PICKFORD CONSULTING PTY LIMITED
A.C.N. 004 003 105
125 Riverview Street, RIVERVIEW, 2066, Australia
Telephone: (02) 418 9151 Fax: (02) 418 9150
Paging: (02) 214 8606 Carphone: 018 260 341

18 December 1995

Mr. Tom Brassil,
Manager, General Services Department,
A.B.C. Television,
221 Pacific Highway,
GORE HILL 2065

ATT. A.1

Fax: (02) 950 3117

CERTIFICATE OF ANALYSIS

YOUR REFERENCE/JOB No.:
TYPE OF SAMPLE: Membrane filter - as received from Mr. T. Brassil.
SITE LOCATION: ABC TV Studios, Gore Hill.
DATE SAMPLED: 18 December 1995 DATE RECEIVED: 18 December 1995
OUR REFERENCE: 17374/75

TEST METHOD: Filters examined in accordance with the August 1988 National Occupational Health & Safety Commission "Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Dust", as per Laboratory Method MFM/1.

All sampling and site work have been undertaken by the client - the analytical procedures and results reported on this Certificate have been conducted by Pickford Consulting.

The sample was a static sample, and was taken under the work area whilst remedial work was being conducted on the ceiling tiles of Studio 21:-

Sample No.	*Lab No.*	*Location*
C 23	17374	Below mobile work ladder, Studio 21
C 79	17375	Blank - Control Filter

Using sample durations and flowrates supplied by the client, airborne dust concentrations (fibres per millilitre of air) for the above samples calculate as follows :

Sample No.	*Start Time (24 hour)*	*Duration (min)*	*Av Flowrate* (L/min)*	*Results (fibres/fields)*	*Concentration* (Fibres/mL)*
C 23	0831	301	1.60	1.5/100	<0.01
C 79	-	-	-	0/100	O.K.

* Volume measurement and Sampling not covered by Terms of Registration.

Analysed and reported by:

G. C. PICKFORD,
Approved Counter and Signatory.

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PICKFORD CONSULTING PTY LIMITED
A.C.N. 004 003 106
125 Riverview Street, RIVERVIEW, 2066, Australia
Telephone: (02) 418 9151 Fax: (02) 418 9150
Paging: (02) 214 8606 Carphone: 018 260 341

20 December 1995

Mr. Tom Brassil,
Manager, General Services Department,
A.B.C. Television,
221 Pacific Highway,
GORE HILL 2065

Att A3

Fax: (02) 950 3117

CERTIFICATE OF ANALYSIS

YOUR REFERENCE/JOB No.:
TYPE OF SAMPLE: Membrane filter - as received from Mr. T. Brassil.
SITE LOCATION: ABC TV Studios, Gore Hill.
DATE SAMPLED: 20 December, 1995 **DATE RECEIVED:** 20 December 1995
OUR REFERENCE: 17385/86

TEST METHOD: Filters examined in accordance with the August 1988 National Occupational Health & Safety Commission "Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Dust", as per Laboratory Method MFM/1.

All sampling and site work have been undertaken by the client - the analytical procedures and results reported on this Certificate have been conducted by Pickford Consulting.

The sample was a static sample, and was taken under the work area whilst remedial work was being conducted on the ceiling tiles of Studio 21:-

Sample No.	*Lab No.*	*Location*
C 33	17385	Under work platform of remedial work, Studio 21
C 130	17386	Blank - Control Filter

Using sample durations and flowrates supplied by the client, airborne dust concentrations (fibres per millilitre of air) for the above samples calculate as follows :

Sample No.	*Start Time (24 hour)*	*Duration (min)*	*Av Flowrate* (L/min)*	*Results (fibres/fields)*	*Concentration* (Fibres/mL)*
C 33	0730	259.	2.00	2/100	<0.01
C 130	-	-	-	0/100	O.K.

* Volume measurement and Sampling not covered by Terms of Registration.

Analysed and reported by:

G. C. PICKFORD,
Approved Counter and Signatory.

PICKFORD CONSULTING PTY LIMITED
A.C.N. 004 000 106
125 Riverview Street, RIVERVIEW. 2066. Australia
Telephone: (02) 418 9151 Fax: (02) 418 9150
Paging: (02) 214 8606 Carphone: 018 260 341

6 January 1996

Mr. Tom Brassil,
Manager, General Services Department.
A.B.C. Television,
221 Pacific Highway.
GORE HILL 2065

Fax: (02) 950 3117

ATT 'E'

CERTIFICATE OF ANALYSIS

YOUR REFERENCE/JOB No.:
TYPE OF SAMPLE: Membrane filters - as sampled* by G. Pickford
SITE LOCATION: ABC TV, Gore Hill.
DATE SAMPLED: 6 January 1996 DATE RECEIVED: 6 January 1996
OUR REFERENCE: 17412/22

TEST METHOD: Filters examined in accordance with the August 1988 National Occupational Health & Safety Commission "Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Dust", as per Laboratory Method MFM/1.

