

FILE NAME: Quebec Asbestos Mining Association (QAMA)

DATE: 1936 Aug 14

DOC#: QAMA099

DOCUMENT DESCRIPTION: Minutes of the 114th Meeting - National Research Council

NATIONAL RESEARCH COUNCILMinutes of the 114th Meeting

Ottawa, 14 August, 1936.

Present: Major-General A.G.L. McNaughton, President; Dr. Frank Allen; Dr. H.E. Bigelow; Dean A.L. Clark; Dean F.M.C. Johnson; Dr. A.S. Mackenzie; Dean G.J. Mackenzie; Mr. Tom Moore; Dr. Julian C. Smith; Abbe A. Vachon; Mr. Lathe, Director of the Division of Research Information; Mr. S.P. Eagleson, Secretary.

The Council met at 9 a.m.

1. **Minutes** The minutes of the 113th meeting, which had previously been distributed, were taken as read and approved.
2. **Financial receipts and expenditures of the Council for the state-ment** The Secretary submitted a statement of the period 1 April to 31 July, 1936. (Exhibit "7")
3. **Selection Committee** The President reported that the Selection Committee had met on the preceding day to consider a vacancy of Assistant Research Biologist in the Division of Biology and Agriculture, but had deferred final decision until further information had been secured and considered at the next meeting of the committee.
4. **Estimates** The President reported that an additional vote of \$10,000 had been provided in the supplementary estimates. The distribution of this in detail to the several services is given on page 8 of Exhibit "7".

He stated that so far as can be estimated at present, after providing for present commitments, there would be available for allocation by Council approximately \$25,000 from Special Fund revenue, which it is estimated will be received during the current year, but that all grants authorized by Council would have to be provided from the Special Fund.

EXHIBIT "L"Associate Committee on Asbestos

The ninth meeting of the Associate Committee on Asbestos was held in Montreal, June 23, 1936, with the secretary of the committee in the chair. Thirteen persons were in attendance.

The committee discussed the problem of open and crudy fibres and the inconclusive results in tests made upon them. It was agreed that an outline for the conduct of future spinning tests and for a series of tests on the laboratory carding machine should be drawn up and circulated for criticism. An effort will be made to secure information from England regarding manufacturing practices in that country.

The National Research Council staff reported the results of preliminary spinning tests on washed asbestos fibre. Washing removed a large amount of dust and produced a fibre which could be spun without heavy losses, the net result being similar to that with unwashed fibre. It was considered worth while to carry out preliminary tests on the impregnation of washed and unwashed fibre.

The committee discussed the question of magnetic iron in asbestos, one of considerable importance when asbestos is to be used for electrical insulating purposes. In studying this question the National Research Council is co-operating with the American Society for Testing Materials.

The effect of various milling machines on fibre was reported by the laboratory staff, which has been studying this question by microscopic methods. Various changes in commercial practice were suggested.

Additional work is to be done on the fundamental character of Canadian and foreign fibres, with chemical analyses of washed and unwashed asbestos. The advice of geologists and petrologists is to be sought in mineralogical studies.

It was reported that certain German investigators had experimented with Canadian fibre and had discovered that certain corrosive effects were associated with sulphur content. This led to a study of the sulphur problem, in which it was indicated that sulphur might be introduced from the coal used in the drying operation. This was regarded as important in view of the possible influence on both corrosive effect and

electrical conductivity. This study will be continued, as well as other experiments on the corrosion of metals in contact with asbestos fibre.

The committee discussed at length the possibility of utilizing tailings from the asbestos mills. Preliminary laboratory experiments had indicated that a considerable quantity of short fibre could be recovered by wet methods. It was agreed that the laboratory should test tailings from each of the mills and report results to the operators. Other utilization possibilities discussed included the production of active silica and magnesium salts, the application of tailings to soils deficient in magnesia, the production of fillers and the manufacture of cheap, fire-proof wall board.

The chairman requested criticism by the committee of the work being done in the laboratories of the National Research Council, and advice as to how the usefulness of the work could be increased. He suggested that closer contact between the research staff and industry be provided. Mr. C.H. Shoemaker, general manager of the Johns-Manville Company, thought the work could be made more practical in character if a steering committee of representatives of the industry and the Council were appointed to supervise the work. After some discussion it was decided to recommend such action to the President, who has since approved of it and asked the producers to name their representatives. The practice of sending a representative from the laboratories to each meeting of the Quebec Asbestos Producers Association will be continued.

The problem of silicosis and asbestosis was briefly discussed. The question is one in which the producers are keenly interested, and it was agreed to keep it on the agenda for future meetings.

Arrangements were made to secure a laboratory assistant for a period of three months at \$75 per month, the salary to be paid by the Quebec Asbestos Producers Association.

August 11, 1936.

F.X. Inthe, Secretary,
Associate Committee on Asbestos

Associate Committee on Tuberculosis

The seventh meeting of the Associate Committee on Tuberculosis was held in Ottawa on June 17, 1936, with 16 persons in attendance. Dr. Oskar Klotz was chairman of the meeting.

