

NOTE FOR FILE

In [REDACTED] s47F absence I took a telephone call from Mr John Flutter, A.C.T. Administration. He wanted to pass on his thanks to the officers involved in providing assistance in the process of obtaining a decision on the removal of asbestos from A.C.T. houses. He told me that the A.C.T. Administration were pleased to have a sensible program in place, with apparently little adverse reaction to the government funding aspect.

I thanked him for his call and undertook to pass his message on to the officers involved..



s47F

Legal Section

12 October 1988

cc.

s47F



MU 88441365

Tel 889230

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ACT Asbestos Support Group

s47F

7th September 1988

Prime Minister
 Hon. R.J.L. Hawke A.C.M.P.
 Parliament House
 Canberra

Referred to
 Min. for Territories
 for reply 26/9/88

Dear Prime Minister,

The ACT Asbestos Support Group represents a growing number of ACT citizens who are sensitive to the environmental and public health risk implications of the ACT asbestos problem. Many of our members are dealing daily with the problem of asbestos in their homes, and realise fully that except as a short term measure, the concept of somehow "sealing it up" is simplistic, and does not remove the public health risk.

We have unequivocal support for our objectives (attachment B) from the trade union movement and the Australian Democrats, together with a number of other interested community groups. You will be aware that Mr Punch, as then Minister for Arts and Territories, appointed myself s47F in July 1988 as a community representative on the ACT Asbestos Advisory Committee. You will also find attached (Attachment A) a statement of the issues which we believe will come before cabinet during the next few weeks. We are hoping for a promise of financial support to be made as soon as possible so that a lasting and rational solution to this major health risk can be planned and implemented.

The matter of asbestos insulation in ACT homes has correctly been raised in the community by government, regrettably long overdue for those who have been unnecessarily exposed to the risks. You will appreciate the deep anxiety such awareness has placed on those who now realise that they are living with, or have worked with, asbestos. That awareness denies any chance of peace of mind and places deep strains on the normal patterns of life as the implications of their circumstances are faced.

The community is already becoming concerned about the wider public health risks as they realise that loose fibres escape on normal convection air currents from the several thousand roof spaces containing loose asbestos fluff. The Asbestos Support Group has received calls from non-affected householders concerned about the risks in their neighbourhood. It is no comfort to any ACT citizen to know that government agencies have known of the risks posed by this carcinogen since before its use as loose fill insulation in ACT homes began.

We are convinced, having explored many aspects of this problem and its history of mismanagement, that we are clearly justified in asking government to take responsibility for a total asbestos removal program for affected homes. Those from whom we have sought expert advice have supported this opinion.

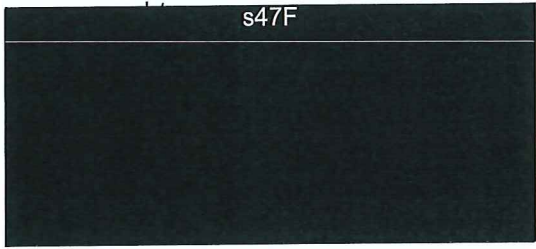
We would be pleased to have further discussions at the earliest time convenient to you before a cabinet decision is taken, and to provide any documentation you require. There is compelling evidence to indicate the presence in the ACT of a major environmental and public health risk as government is well aware.

The government must be aware that Australia's incidence of mesothelioma is considerably higher than that of other countries. There is an opportunity in supporting our objectives not only to act responsibly, but to have that action received positively by both Australian and international communities.

We look forward to an equitable decision as soon as possible in response to our requests.

Yours faithfully,

s47F



ACT ASBESTOS SUPPORT GROUP
STATEMENT FOR CONSIDERATION BY CABINET MINISTERS

SEPTEMBER 1988

THE ISSUE: ASBESTOS FIBRE IN ACT HOUSES AND THEIR ENVIRONMENT.

From 1968 until late 1978 loose asbestos fibre (both amosite and crocidolite) was pumped into the roofs of an unknown number of Canberra homes as insulation - estimates vary between 2000 and 8000 homes. This hazardous material remains as an unmanaged environmental and public health risk to the community. Meanwhile extensive management programs have been in place for some years in the public domain (both government and private enterprise) to remove asbestos products.