The samples were taken in the following static locations, 1 to 1.5 m above catwalk level, during an investigation into the asbestos soffit of Studio 21, and during Studio preparatory work in Studio 22:-

Sample No.	*Lab No.*			*Location*
A 66	17412	Studio 21	SE	Catwalk
A 03	17413	Studio 21	NE	Catwalk
A 15	17414	Studio 21	N	Catwalk
A 68	17415	Studio 21	NW	Catwalk
A 18	17416	Studio 21	SW	Catwalk
A 46	17417	Studio 22	SE	Catwalk
A 29	17418	Studio 22	NE	Catwalk
A 20	17419	Studio 22	N	Catwalk
A 07	17420	Studio 22	NW	Catwalk
A 24	17421	Studio 22	SW	Catwalk
A 16	17422	Blank		Control Filter

Using sample durations and flowrates measured on site, airborne dust concentrations (fibres per millilitre of air) for the above samples calculate as follows :

Sample No.	*Start Time (24 hour)*	*Duration (min)*	*Av Flowrate** *(L/min)*	*Results (fibres/fields)*	*Concentration** *(Fibres/mL)*
A 66	0744	280	2.05	6.5/100	<0.01
A 03	0745	278	2.00	2/100	<0.01
A 15	0747	284	2.05	5.5/100	<0.01
A 68	0801	261	2.00	2.5/100	<0.01
A 18	0757	270	1.95	3.5/100	<0.01
A 46	0816	266	2.00	2.5/100	<0.01
A 29	0814	269	2.00	1/100	<0.01
A 20	0813	271	2.05	0/100	<0.01
A 07	0812	274	2.00	1/100	<0.01
A 24	0811	276	2.00	1.5/100	<0.01
A 16	-	-	-	0/100	O.K.

* Sampling not covered by Terms of Registration.

Analysed and reported by:

G. C. PICKFORD,
Approved Counter and Signatory.

PICKFORD CONSULTING PTY LIMITED
A.C.N. 004 003 105
125 Riverview Street, RIVERVIEW, 2066, Australia
Telephone: (02) 418 9151 Fax: (02) 418 9150
Paging: (02) 214 8606 Carphone: 018 260 341

6 January 1996

Mr. Tom Brassil,
Manager, General Services Department,
A.B.C. Television,
221 Pacific Highway,
GORE HILL 2065

ATT BI

Fax: (02) 950 3117

CERTIFICATE OF ANALYSIS

YOUR REFERENCE/JOB No.:
TYPE OF SAMPLE: Membrane filters - as received from Mr. T. Brassil.
SITE LOCATION: ABC TV, Gore Hill.
DATE SAMPLED:. 5 January 1996 DATE RECEIVED: 6 January 1996
OUR REFERENCE: 17409/11

TEST METHOD: Filters examined in accordance with the August 1988 National Occupational Health & Safety Commission "Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Dust", as per Laboratory Method MFM/1.

All sampling and site work have been undertaken by the client - the analytical procedures and results reported on this Certificate have been conducted by Pickford Consulting.

The samples were taken in the following static locations, during set-up of two plastic enclosures on the catwalk prior to an investigation of the asbestos on the soffit of Studio 21:-

Sample No.	*Lab No.*	*Location*
A 05	17409	Studio 21- Lighting batten 66, adj to work area west side, cat walk level
A 53	17410	Studio 21- Lighting batten 5,adj to work area north side,catwalk level
A 26	17236	Blank - Control Filter

Using sample durations and flowrates supplied by the client, airborne dust concentrations (fibres per millilitre of air) for the above samples calculate as follows :

Sample No.	*Start Time (24 hour)*	*Duration (min.)*	*Av Flowrate* (L/min)*	*Results (fibres/fields)*	*Concentration* (Fibres/mL)*
A 05	0750	280	1.95	0/100	<0.01
A 53	0748	297	2.00	1/100	<0.01
A 26	-	-	-	0/100	O.K.

* Sampling not covered by Terms of Registration.

Analysed and reported by:

G. C. PICKFORD,
Approved Counter and Signatory.

PICKFORD CONSULTING PTY LIMITED
A.C.N. 004 003 106
125 Riverview Street, RIVERVIEW, 2066, Australia
Telephone: (02) 418 9151 Fax: (02) 418 9150
Paging: (02) 214 8606 Carphone: 018 260 341

6 January 1996

Mr. Tom Brassil,
Manager, General Services Department,
A.B.C. Television,
221 Pacific Highway,
GORE HILL 2065

ATT B2

Fax: (02) 950 3117

CERTIFICATE OF ANALYSIS

YOUR REFERENCE/JOB No.:
TYPE OF SAMPLE: Membrane filters - as sampled* by G. Pickford.
SITE LOCATION: ABC TV, Gore Hill.
DATE SAMPLED: 6 January 1996 DATE RECEIVED: 6 January 1996
OUR REFERENCE: 17423/24

TEST METHOD: Filters examined in accordance with the August 1988 National Occupational Health & Safety Commission "Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Dust", as per Laboratory Method MFM/1.