Dr. E. M. Watson presented a report covering tuberculosis research carried out by the Health of Animals Branch of the Dominion Department of Agriculture. The work had chiefly to do with tuberculin used for testing cattle under the department's tuberculosis eradication plan. Dr. Hilton reported that the department was now testing about one million cattle per year.

Dr. R. G. Ferguson, Head of the Qu'Appelle Indian Health Unit in Saskatchewan, outlined to the committee his work on the control of tuberculosis amongst Indian children attending boarding schools and on the vaccination of Indian children with B.C.G. (*Bacillus Calmette-Guérin*), which was undertaken on the recommendation of the committee. Tuberculosis amongst the Indians has been radically reduced by the isolation of active cases, especially those among the school children. Vaccination with B.C.G. has not yet progressed far enough to do more than confirm the innocuity of this vaccine. The committee considers, however, that Dr. Ferguson has a unique opportunity to carry out a scientific test of the value of B.C.G., since (a) the Indian race is unusually susceptible to tuberculosis, (b) the situation in the Qu'Appelle Indian Health Unit is such that Dr. Ferguson can make his vaccinated and control groups exactly alike, and (c) he is able to secure post-mortem examinations and thus definitely determine the cause of death. A period of some years will be required to determine what degree of resistance is conferred by B.C.G.

Tuberculosis research at Queen's University, not now supported financially by the committee, was reported on by Dr. G. B. Reed. No work is at present being done on B.C.G., but an effort is being made to check, by means of the complement fixation test, tuberculin tests which have been carried out on Indian children in Saskatchewan and similar tests on vaccinated cattle at the University of Alberta. Positive results were obtained on the sera from 11 Indian children and negative results on the sera from 40 vaccinated cattle, in both cases closely checking the results of tuberculin testing.

Large-scale experiments on the vaccination of cattle with B.C.G. at the University of Alberta were reported by Dean A. Rankin as practically complete. He had found that B.C.G. was entirely innocuous and that it conferred a substantial degree of resistance but not complete immunity to tuberculosis in cattle. There remained for completion histological studies of vaccinated animals which had been exposed to tuberculosis and subsequently slaughtered, and also observations on one small group of vaccinated animals in a

tuberculous herd. Dean Rankin is also endeavoring to eliminate tuberculosis from two tuberculous herds by the vaccination with B.C.G. of all animals introduced into these herds. Good progress is being made but it is still uncertain whether tuberculosis can be completely eliminated in this way.

Dr. J.A. Baudouin, of the University of Montreal, reported upon the vaccination of children with B.C.G., an experiment which has now been under way for about ten years. Recent results have fully confirmed the previous indications, (a) that B.C.G. was harmless to children, (b) that vaccination reduced general mortality, (c) that vaccination reduced morbidity (state of illness), and (d) that it reduced to a major extent the number of deaths from tuberculosis amongst children exposed to open cases of the disease. Recently Dr. Baudouin's work has been improved by a special study of vaccinated and unvaccinated children in the same families, and by expressing the results of vaccination on the basis of child years of life. While very substantial results have already been obtained, in line with results in France and elsewhere, there is still not full agreement as to the degree of resistance conferred by B.C.G. and it is therefore important that the work be continued with, if possible, even closer control, until it has passed definitely beyond the experimental stage. Re-vaccination and tuberculin testing of vaccinated children are also regarded as necessary.

The preparation of all B.C.G. used in Canada is carried out at the University of Montreal by Dr. A. Frappier, who is following methods developed at the Pasteur Institute in France. Dr. Frappier described his methods to the committee, members of which expressed themselves as fully satisfied with the precautions being taken.

Dr. Klotz reported on tuberculosis research carried out at the University of Toronto without financial assistance from the committee. An attempt was being made to develop cultural methods to supplant tests on guinea pigs for primary isolations. This work was successful and it was proposed to apply in Toronto hospitals the methods developed.

Dr. H. MacL. Harris, of the Department of Pensions and National Health, outlined the Spahlinger method of treating tuberculosis. The committee did not propose to undertake any work on this method of treatment.

The question of silicosis and asbestosis, previously discussed by the committee in relation to tuberculosis, was reviewed by Dr. Klotz, who reported that he was co-operating with the Banting Institute in their investigations, but that he was not yet satisfied that this important question was receiving the attention which its seriousness justified. No definite action was taken by the committee in this matter.

In view of the Council's expressed opinion that the work of the Associate Committee on Tuberculosis should not be extended into new fields and that steps should be taken to complete the researches under way as soon as possible, the committee considered at length proposals for future work. While recognising the necessity for the strictest economy in the use of funds, the committee nevertheless unanimously decided to recommend to Council the completion of the project under way by Dean Rankin and the continuation of those of Drs. Ferguson, Boudouin and Frappier.

Applications for financial assistance were placed before the executive of the Associate Committee on Tuberculosis at a meeting on August 12 and it was recommended that the following grants be made:

Dr. A. Rankin	Unexpended balance
Dr. E.C. Ferguson	\$2000
Dr. A. Frappier	1265
Dr. J.A. Boudouin	5865

The Council has already appropriated \$5000 for the work of this committee, and it is requested that a further appropriation of \$4130 be made in order to provide in full for these recommended grants.

August 13, 1936.

F.B. Latho,
Acting Secretary, Associate Committee
on Tuberculosis.