The health dangers associated with asbestos fibre inhalation include lung cancer and mesothelioma. High exposure, as for example in industrial settings, may lead to asbestosis. Long latency periods (on average 30 years) are typical of these cancers. Assessment of the relative levels of exposure to asbestos in the ACT is difficult as is the accurate prediction of the long term medical consequences. Medical indications are that mesotheliomas can result from comparatively low levels of exposure over a short period of time. Other cancers and some other lung problems may also be implicated.

The processed asbestos fluff blown into ACT houses may contain greater concentrations of the fine fibres implicated in the development of mesotheliomas.

The present government acknowledges the hazardous nature of asbestos and through its responsibility for the protection of public health it has committed itself in the following ways:

1. By prohibiting the use of asbestos in all but a few applications for which substitutes are to be found as soon as possible.
2. By undertaking a major program for the removal of asbestos from government properties.
3. By publishing, through its various agencies, standards and codes of practice for the control of asbestos hazards and safe removal procedures. Appropriate regulations have been instituted to enforce the safe management of asbestos in the community.

4. By advising the ACT community of the dangers associated with the presence of loose asbestos fibre in the domestic environment.
5. By adding to the terms of reference of the ACT Asbestos Advisory Committee consideration of the domestic asbestos problem.
6. By the then Minister for Arts and Territories, Mr Punch, announcing a survey to ascertain the extent of the domestic asbestos problem in the ACT (July 12, 1988).

PUBLIC HEALTH RISK:

The health risks of airborne asbestos have been extensively documented.

"It is generally considered that significant health risks arise subsequent to the inhalation of airborne asbestos fibre." (Guide to the Control of Asbestos Hazard in Buildings and Structures: Worksafe Australia National Occupational Health and Safety Commission, 1987).

The loose asbestos fibres easily become airborne as a result of normal air currents passing through roof spaces. Particularly they are disturbed by:

- fire
- accidental damage, eg, storm or collision
- malicious damage, eg, breaking and entry
- burst pipes
- animal intrusion.

Airborne fibres can enter the immediate living spaces through:

- vents, fans and other openings, eg, cracks over wardrobes, cupboards and stoves
- ducted heating/cooling systems
- building cracks/deterioration.

Airborne fibres are disturbed in the roof space or wall cavities by:

- any reconstruction activities
- all routine maintenance measures
- various installations, eg, installation or repair of a hot water system. This work would require the presence of a decontamination unit, costing the householder at least \$2000 for its use while the work was done.

Attempts at unlawful extraction and disposal also disperse the fibres into the environment.

SOLUTIONS:Total Removal

The solution is to totally remove all loose asbestos from ACT houses for safe disposal. Despite the expense, this is the only way further long term public health risks can be contained.

Alternatives To Total Removal

Encapsulation, sealing up and encasing are terms which describe processes which have been suggested as alternatives for total removal of asbestos.

These processes are usually suggested as cost saving alternatives to total removal. They have not been established as being 100% effective as no completely efficient technology has yet been developed for these applications. These approaches themselves are not without problems, for example adequate house ventilation and access to essential services located in roofs become problems. If these processes are used:

- Normal maintenance could not readily be carried out as houses age, and alterations to the houses would prove difficult if not impossible. Again, the required use of decontamination units would add greatly to the cost of simple repairs.
- Implementation of the ongoing obligations imposed by the Guide to Control of Asbestos Hazard in Buildings and Structures (Worksafe Australia NHOCCS 1987) for the protection of public health, would be costly for the government to implement and untenable to householders and their neighbours.
- Property would fail to ever regain its value and the present anxieties in the community would continue until the asbestos was removed. Ultimately the asbestos has to be properly removed and disposed of, even if the house containing the asbestos is to be demolished.

THE COSTS:

Who pays? The individual householder or the government?

Currently, asbestos fibre in the ACT has created a broad based health risk which affects the entire community. Until the asbestos is removed that problem remains and while it remains more people will be exposed to a known carcinogen. The government was privy to technical and medical information by the 1960's which, through lack of foresight, it failed to use to protect the community.

In legislating standards to protect the public health and the environment, the government has greatly increased the costs of asbestos removal. Such standards are both appropriate and necessary to protect the public interest but it is the responsibility of government, not individuals, to carry the costs involved. Workers compensation insurance costs for workers in the asbestos removal industry are another inflationary factor. These need review.

The government's responsible involvement in the financing and planning of a major asbestos removal program, together with appropriately initiated research, should ensure higher levels of efficiency and economies of scale which are quite impossible in the present ad hoc situation.

