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Asbestos representative attends summit meeting

The Chairman of the Quebec Asbestos Mining Association, Mr. M.J. Messel, attended, at the invitation of Premier Lévesque, the first economic summit meeting ever held in Québec with representatives of the State, private enterprise, labour unions and cooperative movements.

Search of progress

On the occasion of this historic gathering, where private industry representation was limited to forty-five invitees, Mr. Messel spoke on behalf of the asbestos mining industry to advocate permanent dialogue between all economic bodies.

"If the political and economic wills are not mutually reinforced", said the Chairman who addressed the 150 participants, "if we do not find a way establishing a climate of mutual trust favourable to continuous discussion between all socio-economic parties, progress will not be possible."

Evoking economic interdependance of all economic bodies "which today assumes proportions such that no single government, no single trade union movement, no single financial or industrial group can be the executive carrier of the interests of a nation or a people", Mr. Messel stressed the need to "modify our economic behaviour and select, from among particular interests which sometimes are divergent, collective objectives centered on promoting Québec socio-economic interests."

Behavioural change

According to Mr. Messel, behavioural change should especially evolve in relations between the State and the private sector, whose higher interests would be better served if they operated in the open. "We should be able to establish relations which are neither those of accessories, nor those of adversaries. To achieve this, there must exist, on both sides, greater understanding and also abandonment of a rather unhealthy practice too often found among politicians, businessmen and civil servants: secretiveness."

The Association Chairman, who is President of Lake Asbestos, also dealt with the necessity to counter adverse publicity plaguing the asbestos industry and with the question of developing manufacturing.

Adverse publicity

On the subject of negative publicity, Mr. Messel mentioned that to the extent that asbestos is a Québec trademark all over the world, everything that inconsiderately discredits asbestos, reflects on Québec's image. Therefore, he asked Government Departments and bodies "to cooperate with industry in fighting this adverse publicity and to promote Québec asbestos, whose unique qualities are reflected in the thousands of uses to which it is applied in the interests of mankind's safety and welfare".

Conversion

On the subject of conversion, the asbestos delegate to the economic summit recalled that his industry has commissioned an overall feasibility study, the results of which should enable an enlightened decision to be made in this field. However, he insisted on the need to develop a healthy domestic market which necessarily calls for greater use of asbestos containing products such as: asbestos-cement products, asbestos paper, textiles, joints, roofing products and asbestos-asphalt.

Finally, Mr. Messel discussed the need for investments required to develop, in a viable economic way, the asbestos mining and manufacturing industry in order to create new jobs.

Monitoring instruments selected

Following six months of trials and testing conducted by technicians of the five member companies of the Québec Asbestos Mining Association, two continuous monitoring and internal checking time weight measurement instruments proved to be highly superior and have been selected by the QAMA's design subcommittee.

Continuous monitoring

The APM, manufactured by CGA's Technological Division, is considered as being the best continuous monitoring instrument. The Ambient Pollution Monitor (APM) was designed to automatically measure the concentration of dust in a specific environment. Its high sensitivity, prolonged autonomous operation and especially, as emphasized by the QAMA's research consultant, Marc Trudeau, in his report, its attenuating radiation β operating principle allow it to perform more favourably than other instrumentation designed for industrial usage. Among the major features leading to selection of this instrument are its easy installation, its distinct modular units and its adaptability to underground mining

Internal checking

Among internal checking instruments, the QAMA's design subcommittee chose the RDM 101-4 manufactured by CGA's Technological Division, which will become the standard internal checking instrument. The Tyndallometer is also recommended for certain applications in mills

The RDM 101-4 operates according to a dust accumulation principle by impact on a polyester disc on which vaseline has been evenly spread. It is compact, light and shock resistant

The Tyndallometer is an instrument which measures respirable dust. Its greatest advantage is that it can quickly produce results in such a way that it is possible to obtain particularly interesting information about the variations in dust levels notwithstanding the absolute value.