The samples were taken in the following static locations, *inside* each of the two plastic enclosed work areas on the catwalk during the investigation of the asbestos on the soffit of Studio 21. Note that these results apply to the work areas and not to any area outside the work areas:-

Sample No.	*Lab No.*	*Location*	
A 69	17423	Studio 21	Inside north work area, catwalk level
A 41	17424	Studio 21	Inside west work area, catwalk level
A 16	17422	Blank	Control Filter

Using sample durations and flowrates measured on site, airborne dust concentrations (fibres per millilitre of air) for the above samples calculate as follows :

Sample No.	*Start Time (24 hour)*	*Duration (min)*	*Av Flowrate* (L/min)*	*Results (fibres/fields)*	*Concentration* (Fibres/mL)*
A 69	0751	275	2.00	42/100	0.04
A 41	0800	268	1.95	116.5/20**	0.6
A 16	-	-	-	0/100	O.K.

* Sampling not covered by Terms of Registration.

** Sample A 41 is an estimate only because the filter was heavily loaded with fibrous material.

Analysed and reported by:

G. C. PICKFORD,
Approved Counter and Signatory.

PICKFORD CONSULTING PTY LIMITED
A.C.N. 004 003 105

125 Riverview Street, RIVERVIEW, 2066, Australia

Telephone: (02) 418 9151 Fax: (02) 418 9150
Paging: (02) 214 8606 Carphone: 018 260 341

6 January 1996

Mr. Tom Brassil,
Manager, General Services Department,
A.B.C. Television,
221 Pacific Highway,
GORE HILL 2065

ATT B3

Fax: (02) 950 3117

CERTIFICATE OF ANALYSIS

YOUR REFERENCE/JOB No.:
TYPE OF SAMPLE: Membrane filters - as sampled* by G. Pickford.
SITE LOCATION: ABC TV, Gore Hill.
DATE SAMPLED: 6 January 1996 DATE RECEIVED: 6 January 1996
OUR REFERENCE: 17425/26-cl

TEST METHOD: Filters examined in accordance with the August 1988 National Occupational Health & Safety Commission "Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Dust", as per Laboratory Method MFM/1.

The samples were CLEARANCE samples and were taken in the following static locations, *inside* each of the two plastic enclosed work areas on the catwalk after the investigation of the asbestos on the soffit of Studio 21, and after an inspection of each enclosure for remnant asbestos:-

Sample No.	*Lab No.*		*Location*
A 43	17425	Studio 21	Inside North work area, catwalk level
A 67	17426	Studio 21	Inside West work area, catwalk level
A 16	17422	Blank	Control Filter

Using sample durations and flowrates measured on site, airborne dust concentrations (fibres per millilitre of air) for the above samples calculate as follows :

Sample No.	*Start Time (24 hour)*	*Duration (min)*	*Av Flowrate* (L/min)*	*Results (fibres/fields)*	*Concentration* (Fibres/mL)*
A 43	1030	115	3.75	8/100	<0.01
A 67	1033	116	3.75	3/100	<0.01
A 16	-	-	-	0/100	O.K.

* Sampling not covered by Terms of Registration.

Analysed and reported by:

G. C. PICKFORD,
Approved Counter and Signatory.

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PICKFORD CONSULTING PTY LIMITED
A.C.N. 004 033 106
125 Riverview Street, RIVERVIEW, 2066, Australia
Telephone: (02) 418 9151 Fax: (02) 418 9150
Paging: (02) 214 8606 Carphone: 018 260 341

7 January 1996

ATT C1

Mr. Tom Brassil,
Manager, General Services Department,
A.B.C. Television,
221 Pacific Highway,
GORE HILL 2065

Fax: (02) 950 3117

Our Reference: ABC-960106-cov

Dear Tom,

ASBESTOS INVESTIGATION WORK

ABC TELEVISION STUDIO No. 21

At your request, I was present at various key times in Studio 21 during 6 January 1996 whilst asbestos investigation work was being conducted by AAA Asbestos Services.

All work was done strictly in accordance with the procedures as detailed in a document written by myself, Our Reference ABC-951016-investigation procedures-a, dated 15 November 1995, plus a letter dated 30 November 1995.

In fact, some work procedures were more stringent in terms of respiratory protection used in Location B (supplied air); air samples were taken inside the enclosures whilst all work was being conducted so as to determine airborne fibre concentrations in active working areas; and PVA adhesive was sprayed onto the internal surfaces of the enclosures at the conclusion of the works.

Minimal asbestos was disturbed during the works in Locations A and C, which was immediately removed by means of a WorkCover approved vacuum cleaner.

Location B was also used to test the ease of removal of the lower of the two layers of fibrous plaster.

At the conclusion of the asbestos removal work, I inspected all areas, and verified that no asbestos waste was present.

On 5 January 1996, two air samples were taken in the general Studio area during the set-up of the plastic enclosures, which yielded satisfactory results less than the detection limit of the method at <0.01 f/mL - see attached NATA endorsed Certificate of Analysis Reference 17409/11, dated 7 January 1996.