It is clear that not only should the cost of removal be met by the government, but that their leadership in these matters would best serve the community's interests.

COMMITMENT REQUIRED:

The earliest possible commitment, in principle, of government funding for asbestos removal is essential. At present, the lack of a positive indication of government support has contributed to community anxiety and inappropriate and dangerous removal action.

The Asbestos Support Group is continuing to receive calls from people attempting to remove asbestos illegally before the survey of ACT households commences. No amount of responsible advice, or threats of legal action, will persuade these people to stop while they fear that they will be left without financial help as their houses become impossible to live in, sell or rent. The incentive to act so dangerously must be removed quickly.

Further, such an assurance of financial support should not be delayed until the results of the foreshadowed survey of ACT households are known. The health risks to the community exist irrespective of the number of houses involved. Whatever the final costs over some years, the loose asbestos must be removed.

A comprehensive asbestos removal program in itself will pose significant problems. An assurance of financial support is necessary so that dealing with the relevant problems in the community can begin, and further exposure be limited. It is perhaps important to note that the ACT's history of loose asbestos insulation use is not typical of other Australian communities, and undertaking responsibility for this problem would not create awkward precedents.

ACT ASBESTOS SUPPORT GROUP

OBJECTIVES

We are calling on the government to take responsible action with regard to the whole range of problems generated by the presence in the ACT environment of large quantities of loose asbestos.

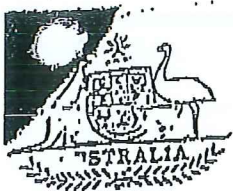
Our six main objectives are:

1. To persuade the government to initiate a program of total removal from houses, at no cost to the householder, to be carried out under stringent health and safety conditions. Further, that the government fully reimburse those householders who have already undertaken the safe removal of asbestos from their homes in accord with local regulatory requirements.
2. To advise and educate the community, including occupants of houses with loose asbestos fibre insulation, workers (tradesmen, etc., who might be expected to come into contact with asbestos in the course of their work), on the public health aspects of the asbestos problem and methods of protection when living/working with asbestos.
3. To persuade the government to provide funds specifically for medical research, long term health monitoring for those at risk and subsequent medical care and compensation for those who develop asbestos related diseases linked to the ACT problem.
4. To persuade the government to provide appropriate compensation in the event that those who have had asbestos removed from their properties fail to regain true market value for those properties.
5. To seek, as a community, to be represented in any negotiations for the planning, implementation and satisfactory resolution of the present asbestos crisis in the ACT.
6. To encourage the government to initiate, without further delay, appropriate research into asbestos removal techniques and to consider management and regulatory strategies which will enhance the cost effectiveness of total removal programs without compromising safety and health concerns. Such research, however, should not delay the commencement of total removal programs using currently accepted techniques.

TECH. SERVICES BRANCH

TEL. NO.

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COMMONWEALTH OF AUSTRALIA

A.C.T. HEALTH SERVICES BRANCH

DEPARTMENT OF HEALTH

C.M.L. Building, Darwin Place, Canberra City, A.C.T. Telephone 49 8077 P.O. Box 825, Canberra City 2601

20 DEC 1988

In reply please quote A:3641

COPY ONLY

The Director,
Department of Works,
CANBERRA, A.C.T. 2607

Asbestosfluff Insulation

I refer again to your memorandum 68/928 of the 16th July, 1968 wherein you requested a report on the health aspects of asbestosfluff.

It is considered desirable that D. Jansen and Company Pty. Ltd., should be dissuaded or even prevented, if possible, from using asbestosfluff as insulation material in houses. Not only are men being unnecessarily exposed to a harmful substance in the course of their work, which is against the best public health practices, but there is evidence that community exposure to asbestos dust is undesirable.

In the light of the present stage of knowledge of the health effects of asbestos dust, it is prudent to limit asbestos to essential uses only and then in solid form.

It is believed that another company, Bowers Asphalt Pty. Ltd., of Rozelle, is considering commencing operation in Canberra, using asbestos in particle form.

With the present demand for insulation, Canberra may become a large market for use of asbestos in the form of fluff for insulation. Many people in the community will be exposed because some asbestos dust will be carried out of the roof space by air currents.

