

FILE NAME: Quebec Asbestos Mining Association (QAMA)

DATE: 1979 May-June

DOC#: QAMA159

DOCUMENT DESCRIPTION: QAMA Bulletin Vol. 3, No. 3

Bulletin

PUBLISHED BY L'ASSOCIATION DES MINES D'AMIANTE DU QUÉBEC

MAY/JUNE 1979 VOL. 3/NO. 3

IRDA

One of the principal recommendations of the Sorès group, to whom the Association des mines d'amiante du Québec had conferred the task of carrying out an in-depth study of the possibilities of manufacturing asbestos products in Québec, brought out the necessity of intensifying research and development.

Sorès report

"In order to develop new asbestos-based products and fill a widening gap in the research and development between these products and their substitutes," the Sorès report concluded, "positive and drastic actions should be taken to improve the prospects of growth of asbestos and asbestos-based products, where an intensive research and development program should be launched in the shorter delays with the following objectives:

- i) to improve the characteristics and the perception of existing asbestos-based products;*
- ii) to improve the manufacturing processes;*
- iii) to develop new asbestos-based products and manufacturing processes.*

These actions could be carried out by an existing organization or by a new organization to be created, grouping all the interested decision centers."

Government policy

While the Sorès experts were completing the preparation of their report, the Québec government announced its new asbestos policy, proposing the creation of a research and development centre for the development of new asbestos-based products on the one hand, and for research into ways and means of ensuring health and safety in both the manu-

facture and the use of asbestos products on the other.

The government expressed the wish that such a centre might be created jointly with the industry, which would have the primary responsibility for orienting and organizing the proposed research body.

The AMAQ, having already endorsed the recommendation of the Sorès report which had been commissioned well before the government announced its policy had no hesitation in subscribing to the objectives put forward by the government regarding research and development, and immediately offered its collaboration.

Plan of action

However, neither the statement of government policy nor the Sorès report went beyond formulating general objectives. It was still necessary to determine the possibilities and means for speeding up the process of developing research into asbestos in Québec, so that the best possible performance is obtained in viable economic conditions, by making optimum use of the human, material and technological resources available.

It was also necessary to ascertain the major needs and objectives for asbestos research and development in Québec and to draw up a concrete plan of action for the creation of a centre.

CDT study

The AMAQ therefore commissioned a study from the Centre de développement technologique (CDT) of the Ecole Polytechnique de Montréal with a view to making a survey of all asbestos-related research activities, to assessing the possibilities and limitations regarding their development in Québec, and to

making specific recommendations for the operating and financing of a research centre.

The CDT report was a valuable working document enabling the AMAQ and its member companies to make a constructive and enlightened contribution, based on expert objective analyses, towards the establishment of a research and development organization.

AMAQ draft agreement

Thus in October 1978 the AMAQ was able to take action on the agreement in principle signed the previous month by the Minister of Natural Resources and the Directors of the Association at the first joint meeting on the subject, and offer the government a draft agreement covering the principal objectives, together with details concerning the establishment, operation and financing of a new centre.

For the most part, it is this draft agreement, with just a few minor changes, which was the object of an order in council dated June 6, 1979 and which forms the basis of the agreement for the creation of the **Institut de recherche et de développement de l'amiante (IRDA)**, signed June 29, 1979 by the Minister of Natural Resources and the President of the AMAQ.

Finalization

The AMAQ welcomes the finalization of this agreement by virtue of which the project can now enter the phase of active organization.

The incorporation and organization of the IRDA will be taken in hand by the AMAQ, which will moreover provide the entire \$500 000 starting capital; the creation of the Institut ushers in a dynamic and stimulating period for asbestos research and development in Québec.

Pilot study to be carried out by Québec scientists

A research project sponsored by the Institute of Occupational and Environmental Health of Montréal

The Institute of Occupational and Environmental Health recently approved an important research project proposed by a team of Québec researchers for the study of the sputum of asbestos workers.

The Executive Committee of the IOEH has assigned almost \$195 000 to this project entitled "Sputum cytology in the asbestos sector". Project director will be Dr. Antoine Simard, researcher at the Institut du Cancer de Montréal, and his principal associates will be Dr. Pierre

Band, director of the clinical research unit at the Institut du Cancer de Montréal, and Dr. René Vaclair, head of the pathology department at Montréal's Hôpital Notre-Dame.

Two-year project

The study, to be spread over two years, aims at determining the prevalence of atypical or abnormal cells in the sputum of asbestos workers. The researchers will also endeavour to establish the relationship between

the seriousness of the atypias discovered and the exposure to asbestos and to cigarette smoking.