Selection criteria

The evaluation and verification tests were carried out on all instruments recommended by the Committee for the Study of the Health Conditions in the Asbestos Industry, except two which were not available in North America.

The selection criteria were the following: strength, facility in operating, maintaining and calibrating, accuracy, precision, sensitivity, portability, flexibility, print out of results and overall performance.

Chinese delegation in the Asbestos region

A chinese delegation in Canada on an official mission visited the Johns-Manville Company installations at Asbestos and the Industrial medicine clinic at Thetford Mines at the beginning of June. The delegation was made up of an industrial toxicologist, two doctors including an expert in occupational medicine, and an environmental engineer, all members of the Health Institute of the Chinese Academy of Medical Sciences of Peking.

The Chinese visitors, who were fully knowledgeable with questions about asbestos mining and familiar with health and hygiene problems, were particularly interested in technological progress made by the Québec asbestos industry

In the photograph above, we see front row, Dr Michel Lesage, Medical Director of the Québec Asbestos Mining Association, Lang Wen-Fang, doctor in occupational medicine, Pi Wen-Fang,head of the delegation and industrial toxicologist, Wu Chung-Hao, doctor and delegation interpreter, back row, Niu Shih-Ju, deputy chief of the Health Protection Division of the Health Institute and environmental engineer, Marc-André Gosselin, Canadian Johns-Manville Director of Public Relations, Liu Li, interpreter from Ottawa, Geoffrey Knight, technical advisor to the Québec Asbestos Mining Association, Dr. Michel Grimard, head of the biological effects division at the Environmental Hygiene Centre, federal Department of Health and Welfare, and Marc Trudeau, QAMA research consultant

The study on asbestos manufacturing

A world-wide synthesis of the industry

The first phase of the market and feasibility study on manufacturing of Québec asbestos fibre is nearly complete. Sorès, an economic and scientific research firm, of Montréal's SNC group, entrusted with conducting the study commissioned by the Québec Asbestos Mining Association, will make public its first preliminary report at the beginning of July as anticipated.

Fifteen products

Fifteen asbestos containing products have been the subject of an exhaustive analysis aimed at conversion possibilities in Québec. The size of the current market, in terms of volume and value for each of the products was established for the six world regions included in Sorès global evaluation.

Pre-selected products

The fifteen asbestos products surveyed during Phase I on the Sorès study are as follows: yarn, tissue, gasket paper, pipe wrappings, flooring felt, roofing felt, A/C pipe, A/C sheet, A/C finished sheet, shingle, friction woven, friction molded, floor tile, plastic filler, compressed asbestos fibre sheet. Sudies and research also was conducted on new products now being developed or just put on the market.

The regions

These regions include Canada subdivided into two zones, Québec and the rest of the country; the United States, Western Europe; the middle East, taking into account its economic development, and the Far East, especially Japan.

Past trends of the various markets were analyzed and, due to supplementary data, all information required for projection related to the evolution of these markets to 1985 was gathered.

Main objective

Thus the work accomplished up to now enables the main objective of the study's first phase to be achieved. This consists in selecting, from the fifteen products studied, the five most promising asbestos containing products for optimum development of Québec's asbestos manufacturing.

Steps of Phase I

In Phase I, stages dealt primarily with research and analysis of all essential information and analysis of all essential information and data required to carry out the phase's main objective, the selection of five products offering the best potential for conversion in Québec.

Personal interviews were conducted with Canadian fibre producers, asbestos product manufacturers in the six geographical zones considered, research centres and associations, users of asbestos products, transportation specialists and organizations and agencies preoccupied with the environment.

Sorès conducted the interviews in Canada while A.D. Little, of Cambridge (Massachusetts), carried them out in the United States and in other parts of the world included in the survey.

World-wide synthesis

Thanks to the work conducted by Sorès and A.D. Little of Cambridge (Massachusetts), which dealt among others with fibre shipments by groups, by products, by country of destination and use, a world-wide synthesis of the asbestos industry was realized. The results will be used as guidelines for selecting the products.

