

Ex. 10722

JHCN/NJ

04/520

Mr. A. Ibbotson,
District Inspector of Mines,
PORT HEDLAND.

30th November, 1964

Dear Sir,

Asbestos Dust

Dr. Letham referred to me your query regarding the use of asbestos mine tailings for road surfacing around Marble Bar.

This practice must cease. The use of asbestos mine tailings for purposes where the general public may be exposed cannot be permitted.

If you have any difficulty in stopping the shire council, let me know and action can probably be taken under the Health Act.

This matter is important and I would be grateful for word from you that the practice has ceased. Thank you for drawing attention to it.

Details in regard to the fibre/size of quartz content will be obtained and a copy sent to you later.

Regards.

Yours faithfully,

J. McNulty
CHEST PHYSICIAN
OCCUPATIONAL HEALTH

PLAINTIFF'S
EXHIBIT

10722-0

H. MAYNARD RENNIE
F.R.C.P. (LOND.), F.R.A.C.P.

TELEPHONE: BW 7711
(A. 4 P.M. XL 2540)

MACQUARIE CHAMBERS.
183 MACQUARIE STREET.
SYDNEY

Dear Mr. Rennie,

Thank you for your 14th
further interesting letter & 25th as
I shall be home for reference.

143 - I am enclosing copy of letter &
with 6th letter.

Yours sincerely

Macquarie

1/11/67

Macquarie

6th November 1961

Dr. H. Maynard Rennie,
Macquarie Chambers,
183 Macquarie Street,
SYDNEY. N.S.W.

Dear Ted,

127 A very brief note as I am just back in Perth after three weeks' holiday. Thank you for your letter of 30th October enclosing your reply to Don Letham. I also have copies from McNulty of your letter to him of 29th September and his letter to you of 25th October. I am very glad indeed that steps are being taken in this very serious matter. 144

140 My secretary this morning showed me a note from last Saturday's paper (4th November) which reads: "Dr. K.L. Sutherland, director of research of the Colonial Sugar Refining Co., of Sydney, is visiting this State and will study the blue asbestos industry on a visit to Wittenoom Gorge mine." My presumption would be that Dr. Sutherland is a Doctor of Science rather than of Medicine but I would be glad of information on this point and also a note as to whether you would like me to do anything for the gentleman while he is here. 144

With best regards,

H. MAYNARD RENNIE
F.R.C.P. (LOND.), F.R.A.C.P.

TELEPHONE: BW 7711
(After 4 P.M.) XL 2540

MACQUARIE CHAMBERS,
183 MACQUARIE STREET,
SYDNEY

10th November, 1961.

Dr. Bruce Hunt,
37 Ord Street,
WEST PERTH.

Dear Bruce,

Many thanks for your note of 6th November.

Dr. K.L. Sutherland is a Doctor of Science as you surmise and he was already on the point of departure from Perth when I received your letter. He is due in Sydney on Monday next and I will get in touch and see what goes on.

I will let you know if there are any immediate developments.

Warmest regards,

Yours sincerely,

Hed
H. MAYNARD RENNIE

HBA

MEETING 8TH JANUARY, 1962, IN MR. BRISBANE'S
OFFICE, MINES DEPARTMENT, PERTH.

Present: Mr. Brisbane, State Mining
Engineer.
Mr. Boylan, Chief Mines Inspector.
Dr. McNulty, Chest Physician,
Kalgoorlie Chest Clinic.
Mr. Thomas, Manager, Australian Blue
Asbestos.
Dr. Letham, Physician, Occupational
Health.

Dust counts were reviewed. Those in the mine showed considerable improvement and Mr. Boylan expressed general satisfaction with the improvement of conditions in the mine. High counts still prevailed in the mill; a recent visit had been made by a representative of Gregorys and Co., Sydney. It is the intention of this Company to seek further information on a form of stocking filtration which has been developed in America. This, apparently, is of exceedingly fine mesh and will trap the fine particles which are a problem in the mill at present. Mr. Thomas said that Australian Blue Asbestos is prepared, if necessary, to pull out the existing exhaust system in the mill and entirely replace it, virtually regardless of cost. He stated also that there are five employees from Hart & Co., Perth, at present continuously employed on the duct work in the mill in an all-out effort to improve conditions in the existing plant.

A further meeting will be held about July or August by which time it is hoped that the ventilation in the mill will be satisfactory.

D. D. Letham

(D.D. Letham)
PHYSICIAN
OCCUPATIONAL HEALTH.

DDL/CT
25th January, 1962.

26th November, 1962.

Dr. J. McNulty,
Chest Physician,
District Hospital,
KALGOORLIE W.A.