On 6 January 1996, a total of five air samples were taken in the general Studio area during the investigation work inside the plastic enclosures, which also yielded satisfactory results less than the detection limit of the method at <0.01 f/mL - see attached NATA endorsed Certificate of Analysis Reference 17412/22, dated 7 January 1996.

Air samples taken inside each of the two plastic enclosures during the investigation work yielded results of 0.04 and 0.6 fibres per millilitre (see NATA endorsed Certificate of Analysis Reference 17423/24) - not unexpected results due to the nature of the work involving not only the amosite asbestos fibres, but particularly the synthetic mineral fibres in the ceiling tiles. It should be noted

that the analytical method does not discriminate between both types of fibres, thus resulting in conservative results somewhat on the "safe" side.

A Fibrous Aerosol Monitor (MIE Model FAM-1) was used during the investigation work to instantaneously measure airborne fibres inside Studio 21 at the north end, immediately underneath the north catwalk enclosure. All results were less than 0.01 fibres per millilitre, and the FAM measurements helped to give added reassurance that the investigation work was proceeding satisfactorily.

After a satisfactory visual inspection of the two enclosures, "clearance" air samples were taken in each of the enclosures. The results - see attached NATA endorsed Certificate of Analysis Reference 17425/26-cl - were all less than the detection limit of the method of <0.01 fibres per millilitre, which are completely satisfactory.

Because acrylic panels had been sealed into place where all of the removed tiles had been, the enclosures were then dismantled under completely safe conditions.

As with Studio 22, AAA Asbestos Services conducted a well planned and excellently executed job - all additional requirements asked of them during the investigation were completed without hesitation and most competently.

The inspections and air tests verify that the entire Studio 21 and the catwalk are both safe for re-occupancy.

ATT C2

Yours faithfully,

G. C. PICKFORD.

REPORT ON INVESTIGATION OF ASBESTOS INSULATION

ABC TELEVISION STUDIOS No. 21 & 22

I. INTRODUCTION

At the request of Mr. Tom Brassil (Manager, General Services Department), and in association with Mr. Brassil and AAA Asbestos Services, an investigation of the ceilings of Studios 21 and 22 took place on 5/6 January 1996, and 17/18 November 1995 respectively.

The aim was to investigate all aspects of the batten motor rooms, air-conditioning system, the studio walls, the asbestos insulation, ceiling penetrations and all adjacent rooms and areas prior to developing a strategy for removing the asbestos insulation.

A second aim was to find a method of facilitating regular inspections of the condition of the asbestos insulation so as to allow an on-going assessment of insulation deterioration.

II. SUMMARY AND RECOMMENDATIONS

Whilst it is evident that the sprayed asbestos insulation has suffered from significant mechanical damage from activities conducted prior to or during the installation of the suspended ceiling system.

This damage is of no significance in terms of any risk to studio occupants because it is generally static and also effectively isolated from the studio environment.

Apart from mechanical damage, the condition of the insulation is quite reasonable, even though it is very soft to the touch, thus making it susceptible to damage even though it is protected by the presence of the suspended ceiling.

As explained in previous reports, the insulation is in the first stage of deterioration (ie the break-down of internal adhesive within the body of the sprayed insulation).

However, there is no evidence of second stage deterioration (ie the loss of 2 to 10 mm sized surface material), nor of third stage deterioration (ie where large sections of the insulation break away from the substrate).

The investigation has supported my belief that the asbestos insulation situation can still be completely and safely managed without the need for immediate removal.

The asbestos removal strategy explained later in this report should be examined critically by all interested parties before a formal asbestos removal specification is written.

Future inspections by ABC personnel (including Health and Safety Representatives) should concentrate on the following aspects:-

- to ensure that the integrity of all suspended ceiling tiles are maintained
- that all penetrations through the ceiling tiles remain sealed
- that routine air monitoring (ie three-monthly) is maintained
- that air monitoring results are satisfactory
- that the present catwalk restrictions and work practices are maintained
- that the presence of clumps of asbestos (ie grey coloured particulate matter greater than approximately 1 mm in size and containing fine visible fibres) on top of the perspex inspection panels is noted

III. INVESTIGATION PROCEDURES

During November 1995 and January 1996, plastic enclosures were set up and three to five ceiling tiles were removed from each studio.

Under full asbestos removal conditions, the asbestos was removed from one area in each of the Studios so as to gain information about the substrate and fibrous plaster soffit.

The lower layer of the twin layered fibrous plaster soffit was also removed to investigate the feasibility of removing the entire bottom layer of the fibrous plaster if all remnants of asbestos were not able to be removed from this surface due to adhesive problems.

All tiles were replaced with clear acrylic panels - glued into place with silicone adhesive, and the asbestos insulation was shielded from view by velcro attached fabric fitted to the underside of the T-bar ceiling grid.

After visual inspection and clearance air tests, the plastic enclosures were dismantled.

See my letters of 18 November 1995 (Our Reference ABC-951118-cov) and 7 January 1996 (Our Reference ABC-960106-cov) for a full explanation of the procedures.

The following diagrams show the approximate positions of the removed ceiling tiles.