In its sputum analysis the team intends to use a technique of cell



Dr. Antoine Simard

concentration devised by Dr. Gino Saccomanno of St. Mary's Hospital, Grand Junction, Colorado, who is well known for his studies of the sputum of uranium workers of the Colorado plateau.

Exact interpretation

The cell concentration technique consists in obtaining a sputum sample which is homogenized in the laboratory, then centrifuged to obtain a cell concentrate from which smears

are prepared and then placed on slides and coloured by the Papanicolaou method for analytical purposes. The interpretation of the smears drawn up by Dr. Saccomanno must be very exact and detailed. Saccomanno's classification identifies three distinct stages in the evolution of cellular atypias, defined as mild, moderate and marked atypical metaplasias (abnormal changes in cell structure), preceding the point where a cancer becomes discernible by X-ray examination by as much as 10 years in some cases.

One of the members of the team, Dr. Band, is already engaged in a study of the sputum of close to 1 000 workers of a uranium mine in the north of Saskatchewan, in collaboration with Dr. Saccomanno. The



Dr. Pierre Band

present study aims also to implant the Saccomanno technique at the Institut du Cancer de Montréal.

750 cases

The group of workers that Dr. Simard and his colleagues propose to examine will include the employees of Les Mines d'amianté Bell, of Thetford Mines, totalling close on 150 miners and 350 employees working in the mill and in the ad-



Dr. René Vaclair

ministrative departments, together with a number of workers who have been exposed to asbestos for 35 years or more, numbering approximately 250 employees of Société Asbestos, of Thetford Mines, and a few employees of Carey Canada, of East Broughton.

Data cards will be prepared for each worker and will carry, in addition to the usual information, references to cigarette smoking. Sputum samples will be obtained twice from each person at the beginning of the project. The samples will be collected at the Institut de médecine Industrielle de Thetford Mines, under the supervision of the director, Dr. Richard Lambert, and his medical staff.

Statistics

The samples will then be assessed by Dr. Saccomanno's method,

first with his full cooperation and thereafter independently. For the solution of any statistical difficulties which may arise, Dr. Simard's team has secured the services of Dr. Michael Feldstein, bio-statistician at the University of Rochester, New York, who is already involved in the uranium study at the Institut du Cancer de Montréal.

In addition to analyzing the results of the cytological examinations, the researchers will determine an asbestos exposure index for each employee. For this aspect of their work, they will call upon the services of Dr. G.W. Gibbs, Director of the Occupational Health and Safety Unit at McGill University. Using the work which Dr. Gibbs has already carried out in the asbestos sector, the data stored in the Unit's computer and the new information obtained in the course of the project, the scientists will be able to evaluate the level and the duration of the exposure to asbestos.

Epidemiology

For epidemiological purposes the results of the cytological examination will be compared with the asbestos concentration that each worker was exposed to and with the duration of this exposure. Cigarette smoking and age will also be taken into account in these comparisons. Once the comparisons have been made among the asbestos workers with regard to age, exposure and cigarette smoking, the team intends to make a number of comparisons with other cohorts at a high lung cancer risk: workers in other industries and smokers living in an urban environment.

The team will pass on to each worker the results of his cytological examination. The confidential nature of the personal files will be fully guaranteed. The overall results, after they have been codified and depersonalized, will then be published, and there can be no doubt that they will be of considerable benefit to the industry as a whole.

Short Course in Mineralogical Techniques of Asbestos Determination

The Mineralogical Association of Canada published in May a volume on the Short Course in Mineralogical Techniques of Asbestos Determination which was held in Québec City from May 20 through 22, immediately prior to the annual meeting of the MAC.

This 279 page volume provides the texts of the lectures given during the course by several eminent specialists; it also contains numerous photographs, tables and graphs. It was edited by Robert Ledoux, Professor in the Geology department of the Université Laval and co-organizer of the course.

As Mr. Ledoux states in his introduction, the volume "should prove to be useful not only to mineralogists but also to all scientists working in industries using asbestos and to researchers on occupational health problems related to asbestos dust."

The volume is the fourth of its kind to be published by the MAC. In fact, each year since 1976, on the occasion of its annual meeting, the Association has sponsored short courses on subjects related to various aspects of mineralogy and then published the lectures of the courses in textbook form.

The "Short Course in Mineralogical Techniques of Asbestos Determination" is available both in French and in English at \$10 per copy. Copies may be obtained by writing to the Mineralogical Association of Canada, c/o Mineralogy Department, Royal Ontario Museum, 100 Queen's Park, Toronto M5S 2C6.