An important element of the comparative study dealt with the production cost structure. Asbestos fibre costs were analyzed thouroughly and in detail in pourcentages of the total costs of production, and distribution costs were determined (freight, handling, insurance, tariffs) for all the products and for the fibre shipped from Québec to various markets included in the study, and most particularly, American and Canadian centres

The report

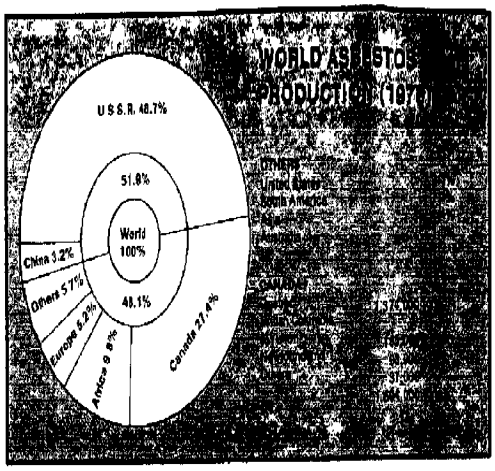
Sorès' report on the first phase of the study will deal with the objectives and procedures of the survey, will include fibre movements throughout the world and will contain a record of Québec asbestos shipments, by market zone and usage. It will also contain a chapter on production of finished products and will analyze manufacturing processes and the international structure of the conversion industry.

This first report will provide results of a detailed study of markets for asbestos products, including the supply and demand profile, uses, substitutes and current and potential markets for each product by region. It will also deal with new asbestos products capable of being developed and will analyze production and transportation costs for the six zones studied.

Finally, the report will conclude with the positive and negative factors which played a determining role in selecting the five products which will be the subject of a more thorough market and feasibility study.

Asbestos: an evolving market

Potential and restraints of a market where Québec is competing with the world



World economic conditions are exerting considerable influence on the evolution of the asbestos market as the difficulties confronting most western countries have completely altered producers' forecasts.

In fact, the latest figures on world asbestos production indicate that, in this field, the world is Québec's competitor. A world with multiple political and economic systems resulting in considerably varied goals for the participants

Markets and currencies

Therefore, producers must accept as a rule that their sales should be oriented toward both geographical and economic diversification and must search for markets offering the best long-term growth potential

Of course, Québec asbestos producers want strong foreign currencies, a goal not always easy to reach, as countries with the greatest need for fiber are frequently those with the least hard currency reserves.

Supply and demand

On the other hand, criteria determining the trend of export-import activities vary a great deal, as a result of the economic-political regimes in power For the most part, assurance for specific foreign currencies is of the utmost importance, while others, such as Canada, opt for free competition

This free competition results in Québec's asbestos producers having to face supply and demand fluctuations. Thus, as in the case of many other commodities, variations which follow a fairly precise cycle occur

Since 1970, demand for asbestos has swung from surplus to scarcity and finally became balanced in 1977

Considerable fluctuations

Such wide fluctuations, over a six-year period, tend to leave one perplexed. All the more since the growth rate had been estimated at some 5 percent per year and no new deposit has come into production during this period.

Since the beginning of 1977, Québec producers have had a surplus of textile and short fibers 46 percent of Québec's production is composed of short fibers, for which the major market is in the United States. Asbestos mines are inevitably feeling the effect of the standards and restrictions imposed by the various levels of the American Government.

Apart from those mentioned, several other factors have contributed to the present evolution – notably the adverse publicity and the introduction of new substitute products on the market.

Adverse publicity

The negative and, more often than not, fallacious publicity aimed at asbestos over the last few years has resulted in the creation of a collective psychosis which encourages public authorities to adopt more and more rigid legislation and regulations governing the use of asbestos containing products.

No one will contest the fact that the asbestos industry has had to face health problems arising from its activities. But, due to technological and scientific progress and to the enormous efforts the industry has made in this field, most of these problems have been eliminated and the remainder are in the process of being solved. Any impartial observer must recognize the remarkable improvements which have occurred.