Diagram of Studio 21 Showing Tile Positions

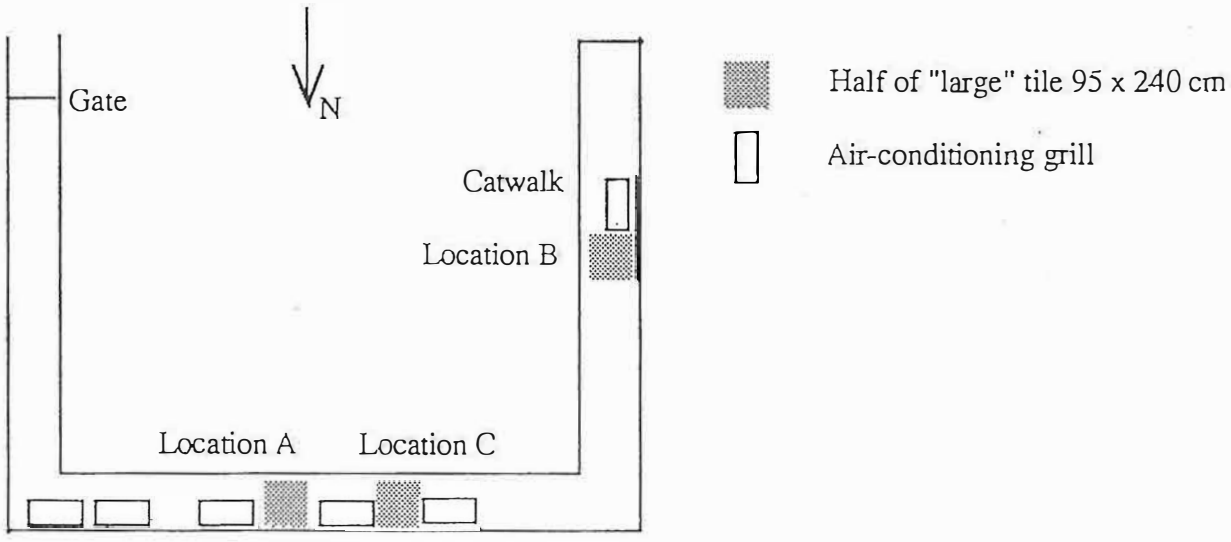
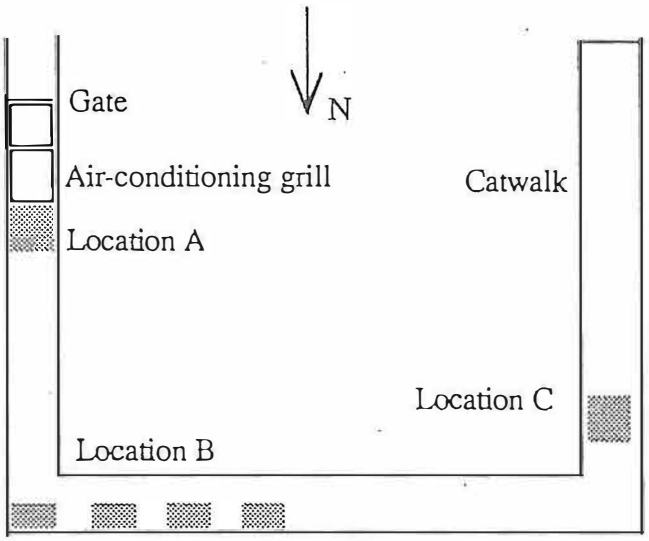


Diagram of Studio 22 Showing Tile Positions



"Small" tile 37 x 95 cm

Half of "large" tile 95 x 240 cm

Small sections of the wall fabric and fibreglass insulation were cut and the walls inspected for the presence of asbestos.

Three areas in each of the batten room lofts were inspected by lifting the plywood flooring, and removing the fibreglass insulation so as to reveal penetration points of air-conditioning ducts, batten cables and cable ducts.

IV. RESULTS OF STUDIO INVESTIGATION

In general, Studio 21 and Studio 22 were identical in terms of the findings and conclusions of the investigation.