Dear Dr. McNulty,

A little over a year ago we had some correspondence concerning the health of workers employed by Australian Blue Asbestos.

I understand that the Company has made some further alterations to allow for the dust problem and I am anxious to know whether you have any further views on the matter.

Would you be good enough to bring me up to date?

Yours sincerely,



H. MAYNARD RENNIE



FIGURE II.

FIGURE III.

FIGURE IV.

lung, but none of the classical showers of fine metallic crepitations associated with asbestosis. An X-ray film of the chest showed extensive pleural thickening throughout the left hemithorax and a left lateral view showed a well-defined shadow projecting inwards from the anterior chest wall. The heart was displaced slightly towards the right. The right lung was normal. The haemoglobin value was 12.3 grammes per 100 ml., the red and white cells were normal and the erythrocyte sedimentation rate was 125 mm. in one hour. The sputum contained asbestos bodies. An attempted aspiration of fluid from the left side of the chest was unsuccessful and a pleural biopsy, performed by Mr. F. J. Clark, produced a thickened, white, rubbery specimen, which was reported to be a malignant pleural mesothelioma.

Treatment with thiotepa was commenced and continued until the patient died in June, 1961.

Autopsy Findings

The only relevant autopsy findings were in the left hemithorax and there was no obvious primary or secondary tumour in the right lung or the abdomen. The left lung was grossly compressed and completely enveloped in the thickened, rubbery, adherent pleura.

The pathologist (Dr. J. Stirrat) reported as follows.

The specimen consists of two wedges of material 11 x 4 x 3 and 7 x 6 x 4 cms. The larger portion of tissue consists of a portion of spongy grey-brown lung tissue covered by the thick firm pleura measuring 2.0 cms. in thickness [Figure II]. The smaller portion of tissue is spongy grey-brown lung with a smooth pleural surface in which there is one small grey-black nodule. Microscopic: Sections show a poorly differentiated malignant tumour infiltrating the pleura and adjacent lung tissue. This tumour consists of pleomorphic cells which tend to line spaces and form small knots and pseudotubular structures: in some instances the space lining cells are flattened or low cuboidal in type, mitoses are present, but are not numerous. There is a marked fibrous tissue stromal increase in the pleura [Figure II].

In addition to the tumour, there is a nodular hyaline fibrosis in the lung showing the whorling around light brown crystalline deposits, characteristic of silicosis [Figure III] together with a more diffuse interstitial fibrosis of the lung with asbestos bodies in considerable numbers distributed in this fibrous stroma [Figure IV]. Lastly there is an acute bronchopneumonia present.

The malignant lesion is a pleural mesothelioma as previously diagnosed by pleural biopsy. This is superimposed on a lung showing the combined picture of silicosis, asbestosis and a terminal bronchopneumonia.

Diagnosis: Pleura—pleural mesothelioma; Lung—asbestosis and silicosis—bronchopneumonia.

Discussion

There appears to be a relationship between exposure to blue asbestos and the development of the pleural mesothelioma in this case. Pleural mesotheliomas are very rare tumours and details are known of only three cases in Western Australia. Asbestosis has, regrettably, become less rare, but there are less than 40 known cases in the State. The relatively short period of exposure to blue asbestos dust confirms an impression received from Wagner *et alii* (1960, 1961) that these tumours may arise after transitory exposure to crocidolite in susceptible persons.

Experience in Western Australia certainly confirms that blue asbestos is a very harmful and lethal fibre. The dust is one that urgently requires further experimental study (Barnes, 1961). The interval between exposure and the development of the tumour is much shorter than has been previously reported. This also applies to the interval between exposure to blue asbestos and the development of asbestosis in this State, which in one instance was less than four years.

The surface gold mining in which the patient was engaged may have contributed to the silicosis which was present, but silicosis is rarely found in Western Australian gold miners with only 10 years' surface mining experience.

Summary

A case is reported of malignant pleural mesothelioma in an asbestos worker suffering from asbestosis and silicosis after two years' work in a blue asbestos mill 10 years previously.

Acknowledgements

My thanks are due to Dr. S. Webster, for referring the patient; to Dr. W. Harris and Dr. D. D. Letham, for helpful advice; and to the Public Health Commissioner, Dr. L. Hensell, for permission to publish this case.

References

- BARNES, J. M. (1961). "Mode of Action of Some Toxic Substances", *Brit. med. J.*, 2: 1079.
- HEARD, B., and WILLIAMS, R. (1961). "The Pathology of Asbestosis with Reference to Lung Function", *Thorax*, 16: 264.
- WAGNER, J. C., SLEGGET, C. A., and MARCHAND, P. (1960). "Diffuse Pleural Mesothelioma and Asbestos Exposures in the North Western Cape Province", *Brit. J. Indust. Med.*, 17: 260.
- WAGNER, J. C., SLEGGET, C. A., and MARCHAND, P. (1961). "Diffuse Pleural Mesothelioma in South Africa", *S.A. med. J.*, 35: 28.