Destructive work

Unfortunately, certain milieus, whom, obviously, competitors do not discourage, pretend to ignore the progress made and refuse to admit the obvious, which is that the new asbestos products currently on the market are perfectly safe, as they are manufactured in such a way as to ensure that dust spreading is pratically non-existent Giving free rein to alarming rumors, these circles give the impression that they are engaged in the systematic destruction of the industry

What can one say of countries which, like Sweden, have banned asbestos in large part, or of the standards issued by the United States Department of Transport which plans to classify asbestos as a "dangerous material" and of the European Community's intention to do the same?

Québec's asbestos industry is fighting this hostile propaganda emphatically and is devoting considerable energy in fighting the adoption of proposed laws or regulations it believes unfair while, at the same time, striving, jointly with its clients, to inform the public of the advantages of asbestos which may be used in complete safety

Substitutes

As for substitute products, other industries are currently working at perfecting several products containing no asbestos, such as tiles made of glass-fibre cement, conduit pipes of polyester-cement and glass fiber, brake linings with a metal alloy base, glass fiber heat insulators. Moreover, the percentage of asbestos contained in the tiles has been reduced from thirty to five percent

Therefore, because of the rigidity of certain regulations and the introduction of numerous substitutes, it is urgent that producers direct their sales towards products which are less likely to be touched and work at developing new markets. Since glass fiber and mineral wool are as rigid as a needle while asbestos fibres are flexible, supple and curved, asbestos, a natural product, seems well designed for purposes to which synthetic products do not lend themselves

Future prospects

To this end, the Quebec asbestos industry is sparing no efforts and is well on the way in reaching its goals.

The future of the asbestos market can be considered with optimism, provided all the interested parties are aware of the need for collective effort, the purpose of which is to protect a vitally important industry for Québec from the dangers and consequences which may result from adverse publicity and the introduction of new substitutes on the market.

Pilot tests on recuperation of asbestos waste

The Canadian Johns-Manville Company recently signed an agreement with the Mineral Research Centre of the Québec Department of Natural Resources to recuperate iron and nickel from asbestos waste. Meanwhile, pilot tests are being conducted to determine the feasibility of such a project.

Nickelized steel

At the request of the Research Centre, Johns-Manville installed a magnetic separator, and for a period of two months, some 70 tons of magnetite (pre-concentrated) were delivered to the Department of Natural Resources. An iron and nickel alloy is obtained from this pre-concentrated magnetite in the form of concentrated iron pellets containing nickel. Should the project find an industrial use, the nickelized steel contained in mining waste could be recuperated in a proportion of 90 to 100 lbs per ton of waste.

The alloy is composed of 85% iron and nickel in a proportion varying between 1 and 1.2 percent and could be very useful to steel alloy manufacturers.

Possibilities to be evaluated

Should the project prove to be economically viable, the possibility of establishing two iron-nickel concentrate plants in the Eastern Townships could be studied. These would produce concentrated pellets and effect consequent metallization.

It is estimated that investments required to build such plants would reach $40 million and create 50 to 60 jobs. Johns-Manville has been quite interested in recuperating iron and nickel from mining waste for more than twenty years, and has spent to this end nearly $300,000 to date.

The Blaylock medal awarded to Lionel Piuze

Lionel Piuze, Vice-president, Operations, of Lake Asbestos Company at Black Lake and President of the Committee on the Environment of the Quebec Asbestos Mining Association, has been awarded the Selwyn G. Blaylock Medal by the Canadian Institute of Mines and Metallurgy for 1977, during the Association's Annual Meeting in Ottawa. Mr W Bartley, President of the Institute, in awarding the Medal, stressed that the honour was bestowed upon Mr Piuze *"in recognition of his out-standing achievements in the mining field."*

The Selwyn G Blaylock medal is awarded annually by the Institute to a person in the mining industry, in memory of Dr S.G Blaylock, former President of Cominco Ltd

Mr Piuze, a native of Riviere-du-Loup, completed his Civil Engineering studies at the University of Montreal and is a graduate in mining engineering from Queen's University in Kingston, Ontario He first worked in mines in north-western Québec, then joined Asbestos Corporation Ltd where he successively held the following positions from 1941 to 1957 Mining Engineer, Manager of the British Canadian and Normandy Mines

In 1957, he joined Lake Asbestos as Manager Promoted General Manager in 1964, Mr. Piuze was named Vice-President and General Manager in 1966. Since 1976, he has held the position of Vice-President, Operations, of the Black Lake and National Divisions of the Company.

