos, including chrysotile?

The viewpoint of Professor Arthur M. Langer, Environmental Sciences Lab., The Graduate School and University Center of New York, on the question of a global ban versus safe use is interesting and must be noted.

*"However, in the end it is a moral judgment: "how much ill health or how many early deaths are acceptable" if they continue to use ...(read Selikoff and Lee, 1978, p. 438-439). To my colleagues in the Collegium Ramazzini, permit me to paraphrase Julian Peto (World Congress on Chrysotile Asbestos, Montreal 1982) who said "scientists are no better qualified to set risks for others than anyone else."*

These issues are more important to current chrysotile consuming countries making up the poorer nations of the world. Consider the following example. The Collegium Ramazzini and especially IARC (International Agency for Research on Cancer), are well aware of the fact that the World Health Organization has reported that diarrheal diseases are one of the major causes of morbidity and mortality among the child in the world today. The poorest of countries suffer from cholera, amoebic dysentery, typhoid fever, as well as serious disease from a host of other pathogens. They do so because in large part they lack the infrastructure to distribute and delivery potable water among their populations. Some 4 billion of such cases occur each year with about 2.5 million deaths. Eighty percent of these deaths occur in children under the age of 5 years (2 million) of which 30 percent are directly related to waterborne agents. Six hundred thousand children die each year because of lack of access to clean water. Of the one hundred fifty thousand other deaths, they occur in pregnant women, the elderly and the health-compromised. Inexpensive chrysotile cement water pipe may be viewed quite differently in these societies.

Available substitutes may be in world commerce today, but the support of a global ban on chrysotile comes with the responsibility of insuring that substitute products are available, accessible and

affordable. The simple water pipe is of extraordinary importance to the world's poorest peoples. The issue before them is do their benefits exceed their cost? It is time to think about the repercussions of a global ban and about those who will suffer the most as a result. The benefits are theirs; the cost is theirs; the moral judgment is most certainly theirs.

The interpretation and use of scientific data is much like beauty: it is in the eye of the beholder. I believe that many scientists might support a ban of chrysotile use in textiles. They might also support a ban on the amphibole asbestos varieties, especially crocidolite. The data sets used by Landrigan and colleagues reflect the hazards of both this industry and this fibre type. Their language concerning low-level chrysotile exposure and risk for disease is stronger than the data supporting their position. The data cited are those resulting from exposures that occurred decades ago.

Unfortunately, they have given little thought to the ramifications of a complete ban. They have failed to provide emerging economies with sufficient information to allow them to come to any conclusion based on available evidence. A complete chrysotile ban, if instituted, might well do far more harm than good."

*Read for you*

## **DDT'S NEW FRIEND**

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The World Health Organization (WHO) announced Friday that it will begin actively promoting use of the pesticide DDT to combat malaria in developing nations. Do you believe in miracles?

### **A U.N. breakthrough against malaria.**

Malaria is the number one killer of pregnant women and children in Africa and among the top killers in Asia and South America. It's long been known that DDT is the cheapest and most effective way to contain the disease, which is spread by infected mosquitoes. But United Nations health agencies and others have for decades resisted employing DDT under pressure from anti-pesticide environmentalists. After tens of millions of preventable malarial deaths in these poor countries, it's nice to see WHO finally come to its senses.



The Agency's malaria chief, Arata Kochi, told reporters that "one of the best tools we have against malaria is indoor residual spraying. Of the dozen or so insecticides WHO has approved as safe for house spraying, the most effective is DDT." He also said, "We must take a position based on the science and the data."

Mr. Kochi's intellectual honesty is commendable and all too rare among public health officials in this debate. For decades, the science and empirical data about DDT's effectiveness have been distorted or suppressed. Nevertheless, and Rachel Carson's scare-mongering notwithstanding, there is no evidence that DDT use in the amounts necessary to ward off malarial mosquitoes is harmful to humans, wildlife or the environment. Period.

By contrast, there's plenty of evidence from the U.S. and Europe to Australia, India, Sri Lanka and Brazil – that spraying DDT is the best intervention. According to Pierre Guillet, another WHO official at Friday's press conference, South Africa temporarily stopped using DDT in 1996 because green groups were opposed, not because it wasn't working. Malaria takes a heavy toll on a country's economy by discouraging foreign investment and incapacitating otherwise productive people, so these anti-DDT alarmists have been helping to impoverish those they don't kill. There is something other-worldly, or worse, about well-healed greens trying to deny the world's poorest people from the very tool used by rich nations to eradicate this disease.