MALIGNANT PLEURAL MESOTHELIOMA IN AN ASBESTOS WORKER

J. C. McNULTY, M.B., B.Ch., B.A.O.

Chest Physician, Kalgoorlie District Hospital, Kalgoorlie,
Western Australia

BLUE ASBESTOS has been mined in Western Australia since about 1946, and with increased production over the last 10 years, dust control and suppression have been serious problems. The asbestos vein lies in a rock body which is mainly quartzite. A number of men have developed asbestosis, silicosis and a mixed type of pneumoconiosis containing elements of both.

The blue asbestos fibre is crocidolite, and Wagner *et alii* (1960, 1961) suggested the probable relationship between exposure to this fibrous mineral and the occurrence of diffuse pleural mesothelioma. The pathological evidence for the association of these tumours with asbestos exposure was not conclusive; in only eight of 33 cases was evidence of asbestosis present. However, with one exception, there was circumstantial evidence of at least transitory asbestos exposure. In their series the mesothelioma occurred 20 to 40 years after the exposure to dust. Most authors stress the long interval between exposure to asbestos dust and the development of asbestosis, and theories of the pathogenesis of the disease have been based on this long interval and its effect on the asbestos body (Heard and Williams, 1961).

The following is believed to be the first case of pleural mesothelioma reported in an asbestos worker outside South Africa.

Clinical Record

A white male worker, born in 1913, now employed as a labourer, had been a surface gold miner from 1937 to 1946 and a mill worker in an asbestos mine from 1948 to 1950. He had also been an occasional prospector for gold. On December 13, 1959, he was referred to the chest clinic for radiological examination of the chest. The X-ray film showed what appeared to be a small left-sided pleural effusion, but the patient refused to attend the hospital for a report or a clinical examination, and returned to the "bush".



FIGURE 1

On October 25, 1960, he was referred again to the chest clinic for examination. He had had some loss of weight, malaise, cough, moderate dyspnoea on exertion and heavy night sweats. He looked ill and wasted, and had early finger clubbing, diminished air entry to the lungs and a dull percussion note over the left side of the chest. There were a few crepitations at the base of the left

DISTRICT HOSPITAL

KALGOORLIE.

JMcN:RM

Date 6th February, 1963.

Dr. B. Hunt,
37 Ord Street,
WEST PERTH : W.A.

Dear Dr. Hunt,

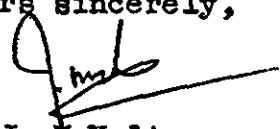
I was very pleased to see that you had returned to practice and hope that your health is fully restored.

Dr. Rennie still writes to me about Wittenoom but conditions are still bad. A 50 year old man who commenced work in the mill in 1954 and ceased in 1959 died of Cor Pulmonale due to pulmonary asbestosis in 1962.

Enclosed is a reprint which might interest you.

With kind regards, Sir,

Yours sincerely,


J. McNulty

CHEST PHYSICIAN

H. MAYNARD RENNIE

F.R.C.P. (LOND.) F.R.A.C.P.

TELEPHONE: BW 7711
(AFTER 4 P.M.) XL 2540

MACQUARIE CHAMBERS,
183 MACQUARIE STREET,
SYDNEY

18th January, 1963.

Dr. J. McNulty,
District Hospital,
WALPOLE, W.A.

Dear Dr. McNulty,

Thank you very much for your letter of the 10th December concerning Australian Blue Asbestos.

I am extremely interested in the information you have given concerning the possible improvement in the ventilation of the mine and mill and the extraordinary series of events which have led to the situation "which may radically alter conditions". You mention that in July last dust counts were as bad as ever. I will be most interested to learn whether such counts are indicative of any improvement following the altered conditions. Will you be good enough to let me know about this when such information is available.

I have noted the other particulars given in your letter and I shall certainly do what I can to help for I too am concerned about this problem.

Kind regards,

Yours sincerely,

H. Maynard Rennie
H. MAYNARD RENNIE

17
KALGOORLIE.

6th February, 1963.

JMcN:RM

Dr. H.M. Rennie,
Macquarie Chambers,
183 Macquarie Street,
SYDNEY : N.S.W.