Third Open-Pit Operators Conference held in the asbestos region

More than 250 participants from all over Canada attended the Third Open-Pit Operators Conference on June 11 through 13, held this year in the asbestos region of Québec. Those present included mining engineers, geologists and technicians from Canadian mining companies, together with representatives from government departments and organizations and from universities, and delegates from major consulting firms and the principal suppliers of mining equipment.

CIM conference

The conference was held under the auspices of the Canadian Insti-

tute of Mining and Metallurgy and organized this year by the Thetford Mines section of the CIM, with a large contribution in human and financial resources being provided by the asbestos mining companies of Thetford, Black Lake, East Broughton and Asbestos which operate open-pit mines.

The participants at the conference enjoyed an outstanding opportunity to become familiar with the many aspects of operating an open-pit asbestos mine, some of them highly complex, thanks notably to the technical sessions conducted by members of the personnel of the asbestos producing companies and

to the guided tours of the installations of Carey Canada, Lac d'amiante du Québec, Société Asbestos and Johns-Manville Canada.

Technical sessions

The technical sessions were spread over two mornings and consisted of papers on 20 different subjects directly related to asbestos mining operations. Each of these twenty sessions, conducted by management personnel from the four asbestos producers involved, made ample use of audio-visual material. Thus not only were slides shown, but the talks themselves had been

previously recorded in English and in French and then synchronized, so that the participants were able to follow them in the language of their choice by means of transistorized audio equipment.

The subjects dealt with during these sessions concerned mining operations as such and the particularities varying from one mine to another, the methods and systems

of environmental control, the processing of waste and recovery from tailings, drilling and blasting, pit slope stability programs, geological activities, planning, operation of workshops, and other aspects.

Mine tours

In their tour of the mining installations, the participants visited in succession the mines and process-

ing plants of Carey Canada at East Broughton, of LAQ at Black Lake, of Société Asbestos at Thetford Mines and of Johns-Manville at Asbestos. At each visit, the CIM conference participants were able to observe the scale, the complexity and the particularities of the various operations in the pits and mills.



Participants at the Third Open-Pit Operators Conference visit the installations at the Jeffrey mine of Johns-Manville.



Conference participants at one of the technical sessions.



Participants visiting the processing plant of Carey Canada at East Broughton.



The conference organizing committee. In the usual order: Mr. Bernard Coulombe, Mr. André Ducloux, Mr. Raymond Gauthier, Mr. Jean-Paul Boivin, Mr. Gilles Cyr, Mr. Lucien Lacasse, Mr. Clément Bernier, president of the organizing committee, Mr. Robert Gale and Mr. Maurice Lauson.

With a conference of this kind, as with the first which was held at Labrador City in 1977 and the second at Kamloops, British Columbia, in 1978, the object is to promote and encourage cooperation and technical exchanges among specialists in open-pit mining operations, and so the CIM Thetford Mines section made a point of providing numerous opportunities, outside the technical sessions and visits to installations, for formal and informal meetings. Having opened at Thetford, the conference closed at Asbestos with a dinner presided by Mr. E.H. Caldwell, President of CIM, where special merit awards were presented to two well-known figures in the Québec mining sector, Mr. M.J. Messel, President of Lac d'amiante, and Mr. Paul Bourassa, President of SOQUEM.

Third Open-Pit Operators Conference held...

Looking to the future

The speakers at the Third Open-Pit Operators Conference, Mr. Lionel Pluze at the opening dinner and Mr. E.H. Caldwell at the closing

dinner, among other things took a look at the future.

Mr. Pluze, former Vice-President, Operations, at LAQ and long-

time Chairman of the AMAQ Committee on the Environment, said that he was confident that the effects of the anti-asbestos campaigns would diminish, and that in his estimation "when all asbestos manufacturing plants keep their ambient air in an acceptable condition and when all asbestos containing products are handled safely, the problem of substitutes will not be a serious threat."



Mr. Lionel Pluze Mr. E.H. Caldwell

In the opinion of Mr. Pluze, the principal problem that the Canadian asbestos industry is likely to have to deal with is that of Soviet competition whose production capacity is rising and could reach 5 000 000 tons by 1985.

For his part, CIM President E. H. Caldwell stressed the importance of technological innovation for the future progress of the Canadian mining industry. "Technological innovation is vital to the continued maintenance of our industry. A concerted effort will be required on the part of industry, government, universities, mining schools and research oriented organizations to overcome the constraints or barriers which hinder the conception and implementation of programs designed to foster technological innovation, and to provide a climate which, on the contrary, will favour and encourage technological innovation."