The results of our investigations have disclosed what appears to be a serious exposure to asbestos dust. In view of the harmful nature of this substance the use of asbestos fluff for the purpose of insulating should be discontinued and less hazardous material such as rockwool, insulwool, or fibre glass should be substituted.

(Arthur D. Spears)
Acting Director

TECH. SERVICES BRANCH

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F.02*Revised*

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Australian Occupational
Health Management Pty Ltd
GPO Box 653
SYDNEY NSW 2001

26 July 1988

Mr John Flutter
General Manager
Technical Services
ACT Administration

Dear John

ASBESTOS HOME INSULATION IN THE ACT

1. BACKGROUND

You asked me to comment on the health issues associated with asbestos home insulation in the ACT. My comments are based on the following meeting and visits:

- (i) On the morning of Thursday 21 July I met with John Flutter and others in the Office of City Management when details of the asbestos insulation problem were outlined and samples and photographs exhibited.
- (ii) In the afternoon of Thursday 21 July I attended to ACT Asbestos Advisory Committee meeting and heard the problem outlined further and also heard the views of the Committee members, including the TLC, MBA, and the community representative; s47F
- (iii) On Tuesday 26 July I met with s47F and s47F of the Office of City Management, and s47F and visited five Canberra homes. One home had recently had amosite insulation removed. Three of the others had amosite insulation in the ceiling space and the fifth home had crocidolite insulation in the ceiling space.

My comments are also based on the consultative experiences of twenty two years working in the field of occupational health - including three years as Head of Scientific Policy for the UK Health and Safety Executive; one year as Director of Occupational Health in South Australia, and five years as Chairman of the Occupational Health Guides Committee of the National Health and Medical Research Council.

2. THE PROBLEM

- (i) The asbestos insulation material used was mostly raw amosite (brown asbestos); but some houses were insulated with crocidolite (blue) asbestos. These are the most dangerous forms of asbestos.
- (ii) The asbestos was "fluffed up" mechanically before being blown into ceiling spaces of homes. The "fluffing up" opened the packed material; made it looser; and therefore made it easier for fine respirable fibres to be released.

Respirable fibres are, by definition, fibres of less than 3 microns diameter and more than 5 microns long with at least a 3:1 aspect ratio. It is the inhalation of respirable fibres which can result in asbestos diseases - asbestosis, lung cancer, and mesothelioma.

- (iii) Because the asbestos was loose in the ceiling the action of the wind, opening and closing doors, and gravity resulted in asbestos entering cupboards and rooms of some houses through gaps in the ceiling and vents in kitchens and bathrooms. In many houses entry to the ceiling space via the manhole has resulted in asbestos being dropped into the house. In some, ceiling spaces have been used as storage areas for suitcases, blankets etc and removal of the stored items has also dislodged asbestos.
- (iv) In many cases young children have been exposed to the asbestos from the above causes or by exploring the ceiling spaces.
- (v) The spraying of asbestos insulation took place in the ACT, and parts of Queanbeyan, during the years 1968-1978. After 1978 the ACT Building Manual effectively banned the use of asbestos in homes.
- (vi) Many ACT householders may be unaware that asbestos is in their homes because: (a) they were not told what the insulation material was; (b) some have had more than one application of insulation material; (c) some have been incorrectly advised in the past; and (d) extensions have made appropriate sampling difficult.

3. HEALTH RISKS FROM THE ASBESTOS INSULATION

- (i) The risk to the installers must have been exceptionally high with fibre levels likely to be as high as any ever recorded.

- (ii) The risk to tradespeople and other workers who have worked repeatedly in their ceiling spaces must be high because moving around in the ceiling space is known to generate concentrations of respirable fibres well above occupational health standards.
- (iii) The risk to the occupiers of the homes is more difficult to quantify because exposures vary. Children are at particular risk because of the susceptibility of developing lung tissue to damage, and because of the long latent period during which changes can occur. In spite of difficulties in quantification, I would expect to see a measurable excess of asbestos related disease in the occupiers.
- (iv) The risk to the general public including occasional visitors, neighbours, and passers-by is likely to be so low as to be not measurable.
- (v) The risk of asbestos diseases in any people who attempt to remove the asbestos insulation material without full precautions will be high.

4. OTHER HEALTH RISKS

All the occupiers I met expressed anxiety not only about suffering an asbestos disease, but also about the fear of asbestos disease and about their concern and frustration at their housing predicament. Anxiety and fear are major causes of disability. The levels of both will rise the longer people continue to live in the asbestos insulated homes.