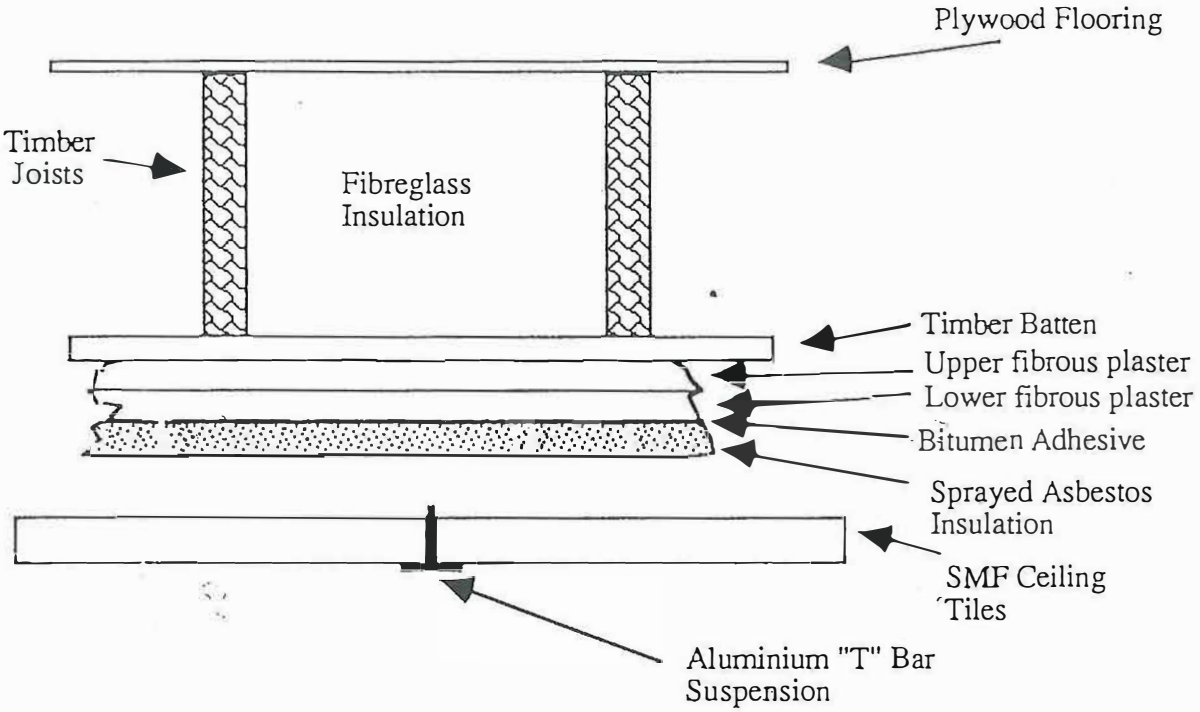
The following comments therefore apply equally to each of these studios, and any exception will be stated as applicable.

A. Soffits of Studios

Diagram 1 is a cross-sectional representation of the soffit of the studio.

Batten Loft Area

Diagram 1



The asbestos insulation consists of amosite asbestos fibres (ie brown asbestos); varies from approximately 10 to 30 mm in thickness; and is strongly adhered to the lower surface of the lower of two layers of fibrous plaster with a bitumen based adhesive.

The asbestos insulation is very soft to the touch, and stereomicroscopic examination shows that there is very little of no internal adhesive throughout the insulation and that there is no evidence of any surface coating.

The under-surface of the insulation shows the presence of considerable mechanical damage caused most likely by past activities including suspension and tile installation.

Gross damage has occurred due to penetrations made in the past with ducts and steel support poles.

There are remnants of the asbestos insulation present on the topside of one quarter to one half of the ceiling tiles adjacent to the catwalk. Tiles away from the catwalk were not able to be observed, but would probably be in the same condition.

In general, all of the ceiling tiles fit snugly into the aluminium "T" bar suspension system; the single and double wire batten cable conduit penetrations through the ceiling tiles and through the batten loft plywood floor are sound, and would permit no leakage of asbestos fibres into work areas.

The lower fibrous plaster layer is held in place with clouts into timber battens

The upper fibrous plaster layer is also held in place with clouts, and the use of adhesive between the layers is either not used, or used very ineffectively.

The penetration of air-conditioning ducts and electrical cable troughs are sealed with paper, foam rubber and/or fibreglass wool.

B. Walls of Studios

An examination of the walls of Studio 21 and Studio 22 revealed the presence of synthetic mineral fibre blanket insulation behind decorative cloth.

No asbestos insulation was seen or suspected.

C. Batten Rooms

A number of areas in each of the loft areas were examined by lifting the plywood flooring, and removing some of the synthetic mineral fibre insulation under the floor.

The top of the upper layer of fibrous plaster was then visible, along with various penetrations which included air-conditioning ducts, batten cable conduits, cable troughs, steel support pipes, fire services and cables.

In general, the vast majority of penetrations were adequately sealed, thus preventing asbestos insulation from the underside of the lower fibrous plaster from entering the loft.

There are one or two small areas where minor gaps are present, but because of the nature of the gaps and the location of the insulation, should not cause any problems, even if the asbestos was to be removed.

D. Other Aspects

I am confident that the air-conditioning ducts and adjacent rooms can be effectively isolated from the soffit of the studios when asbestos is to be removed.

Along with various other control actions, the isolation would guarantee that no measurable airborne asbestos fibres would escape from the asbestos work areas.

V. SUMMARY OF ASBESTOS REMOVAL STRATEGY

There are a number of different asbestos removal strategies that could be used for Studio 21 and 22.

However, because of the findings of the investigation, supported by experience with similar situations, I have chosen the following asbestos removal strategy to be the most viable approach, obviously to be executed by an experienced and licensed asbestos removal contractor:-

Step 1. Remove all equipment - including battens - from the studio.

Step 2. Erect scaffolding over the entire studio floor area between the catwalks so as to support a plywood floor that is within 2 m of the asbestos insulated soffit.