Mr. Piuze is a member of the Order of Engineers of Québec; the American Institute of Mining Engineers, Canadian Institute of Mines and Metallurgy, past President of the Thetford Mines chapter and also former President of the Industrial Minerals Division, a member of the Executive Committee of the International Information Conference on

The president of the Canadian Institute of Mines and Metallurgy, Mr W. Bartley, presents the Blaylock medal to Mr Piuze

Asbestos, President of the Committee on the Environment of the Québec Asbestos Mining Association; and a member of the National Advisory Committee on the Mining Industry

Sister-association in Australia

Similarly to asbestos mining firms in Québec, six large Australian asbestos producers and manufacturers have formed an association, to be known as the *Asbestos Association of Australia.*

The founding-members are Bendix Mintex Pty Ltd., Chrysotile Corp. of Australia Ltd., Hardie Ferodo Pty Ltd and Jones Hardie & Coy Pty Ltd. Shortly after it was founded, three other companies joined the Association; Wunderlick Ltd., Richard Klinger Ltd. and T.B.A Industry Products Pty Ltd.

The President of the new association, R.D Palfreyman of Jones Hardie & Coy, was recently elected to the Board of directors of the International Conference on Asbestos Information

Objectives

The goals of the Australian Association are quite similar to those of the Quebec Asbestos Mining Association, in fact, the *Asbestos Association of Australia* has the following objectives a) to coordinate the efforts of member-companies to eliminate health risks which may result from the use of asbestos, b) to provide members with quick and efficient information services dealing with hygiene and health questions; c) to encourage cooperation and exchange of information related to medical, scientific and technical research as well as the development and promotion of effective control methods of asbestos dust; d) to develop and maintain a spirit of cooperation and constant liaison with the government and labour groups on all asbestos, industrial health and environmental matters, e) to study the use of asbestos in Australia and help members and non-members of the Association with any problem related to industrial medicine, dust measurements and control techniques

Record income for Asbestos Corporation

Asbestos Corporation Limited, whose annual shareholders meeting took place in Montreal in May, shows in its annual report that the Company's net income for the period ending December 31, 1976 hit a new record at $20,422,069; a sizeable increase when compared to 1975 net income which was $14,239, 332.

Re-invested profits

Asbestos Corporation re-invested $17,585,067 of its profits, and its assets now total $220,093,010. Regarding salaries, the Company paid out over $41 million to its 2,268 employees Tax payments amounted to nearly $20 million.

Purification program

The Company spent $10 million in 1976 on its air purification and hygiene improvement program This program will involve, in 1977 and 1978, investments of about $20 million.

In this regard, the President of Asbestos Corporation, Maurice Taschereau, noted that considerable improvement in dust levels had been brought about throughout the Company. "We fully accept our own responsibilities towards employees affected by asbestos in former years", said Mr. Taschereau, "and we are working with our employees, the labour unions and the Government to find a just solution".

Asbestos Corporation, according to its President, is well in advance of the timetable with regard to dust concentration levels set in 1975 by the Québec Government

Heavy demand

On another subject, Mr. Taschereau, whose Company produces 85% of asbestos in categories for the asbestos cement sector, eshimates that fibre demand should remain strong for many years to come as Asbestos Corporation continues its search for new deposits. "However", he stressed, "new production can be started up only if prices remain at adequate levels well into the future".