Dear Dr. Rennie,

155
Thank you for your continuing interest in our asbestos problem.

Unfortunately the latest inspection of the mine and mill at Australian Blue Asbestos suggests that I may have been too sanguine in my last letter. The Mines Department Inspector reported to me that the mill was dirtier than ever. Despite a reduced ore production from the mine, a higher rate of fibre extraction has been achieved at the expense of higher dust concentrations. Is it to be wondered that this cynical attitude towards their workers' health makes me doubt the Company's good faith.

Enclosed is a reprint which might interest you. Also enclosed are copies of letters concerning a man born 1910 who was unfortunate enough to be employed in the mill by Australian Blue Asbestos from 1954 to 1959. Such rapidly progressive disease is uncommon in the literature of industrial chest disease and confirms the fearful hazard to which the workers are exposed.

Yours faithfully,

J. McNulty
CHEST PHYSICIAN

Wittensohn Eli

21st February, 1933.

H. Maynard Rennie, Esq., F.R.C.P.,
183, Macquarie Street,
SYDNEY N.S.W.

My dear Ted,

I started work a week or two ago, only part-time, and have just received a letter from Dr. McNulty our old friend from Kalgoorlie. McNulty is apparently still very unhappy about Wittensohn and writes to me as follows:- "Dr. Rennie still writes to me about Wittensohn but conditions are still bad. A 50 year old man who commenced work in the mill in 1934 and ceased in 1939 died of Cor Pulmonale due to pulmonary asbestosis in 1939". Also you probably saw McNulty's article in the N.J.A. of 15th December 1932 concerning the patient with the malignant pleural mesothelioma following asbestosis. It does seem that there is still room for the able and energetic Rennie to do some life-saving work in this matter. 15

I am devising all sorts of techniques to do the technical side of my work with one hand - the left hand is I am afraid permanently useless - but find it all rather fatiguing and very time-consuming. I do not think I can possibly manage to get over to the Council Meeting in March. The cost would be very considerable, as I would have to travel with a chaperon which of course doubles all expenses - and I do assure you that not receiving any income at all for 3 months is a very heavy slug to the exchequer.

With best regards,

21st February, 1933.

Dr. J. McNulty,
District Hospital,
KALGOORLIE ... W.A.

Dear Dr. McNulty,

156
Thank you for your letter of 6th February. I am indeed starting professional work again but I am afraid that "fully restored" is not really an accurate description of my current physical state because I have recovered no power at all in the left upper extremity and with a stick the left leg will only enable me to shuffle some 20 or 30 yards. However it would be too dull not to try to do any work at all and as I have now been out of hospital for 6 weeks I thought I would try and see how I fared.

Thank you for the article which I have read with interest. I have written directly to Dr. Rennie and I enclose a copy of this letter. We shall obviously have to keep on hammering and at any time that you think I can be of assistance in this matter I shall do my best to co-operate.

With kindest regards,

I am yours very sincerely,

Bruce Hunt.

11th February, 1963.

Dr. J. McNulty,
District Hospital,
KALGOORLIE, W.A.

Dear Dr. McNulty,

Thank you very much for your letter of the 6th February, 1963, with enclosures.

I am very interested and most concerned to know that in spite of a number of changes in both the mine and mill at Wittenoom the Mines Department inspector reports that the mill is dirtier than ever.

Would it be possible for you to ask Dr. Letham to write to me expressing his current opinion on the position at the mine and mill so that I may be fully informed for my approach to the Company?

I can assure you that I will do my best to get some effective action in this matter.

With kind regards,

Yours sincerely,

H. Maynard Rennie
H. MAYNARD RENNIE

H. MAYNARD RENNIE

F.R.C.P. (LOND.) F.R.A.C.P.

TELEPHONE: BW 7711
(AFTER 4 P.M.) XL 2540

MACQUARIE CHAMBERS, 14
183 MACQUARIE STREET,
SYDNEY

25th February, 1963.

Dr. Bruce Hunt,
37 Ord Street,
WEST PERTH. W.A.

Dear Bruce,

Many thanks for your note of the 21st February. I am deeply distressed to know that you cannot make it to the Council Meeting but I fully appreciate the reasons that you have given. We are all very sad about this and shall miss you greatly.

Re Wittenoom - I fully agree that there is need for further action to be taken. It is about a year ago now when I first took this matter up with the Company and they claimed that they had made quite a number of alterations which should prove helpful in solving the problem. At that point in time it was not, therefore, possible to do more than to place all the bitter facts before them, which I did. However, I have initiated this later move by writing to McNulty and also asking him to get a current report from Letham on the position so that I may approach the Company again. I gather that the conditions are, in fact, worse than they were and this gives me a tremendous pull. I will let you know what goes on.

Warmest greetings,

Yours sincerely,

H. R.
H. MAYNARD RENNIE