Two awards presented by the CIM

The Third Open-Pit Operators Conference was the occasion for the presentation by the Canadian Institute of Mining and Metallurgy of honorary awards to Mr. M.J. Messel, President of Lac d'Amiante du Québec, and Mr. Paul Bourassa, President of SOQUEM. They received their awards from Mr. E.H. Caldwell, President of the CIM, at the conference's closing dinner in Asbestos.

Mr. Messel

The Distinguished Service Award presented to Mr. Messel is in recognition of the invaluable services that throughout his career he has rendered the Québec mining industry, particularly the asbestos industry, and the Canadian Institute of Mining and Metallurgy. A mining engineer and graduate of McGill University in Montréal, Mr. Messel acquired wide experience of the asbestos industry with various companies before joining Lac d'Amiante du Québec in 1956 as General Manager, a position which he held until his appointment as President in 1964. Since 1976, Mr. Messel has also been Vice-President of ASARCO Incorporated, of New York, the parent company of LAQ. He was several times President of the Association des mines d'amiante du Québec.



Mr. M.J. Messel

Mr. Bourassa

For his part, Mr. Bourassa received the Proficiency Medal for his technological contribution to the mining industry in District no. 2 of the CIM. An engineer specializing in mining exploration, Mr. Bourassa joined Québec Cartier Mining in 1965 and was responsible for several development projects, including the Mount Wright project, until his appointment in 1971 as Director of the company's Engineering and Research Department. He became President of the Société québécoise d'exploration minière (SOQUEM) in 1978.

New offices for Les Mines d'amiante Bell

The management and the administrative departments of Les Mines d'amiante Bell are now grouped together in a completely new building. Its architecture is simple yet elegant, and its exterior is a constant reminder to passers-by along Boulevard Smith, at Thetford Mines, that they are in the capital of the asbestos world.

The upper part of the outer covering of Bell's new head office is in fact composed of shaped asbestos cement panels, which contribute largely to the building's aesthetic appeal.

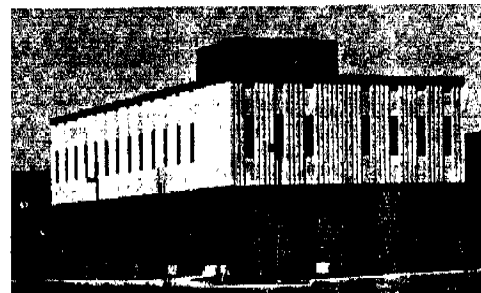
Practical and functional, the Bell building stands close by a small wood and is separated from Boulevard Smith by spacious lawns, it was built on company grounds about one kilometre from the mine.

Bell's new premises consist of two floors over an area of 2 000 square metres, and bring under one roof all the company's departments which had previously been scattered among several buildings due to the growth of the engineering and

certain other departments.

The Bell building, specially designed for easy maintenance and possessing its own water and waste disposal systems, is laid out in such a way as to obtain optimum efficiency and to meet the company's present and future needs.

The rational use of space is



The new Bell building on Smith Boulevard at Thetford Mines.

shown in the arrangement of the offices and the regrouping of the departments. On the ground floor are found the accounting, data processing and purchasing departments on the one hand and the marketing

and personnel departments on the other. The general management, including the President's office and that of the production manager, is located on the floor above, as also are the engineering and geology departments. The basement includes a large room equipped so that the employees can take their meals there.

Les Mines d'amiante Bell, a subsidiary of Turner & Newall, produces fibres mainly of grades 3, 4, 5 and 6. The company's major pro-

Carey Canada Inc.

The management of Les Mines Carey-canadiennes Ltée of East Broughton, Québec, announced in May the amalgamation of two Canadian divisions of the Jim Walter Corporation, of Tampa, Florida, namely Les Mines Carey-canadiennes and Jim Walter Building Products under the new corporate name of Carey Canada Inc.

The company has been mining its present asbestos ore body, located to the east of East Broughton, since 1958. It produces some 200 000 tons of asbestos fibre per year, exporting 50% of its production to the United States where it is used in hundreds of different applications. The rest of its production is sold in

more than 45 countries around the world. Carey employs 500 people in its mine, processing plant and administrative departments.

The division which until now operated under the name of Jim Walter Building Products manufactures accessories and decorative fittings for the home. The products manufactured at its Barrie, Ontario, plant include bathroom accessories, decorator lights and mirrors, range hoods, heaters and ventilating equipment.