Step 3. Cover the plywood floor with Canvacon or similar (ie a tough, reinforced, waterproof membrane).

Step 4. Cover the Canvacon with two independent layers of 200 micrometre thick plastic, ensuring that the edges against the catwalk and south wall are turned up so as to form a waterproof "tray".

Step 5. Cover the exposed walls above the scaffold with two independent layers of 200 micrometre thick plastic.

Step 6. Electrically isolate the air-conditioning plant, and mask all air-conditioning registers with two independent layers of 200 micrometre thick plastic.

Step 7. Connect a number of negative air filter units (the exact number yet to be calculated) to the work area above the scaffold, and exhaust them to outside atmosphere via windows in the north wall of the building.

Step 8. Connect a four chamber, wet decontamination unit to the work area, and suitable access into the work area, if placed on the studio floor.

Step 9. Hire or buy a recording micro-manometer (the exact model and type yet to be determined) and install so that the negative pressure inside the work area is monitored 24 hours per day.

Step 10. Using initial data from Step 9, adjust the number of negative air units so as to obtain a reliable vacuum (yet to be determined) inside the work area.

Step 11. Vacuum clean all catwalk surfaces, inside and outside, including the cable trays.

Step 12. Engage a competent person to thoroughly visually inspect the entire work enclosure.

Step 13. Conduct smoke tests on the enclosure, with the negative air filter units not operating. Rectify any leaks and re-test until satisfactory.

Step 14. Conduct airborne asbestos fibre sampling in areas adjacent to the Studio being stripped; the clean end of the decontamination unit; the asbestos removal worker's change room; and from time to time in the asbestos removal worker's lunch room.

Step 15. With workers using air-line respiratory protection, carefully remove one ceiling tile, and vacuum - if possible - the top surface of adjoining ceiling tiles. Place the removed ceiling tile into a 200 micrometre thick plastic bag (or wrap in 200 thick plastic) to eventually dispose of as asbestos waste.

Step 16. Remove cleaned adjoining ceiling tiles, repeating Step 14, until all tiles are removed and in plastic.

Step 17. Remove the "T" bar system and suspension rods, and either decontaminate and dispose of as building waste, leave contaminated and dispose of as asbestos waste.

Step 18. "Bulk-off" the sprayed asbestos insulation, bag, and remove from the work area using proper decontamination procedures.

Step 19. Carefully remove the lower layer of fibrous plaster, making sure that the upper layer is left undisturbed. Have contingency equipment ready for instant use in case the upper layer begins to collapse. On the ABC architects advice (as yet to be requested) take steps to further secure the upper layer of fibrous plaster.

Step 20. Bag or wrap in plastic all fibrous plaster as asbestos waste, and remove from the work area using proper decontamination procedures.

Step 21. Removal contractor to ensure that all asbestos has been removed.

Step 22. Competent person to thoroughly visually inspect the entire asbestos removal area, and any remnant of asbestos to be removed.

Step 23. All internal surfaces of the work area to be sprayed with PVA adhesive.

Step 24. Conduct "clearance" air sampling to ensure that no detectable asbestos fibres are present.

Step 25. Upon receipt of satisfactory air sampling results, dismantle the plastic enclosure and dispose of as asbestos waste.

Step 26. Inspect the studio to ensure that no waste asbestos is present.

Step 27. Conduct various non-asbestos tasks, including re-insulation of the soffit and installation of a new ceiling.

Step 28. Dismantle scaffolding, and refit studio.

VI. FUTURE INSPECTIONS FOR ASBESTOS DETERIORATION

Future routine inspections of Studio 21 and 22 by ABC personnel should examine various aspects as listed in Section II of this report.

One of the important observations necessary should be to examine the upper surface of each of the perspex inspection panels for the presence of small (or for that matter, large) clumps of asbestos that have fallen from the soffit.

It will be important to carefully examine and analyse the mechanism that has caused each clump to fall.

For example, mechanical damage to the surface of the sprayed asbestos resulted in the appearance of "dags" (ie loose dangling pieces of asbestos), that were partially removed by vacuum cleaning during the investigation works.

However, the asbestos workers were instructed to not touch or modify in any way, the surface appearance of the asbestos.

Hence, the remnants of some of the dags are still present, with the likely possibility that they may eventually fall off.

It will therefore be important not to confuse the presence of clumps from these sources with those arising as a result of deterioration.

Further, at least one inspection panel is adjacent to penetrations of steel support poles where the lower layer of fibrous plaster has been separated from the upper layer. This could be confused with the appearance of Stage 3 deterioration because the asbestos appears to have fallen down.

It will also be important for fallen debris on all perspex panels to generally be similar in appearance, before a judgement be made concerning deterioration.

Because of the subjectivity involved, it could be difficult for some people to judge the point at which a decision should be made concerning the removal of the asbestos insulation.