"In the meantime, production at Thetford is reasonably stable, and broad exploration programs are underway to discover additional ore reserves in the region. At this time, we have enough ore for 15 to 20 years, at present production levels"

New member of the Board

During the Annual Meeting, Roland Dugré, Directeur Général of the School of Higher Technological Studies of the University of Québec, was elected a member of the Board of Directors of the Company.

Re-opening of the King Beaver mine

Asbestos Corporation Ltd has re-opened its King Beaver open-pit mine The decision was made following progressive exhaustion of the ore at the *Normandie* mine where operations will cease before the end of the year.

As the *King Beaver* process plant, which burnt in 1974, will not be rebuilt, the ore concentrate from the open-pit mine will be transported by truck to the *Normandie* mill at Coleraine. The underground unconcentrated raw ore is processed at the *British Canadian* plant at Thetford Mines.

New road

The realization of the project required that a new road connecting the *King Beaver* mine, the *British Canadian* plant and the *Normandie* mill be built. A 900-foot tunnel was dug to connect the 112 E overpass to the new road. Work involved cost approximately $3 million An agreement between the Lake Asbestos Company and Asbestos Corporation will permit trucks to cross the premises of Lake.

Ore transported will reach approximately 7 700 tons per day fter the *Normandie* mine has been closed.

The new road and tunnel to be used by trucks which will carry the asbestos ore from the King Beaver *mine in Thetford Mines to the* Normandie *mill at Coleraine*

Health, hygiene and the environment

Exposure threshold considered safe

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The level of asbestos dust to which the general public is exposed to does not present a danger to health.

This is the conclusion drawn from remarks made by Dr. I.J. Selikoff, Professor of community medicine at Mount Sinai School of Medicine, who was addressing members of the Association of Asbestos-Cement Pipe Producers meeting this year in Mexico City.

A safety threshold

Dr. Selikoff, well-known for his alarmist statements on the dangers of asbestos, admitted during a debate at the Mexico City Convention that there exists a safe level of exposure to asbestos and that this threshold is found at the level of an asbestos industry worker's home environment. This implies that the general public's exposure to levels of asbestos dust does not constitute a danger to health.

Studying the past

Questioned, on the other hand, on the scientific value of his extrapolations of mortality rates as a result of excessive exposure to asbestos dust, Dr. Selikoff explained that his projections were necessarily based on current anomaly rates due to past exposure levels, since establishment of a dose-response relationship requires a reference period of at least twenty years. He further acknowledged that his studies did not take into account improvements made in air purification techniques and the progressive lowering of dust levels.

The Association of Asbestos-Cement Pipe Producers had invited medical doctors and scientists to this convention, to deal with industry-related health and environmental problems.

Acceptable methods

On this occasion, Dr. Clark Cooper of *Equitable Environmental Health* presented the results of a study commissioned by the Association to determine the dust level to which workers who cut or saw asbestos-cement pipe are exposed.

Dr. Cooper's inquiry shows that, in this case, the dust level is less than 2 fibres (2f/cc), and that all methods used for cutting and sawing asbestos-cement pipe are recommendable, with one exception.

As a matter of fact, only the portable circular saw method, using an abrasive disk instead of a saw, was found to be unacceptable because of the level of fibres produced. Indeed, this method was rejected by the Association several years ago.

Cancer and the environment

On another subject, Dr. Marvin Kuschner, Dean of the School of Medicine of New York State University, suggested that the industrial or urban air has a minor influence on the incidence of cancer.

According to Dr. Kuschner there is too much a tendency to confuse environment with the air breathed in industrial locations and cities, since this is not where the main problem lies. In the opinion of the New York specialist, the main sources of cancer are cigarettes and the nutritional environment, especially poor eating habits.

Several Québec asbestos industry representatives attented the Mexico City Convention including the Chairman and the Medical Director of the Québec Asbestos Mining Association, Mr. Messel, and Dr. Michel Lesage. The Scientific Secretary of the Montréal Institute of Occupational and Environmental Health, Dr. Premysl Pelnar, also attended.

Bulletin

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