5. CONCLUSIONS

- (i) This is a public health asbestos problem far greater than any documented elsewhere in the world.
- (ii) The risk of asbestos related diseases can be virtually eliminated by tight sealing of the homes and prohibition of entry to the ceiling spaces and decontamination of living areas and the area under the house where significant quantities of asbestos have accumulated.

Prohibition against access would be extremely difficult given the presence of electrical and plumbing facilities in roof spaces.

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42

This approach will not eliminate material leaving the roofspace through the tiles or stop occasional high exposures in case of fire, wind damage or collapse of the ceilings due to water damage.

- (iii) The risk of disability due to anxiety and fear aroused in occupiers will not be eliminated, and is unlikely to be reduced, by sealing as in (ii).
- (iv) The only way to eliminate the health risks associated with this problem is complete removal of asbestos insulation from the homes.

Yours sincerely

Dr David Douglas
MBBS MSc FRCM FRCO

FACSIMILE SHEET

TO: s47F (PRIME MINISTER & CABINET)

FAX NO: 715 776

FROM: s47F

FAX NO: 46 2774 - TECHNICAL SERVICES BRANCH

SUBJECT: REPORT BY PROF ARMSTRONG ON
..... 10065105

NO. PAGES: (including coversheet) 4

DATE: 25 July 88

TIME: 10.50

COMMENTS:
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TECHNICAL SERVICES BRANCH
ACT ADMINISTRATIONS - OFFICE OF CITY MANAGEMENT
FAX NO. 46 2774

The National Health
and Medical Research Council
The University
of Western Australia



**NHM&MRC Research Unit in
Epidemiology and Preventive Medicine**

University Department of Medicine
The Queen Elizabeth II Medical Centre
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Received
24/7/88
[Signature]
Mr J Flutter
General Manager
Technical Services Branch
ACT Administration
GPO Box 158
CANBERRA ACT 2601

Dear Mr Flutter

Asbestos insulation in Canberra houses

I am writing to confirm and amplify the advice that I gave verbally in Canberra on 20th July.

As I understand it, raw asbestos was milled and blown into the roof spaces, on top of the ceilings, of some 2,000 to 8,000 (best estimate about 5,000) houses in Canberra between 1968 and 1979. Most of this is believed to be amosite (brown) asbestos, although some houses are known to contain crocidolite (blue) asbestos. The asbestos is finely divided and, in most cases, free within the ceiling space. It has been shown, in some instances, to have entered the living space, and it is likely that some of it has entered the general environment around the affected homes. In addition, substantial exposures are known to have occurred during maintenance or building work on affected houses, on entry of occupiers into the roof space, and in the course of unregulated removal of the asbestos from the houses.

Briefly, amosite and crocidolite have the capacity to cause malignant mesothelioma of the pleura and peritoneum, lung cancer, possibly some other cancers and a number of benign conditions of the lungs. They are more potent than the commoner chrysotile (white) asbestos in their capacity to cause mesothelioma. Low level exposure to amosite and crocidolite has been clearly shown to cause malignant mesothelioma. For example, there were five deaths from mesothelioma among 550 deaths in 3,100 household cohabitants of men who worked in an amosite asbestos factory in the United States (Anderson HA et al, *Asbestos among household contacts of asbestos factory workers*, Ann NY Acad Sci 1979; 330:357-400.) There were no reliable estimates of levels of exposure in the homes in this study; it was assumed that exposure was a consequence of asbestos brought home on the clothes of the family member exposed at work. Up to 1982, we had identified 4 cases of mesothelioma diagnosed in Western Australia in people who had lived at Wittenoom, Western Australia, but had not worked in either the crocidolite mine or mill (Armstrong BK et al, *Epidemiology of malignant mesothelioma in Western Australia*, Med J Aust 1984; 141:86-88). One of these persons had lived there for 10 years as a child and developed mesothelioma at 27 years of age. Because mesothelioma is a very rare cancer in the absence of exposure to asbestos (about 1 per million person years), it is undoubted that these occurrences of mesothelioma were due to the environmental exposure to asbestos that the individuals concerned had experienced. While an increased risk of lung cancer cannot be demonstrated quite so readily (because it is common in the absence of exposure to asbestos), it is highly likely that it has also occurred in persons with environmental exposure to asbestos.