Management

Mr. M. Prus, who was President of Les Mines Carey-canadiennes, has been appointed Chairman of the

Board of Directors and President of Carey Canada Inc., whose head office is located at East Broughton. Mr. Gordon Scowcroft, who was President of Jim Walter Building Products, will retain his former duties regarding the management of this division and will also be a Director of Carey Canada Inc.

The others Directors of Carey Canada Inc. are Mr. Jean-Paul Bolduc, Vice-President, Operations and Mr. Ross W. King, Secretary-Treasurer, both from East Broughton, and Mr. P.-André Gervais of the Montréal law firm of Doherty, MacKenzie, Givakes, Gervais LeMoine.

Institut de recherche et de développement de l'amiante

Joint communiqué from the Government and the AMAQ

The signing of an agreement between the Québec government and the Association des mines d'amiante du Québec for the creation of an institute of asbestos research and development was marked by a short ceremony held before the press in the Québec Parliament building, on June 29. After completing their signatures, the Minister of Natural Resources, Yves Bérubé, and the President of the AMAQ, Marcel Dorais, answered questions from the journalists present. The full text of the communiqué issued jointly on this occasion by the Department of Natural Resources and the AMAQ is as follows:

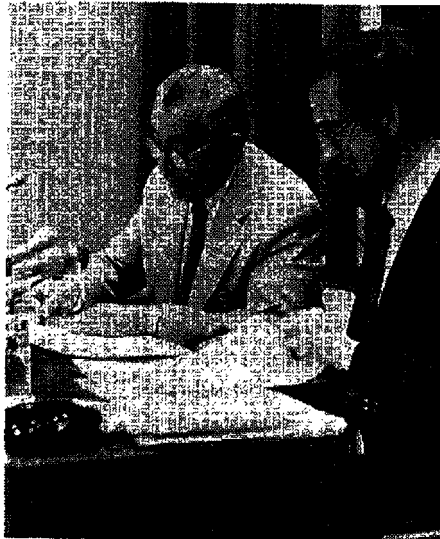
"It is with great pleasure that the Minister of Natural Resources, Yves Bérubé, and the President of the Association des mines d'amiante du Québec, Marcel Dorais, announce the signing of an agreement concerning the creation of an asbestos research and development centre.

The objectives of the centre, which will be known as the Institut de recherche et de développement de l'amiante (IRDA), are:

- the measurement of the amount of fibre emission in the environment by existing and new asbestos-based products, and research on methods aimed at its elimination;
- the development of new asbestos-based products leading to the establishing of new industries using asbestos fibre.

The setting up of the IRDA will be the task of the Association des mines d'amiante du Québec, which will see to its incorporation and its organization by

means of a \$500 000 starting fund entirely underwritten by the Association. The



The President of the Association des mines d'amiante du Québec, Marcel Dorais, and the Minister of Natural Resources, Yves Bérubé, signing the agreement for the creation of the IRDA.

financing of the IRDA during the five years following its setting up will be provided as follows: the Government of Québec will contribute up to \$5 million with a yearly average of \$1 million, while the asbestos producers who are members of the AMAQ will contribute up to one-half of 1% of the total value of their annual net sales of asbestos fibre (estimated net sales for 1978: \$300 million).

To begin with, the IRDA Board of Directors will consist of four representatives of the industry appointed by the member companies of the AMAQ, and of three representatives appointed by the Government. It is understood that any eventual new member of the AMAQ will be called upon to contribute to the IRDA and to designate a Director. The location of the IRDA's head office will be determined by the Board of Directors.

The agreement puts into effect the principles jointly agreed in September 1978 by the AMAQ and the Government, and was countersigned by the four member companies of the Association des mines d'amiante du Québec, namely les Mines d'amiante Bell, Johns-Manville Canada, Carey Canada and Lac d'amiante du Québec, and by the Société Nationale de l'Amiante.

Minister Bérubé said that he is very pleased with the creation of the IRDA, which represents an important element, often largely overlooked, of Québec's asbestos policy. Marcel Dorais, President of the Association des mines d'amiante du Québec, for his part expressed the hope that this collaboration with the Government will rapidly lead on to concrete achievements which will further the cause of asbestos in Québec. To conclude, they both offered their wishes for a long and successful career for the Institut de recherche et de développement de l'amiante."

English

This BULLETIN is published by l'Association des mines d'amiante du Québec, 1130 Sherbrooke Street West, Suite 410, Montréal H3A 2M8.

The Post Office Department in Ottawa has authorized postage paid in cash and forwarding of the publication by third class mail.