Even if WHO's decision won't change those minds, its stamps of approval on pesticide use matters in the public health world. Other organizations, ranging from the World Bank to Aid for International

Development, to Doctors Without Borders, look to WHO for guidance and will now likely reassess their own guidelines. The U.S. is typically the largest donor to these international agencies, and the recent efforts of Republican Senators Sam Brownback of Kansas and Tom Coburn of Oklahoma, who have called for DDT intervention and more responsible allocation of aid dollars generally, no doubt played a role in WHO's decision.

One insecticide won't end malaria and DDT's proponents don't claim it will. But by keeping more people alive and healthy, DDT can help create the conditions for the only lasting solution, which is economic growth and development. It's encouraging that even a U.N. health agency seems to have figured that out.

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## **International Conference: Unions and Chrysotile – Moscow, Russia**

The Chrysotile Institute was recently informed that the Chrysotile Alliance, a grouping of labour organizations in favour of a safe and controlled use of chrysotile, is organizing an international conference in Moscow, April 25-27, 2007. The objective of the Conference is to discuss and reach an agreement on a common and official position for the labour movement to oppose that of a certain number of mainly European unions, actively lobbying for a global ban of chrysotile. This Conference will be an opportunity for those who defend the safe use of chrysotile to make their voices heard, especially by international authorities. Among other subjects, recent scientific data on the different fibres, as well as safe working methods and other pressing issues will be discussed.

The Institute, which comprises representatives from the industry, governments and labour organizations, urges workers' union organizations from user and producer countries to participate in the Conference.

## **Europe: Launch of a Guide for the Health and Safety of Silica Workers**

In the fall of 2006, at the request of the European Commission, industry and labour representatives from 14 different economic sectors in Europe, including such industries as cement, ceramics, glass fibre, metal casting, minerals, etc., oversaw the application of an agreement aimed at improving the protection of more than two million workers exposed to silica. For this purpose, a guide titled "*Agreement on Workers Health Protection Through the Good Handling and Use of Crystalline Silica and Products Containing It*" was published. This guide is available in 20 different languages at [www.nepsi.eu](http://www.nepsi.eu). As is the case for chrysotile, silica is considered a Class 1 carcinogen by the IARC. Considering how the two substances are treated differently by European authorities, one can only conclude that a double standard is being applied!

## **Brazil: Growing Presence on the Web**

**Crisotila Brasil**, the Brazilian Chrysotile Institute, a tripartite organization comprising industry, union and government representatives, announced that its website: [www.crisotilabrasil.org.br](http://www.crisotilabrasil.org.br) now presents its vital industry information in three languages, Portuguese, Spanish and English. Those who are interested will find on this website an abundance of information on chrysotile, related activities, scientific research, new available data, etc. The Brazilian Institute's on-line collection includes about 525 referenced studies and 379 scientific papers. In other words, it's a true goldmine of information!

## **Egypt: Experts at a Symposium Conclude that Plants Using Chrysotile May Be Reopened**

After closing industrial plants where chrysotile-cement pipes were being manufactured, and after putting their 3,500 workers out of a job in 2004-05, Egypt is now reconsidering its strategy. At a conference organized by the Scientific Research Academy, the attending group of experts from various fields including the environment, preventive medicine, and workplace health and safety, came to the conclusion that a safe and controlled use of chrysotile does not entail significant risk for human health and suggested that these plants be reopened. The experts also pointed out that one of the advantages of chrysotile-cement pipes is that they do not react chemically with the chlorine contained in water, as opposed to PVC pipes. This is a vital piece of information for a country where as many as 2,400 villages currently have no access to drinking water due to the lack of a proper water distribution infrastructure.

## Peru: Health Specialists Speak Out

At the request of the Peruvian Public Health Committee and Workplace Health Commission, representatives from the Peru Medical College voiced their observations on the issue of a safe and responsible use of chrysotile. These health specialists expressed their opinion on the obvious distinction to be made between the different types of asbestos fibres and came forth with many other scientific observations. Among other conclusions, the committee noted that chrysotile has a very low degree of biopersistence in the lungs and, with today's standards of use chrysotile does not present any measurable risk for human health. This important presentation includes many other interesting comments and can be viewed on our website at: [www.chrysotile.com/en/chrysotile/hltsfty](http://www.chrysotile.com/en/chrysotile/hltsfty).



## Montreal International Conference: DVD and CD Now Available

The Montreal scientific conference on chrysotile, where hundreds of scientific experts and representatives from using and producing countries came together on May 23-24, 2006, is now available on DVD or CD, in French or English. The CD features biographical notes for each of the speakers, as well as a summary of their lecture and accompanying presentation. The DVD contains the actual conferences given by experts who came to share the most recent scientific data available and by government representatives from Québec and Canada who presented their respective positions in favour of a safe, controlled and responsible use of chrysotile. This reference tool is a must-have! To obtain a copy, please contact the CI at [info@chrysotile.com](mailto:info@chrysotile.com).