A US National Research Council Committee on Nonoccupational Risks of Asbestiform Fibres estimated in 1984 that a lifetime of exposure to asbestos fibres at 0.0004 fibres per cc of air would lead to a lifetime risk of mesothelioma of about 9 per million persons so exposed (range of plausible values 0 to 350). For lung cancer the corresponding risks were estimated

at 64 per million for a male smoker, 23 per million for a female smoker, 6 per million for a male nonsmoker and 3 per million for a female nonsmoker. At present levels of smoking in Australia, the lung cancer risks would be about 26 per million in men and 9 per million in women, or about 17 per million over both sexes. Thus the risk of either mesothelioma or lung cancer from a lifetime of exposure at 0.0004 fibres per cc would be about 26 per million. If we assume that average levels of exposure in the affected Canberra houses would be about 0.01 fibres per cc, then the risk from a lifetime of residence would be, on the National Research Council's best estimates, about 650 per million (assuming linear dose response). That is, about 1 in 1,000 lifetime residents would die in consequence of their exposure to asbestos in one of the affected houses. It should be noted that the National Research Council's estimates were based on exposure to mixed asbestos fibres including chrysotile which carries a lower risk of mesothelioma than does amosite. Thus the risk of mesothelioma in the Canberra houses would be likely to be greater than the above estimate would suggest.

There are a number of possible ways of dealing with this problem.

First, to do nothing at present except collect more data. The data to be collected would include an estimate of the number of houses affected, the extent of asbestos exposure in those houses during normal habitation (estimated ideally by way of personal sampling and fibre counting by transmission electron microscopy), and the evolution of incidence of mesothelioma over time in the ACT since 1968 and its relation to residence in affected houses. The sampling data could then be used as inputs into a more rigorous risk estimation process, and the epidemiological data might indicate whether disease due to asbestos in the houses was evident already in the ACT population. There are two major problems with this approach. The first is that any process of risk estimation will be very uncertain. This uncertainty is a consequence of the paucity of data on risk associated with low levels of exposure to asbestos, the paucity of data on risk associated with more-or-less pure exposure to amosite, and a lack of data on the effects of occasional high levels of exposure that might occur while the asbestos remained in the houses. The second problem is the latent period from first exposure to asbestos to appearance of mesothelioma in consequence of that exposure. This period is rarely less than 15 years and usually 30 to 50 years. Thus, at the earliest, mesothelioma due to asbestos in Canberra houses might have begun to appear in about 1983 and would still be very rare in comparison to what it might become at some time in the next 15 to 20 years. Waiting until the risk was clearly evident in the mesothelioma statistics would carry with it the consequence that action then would not show a reduction in risk of mesothelioma for a further 30 to 50 years.

Second, to collect the data as outlined above and proceed, in addition, to take whatever steps were feasible to minimise the entry of the asbestos into the living spaces of the affected houses (short of removing the asbestos from the roof spaces) and to remove whatever asbestos had already accumulated there. This policy would inevitably require, in addition, the enactment of regulations regarding entry into the roof spaces, building work, demolition, removal of the asbestos etc. It should be possible, by this means, to bring levels of exposure in the houses down to levels that might be considered acceptable. Whether or not this was so, however, would need to be established by carefully conducted before and after monitoring studies. In addition, the problem of contamination of the wider environment with asbestos blown out under the eaves or between tiles would remain, as would the possibility of occasional heavy exposure or gross contamination of the environment due to breach of regulations. The significance of these problems, in terms of risk to human health, would be difficult to evaluate even with careful monitoring of airborne asbestos by sensitive techniques.

Third, to move expeditiously to the removal of the asbestos from the roof spaces as well as whatever asbestos had accumulated in the living spaces. This would provide the most definitive solution to the problem. Whether or not it should be done will depend more on a judgement regarding the psychological and social effects of leaving the asbestos in the houses rather than on the likely seriousness of the health consequences of leaving it there. My experience of the anxiety that people now experience when they believe themselves to be

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& MRC RESEARCH UNIT

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29

exposed to asbestos, together with recognition that a low level of asbestos related disease would probably continue to occur if the asbestos were to be left in place, leads me to suggest that this is the preferred course of action.

I trust that you will find this opinion to be helpful.

Yours sincerely



Bruce K Armstrong
Director and Professor of Epidemiology and Cancer Research
24th July 1988