As a guide - and based on past experience - it would be reasonable to make the decision to remove the insulation when:-

- Widespread Stage 2 deterioration is present on all inspection panels, or when
- Significant Stage 3 deterioration has occurred in half or more of the panels

Prepared by:
G. C. PICKFORD. 19 January 1996

PICKFORD CONSULTING PTY LIMITED
A.C.N. 004 009 105
125 Riverview Street, RIVERVIEW, 2066, Australia
Telephone: (02) 418 9151 Fax: (02) 418 9150
Paging: (02) 214 8606 Carphone: 018 260 341

2 April 1996

Mr. Tom Brassil,
Manager, General Services Department,
A.B.C. Television,
221 Pacific Highway,
GORE HILL 2065

Fax: (02) 950 3117

CERTIFICATE OF ANALYSIS

YOUR REFERENCE/JOB No.:
TYPE OF SAMPLES: Bulk samples - as sampled by G. Pickford.
SITE LOCATION: Studio 23, ABC TV Studios, Gore Hill.
DATE SAMPLED: 28 March 1996 **DATE RECEIVED:** 28 March 1996
OUR REFERENCE: 17678/80

TEST METHOD: Bulk materials examined by Polarized Light Microscopy (with Dispersion Staining) using internal Laboratory Method ID/1.

Sample No.	*Lab No.*	*Sample Location*
# 01	17678	ceiling insulation between perforated hardboard ceiling and twin fibrous plaster layers
# 02	17679	ceiling insulation on top of twin fibrous plaster layers
# 03	17680	sealing material around air-conditioning duct penetration through concrete soffit

Analysis and Comments:-

Sample No.		
# 01	no asbestos detected	The sample was grey/brown coloured fibrous material of approximate mass 0.1 g, in which synthetic mineral fibres were detected. No asbestos fibres were detected in the sample.
# 02	no asbestos detected	The sample was yellow/brown coloured fibrous material of approximate mass 2.1 g, in which synthetic mineral fibres were detected. No asbestos fibres were detected in the sample.
# 03	no asbestos detected	The sample was white coloured fibrous material of approximate mass 0.1 g, in which synthetic mineral fibres were detected. No asbestos fibres were detected in the sample.

Analysed and reported by:

This Laboratory is registered by the National Association of Testing Authorities, Australia. The test(s) reported herein have been performed in

PICKFORD CONSULTING PTY LIMITE
ACN 001 00
125 Riverview Street, RIVERVIEW, 2066, Austra
Telephone: (02) 418 9151 Fax: (02) 418 91
Paging: (02) 214 8606 Carphone: 018 260 3

4 April 19

Mr. Tom Brassil,
Manager, General Services Department,
A.B.C. Television,
221 Pacific Highway,
GORE HILL 2065

Fax: (02) 950 3117

CERTIFICATE OF ANALYSIS

YOUR REFERENCE/JOB No.:
TYPE OF SAMPLE: Membrane filters - as sampled* by G. Pickford.
SITE LOCATION: ABC TV, Gore Hill.
DATE SAMPLED: 28 March 1996 DATE RECEIVED: 28 March 1996
OUR REFERENCE: 17667/77

TEST METHOD: Filters examined in accordance with the August 1988 National Occupatio Health & Safety Commission "Guidance Note on the Membrane Filter Method for Estimati Airborne Asbestos Dust", as per Laboratory Method MFM/1.

The samples were taken in the following static locations, 1 to 1.5 m above catwalk level, duri normal production routines were occurring, including various reheasals and presentations:-

Sample No.	*Lab No.*			*Location*
C 73	17667	Studio 21	SE	10 m N of SE corner
C 18	17668	Studio 21	NE	6 m S of NE corner
C 123	17669	Studio 21	Mid N	midway between NE and NW corners
C 19	17470	Studio 21	NW	8 m S of NW corner
C 31	17671	Studio 21	SW	4 m N of SW corner
C 81	17672	Studio 22	SE	8 m N of SE corner
C 96	17673	Studio 22	NE	2 m S of NE corner
C 60	17674	Studio 22	Mid N	midway between NE and NW corners
C 79	17675	Studio 22	NW	3 m S of NW corner
C 47	17676	Studio 22	SW	4 m N of SW corner
C 06	17677	Blank		Control Filter

Using sample durations and flowrates measured on site, airborne dust concentrations (fibres per millilitre of air) for the above samples calculate as follows :

Sample No.	*Start Time (24 hour)*	*Duration (min)*	*Av Flowrate* (L/min)*	*Results (fibres/fields)*	*Concentration* (Fibres/mL)*
C 73	1013	393	1.00	1/100	<0.01
C 18	1021	386	0.98	3/100	<0.01
C 123	1020	392	1.00	1/100	<0.01
C 19	1019	391	1.00	0/100	<0.01
C 31	1017	392	1.00	0/100	<0.01
C 81	1042	384	1.00	1/100	<0.01
C 96	1041	388	1.00	3/100	<0.01
C 60	1038	398	1.00	0/100	<0.01
C 79	1039	394	1.05	3/100	<0.01
C 47	1040	391	1.00	0/100	<0.01
C 06	-	-	-	0/100	O.K.

* Sampling not covered by Terms of Registration.

Analysed and reported by:

S. PARTRIDGE,
Approved Counter and Signatory.