Appendix H – Register of Asbestos Materials
Coffey Environments

coffey environments

Register of Asbestos Materials Report

Caritas/ O'Brien Project
Cnr Forbes St and Burton St
DARLINGHURST NSW 2010

Prepared for:

St Vincents Hospital Sydney Ltd
406 Victoria Street
Darlinghurst NSW 2010

Report Date: 23.8.06
Project Reference: ENVISYDN00113AA

Fieldwork by:	Written/Submitted by:	Reviewed/Approved by:
Maria Bowen WHS & Property Risk	Maria Bowen WHS & Property Risk Surveyor	Ibrahim Ech OHS and Property Consultant

Coffey Environments Pty Ltd ABN 45 090 522 759
Level 18, 2 Park Street Citigroup Centre Sydney NSW 2000 Australia

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EXECUTIVE SUMMARY
Asbestos Materials Report

Caritas, Corner Forbes Street and Burton Street, Darlinghurst NSW

Coffey Environments conducted an Asbestos Materials site investigation of Caritas site Darlinghurst located on the corner of Forbes Street and Burton Street, Sydney. The survey was undertaken in August 2006. The purpose of the survey is to undertake a compliance audit to assess potential asbestos containing materials at the site.

State legislation and guidance requires that the register be used by property owners, employers, controllers of premises and other interested parties, such as contractors, as part of an overall asbestos management plan designed to control the risks of exposure to asbestos fibres.

Asbestos containing materials identified in the assessment include:

- Lagged pipes located in the Basement Plant Room, Basement toilet and at numerous locations through the sub-floor of the Outpatient Building;
- Lagged pipes located in a basement service tunnels/plant pump room of the Inpatient Building
- Switchboard Backing (Basement Plant Room) Outpatient Building;
- A storage container (basement kiln room) Outpatient Building,
- Fibrocement sheeting in the ceiling of a veranda, ceiling of a toilet, a second floor eave and external wall/ fascia of a courtyard in the Outpatient Building;
- Spray insulating material on the second floor veranda ceiling of the Inpatient Building;
- Spray material on timber beams in ceiling cavity of the Inpatient Building;
- A paint substance/sealant on underside of the original metal deck roof within ceiling cavity, Inpatient Building; and,
- Insulation and asbestos lagged pipes in ceiling space, Inpatient Building.

Asbestos containing materials were also registered in lagged pipes in a service duct, north side of stairs between first and second floors and in lagged pipe and asbestos cement sheeting in the west wall of a store outside switch room ground floor.

Attention is drawn to the sprayed insulating material on the second floor veranda ceiling of the inpatients building which is friable and assumed to contain asbestos. Not all sprayed insulating material contains asbestos. Coffey recommend the material be sampled and analysed for asbestos fibres. The building material should be managed as an asbestos containing material until sampling and analysis is undertaken.

Other situations and control strategies are detailed in the main report.

1 INTRODUCTION

Coffey Environments was commissioned by **St Vincents Hospital Sydney Limited** to conduct an Asbestos Building Materials Compliance Survey ('The Survey') of Caritas site Darlinghurst located on the corner of Forbes Street and Burton Street, SYDNEY. The survey was undertaken in August 2006. The work was undertaken concurrently with a Phase 1 Contamination and Geotechnical Assessment.

The assessment was conducted on the basis of the condition of the materials at the time of inspection and the future anticipated activities at the site. The scope of this investigation did not allow intrusive sampling techniques to be undertaken, and consequently this report is not to be used as a reference document for the purposes of demolition.

The purpose of the survey is to undertake a compliance audit to assess potential asbestos containing materials at the site.

The work was undertaken in accordance with a Coffey Environments proposal of 26 July 2006 and St Vincents Hospital Sydney Limited commission of August 2006.

1.1 Background

Previous assessments of the Caritas site have been undertaken for St Vincent's Hospital and the results are reported in:

- *Asbestos Management Plan, St Vincents Hospital, Victoria Street, Darlinghurst*, New Environment, August 2003;
- *Inspection and Assessment of Asbestos Insulation Material, Roof of Carita's Inpatient Building, Cm Forbes St and Burton St*, Johnston Environmental Technology (JET) Pty Limited, June 2003; and,
- *St Vincents Hospital Asbestos Register, Department of Health, Amdel, November 1985.*

1.2 Scope

The scope of work required Coffey Environments to:

- Mobilise a technician/consultant to and from the site;
- Liaise with personnel and collect data on the history, use and function of the site;
- Conduct an Asbestos Materials Survey of the site;
- Collect samples of suspect asbestos material (where accessible) and submit samples for laboratory analysis. Note: Only 'typical' suspected occurrences are to be collected and sampled (e.g. one in every same fire door / gasket will be analysed);
- Document the details of materials identified including photographs;
- Record, collate and report the findings; and,
- Deliver one bound report and register of Asbestos Materials to the client.

2 METHODOLOGY

Asbestos surveys are undertaken considering a risk management approach, in accordance with best practice and recent State Government Legislation. An Occupational Health and Safety and Environmental risk assessment was conducted based on the condition of building materials identified during the survey and prioritised through Action Classifications, listed below.

The assessment involved the investigation for the presence of asbestos materials and information was collected from the owners/occupiers/tenants of the site on relevant issues pertaining to the site. Based on the all available data and the status of the Site at the time of inspection, where items suspected of containing asbestos were identified, visual and/or analytical characterisation (where required) was performed and reported in this Asbestos Materials Register.

Only 'typical' suspected asbestos material occurrences are inspected and sampled. Sampling is undertaken on a representative basis, for example, the inspection of one fire door of the same type within the same building is undertaken (i.e. not every 'matching' fire door is examined), unless specifically instructed. Sample collection was performed in a non-destructive and non-invasive.

Asbestos material surveys are restricted to areas that are reasonably accessible during the survey, with respect to the following:

a) Without contravention of relevant statutory requirements or codes of practice;

b) without demolition or damage to finishes and structure; and

c) excluding plant and equipment that was 'in service' and operational.

Where the Surveyor encounters access restrictions during the survey, these situations are documented and reported.

No assessment can be regarded as absolute. Future demolition or refurbishment of structures may reveal materials concealed during the assessment, therefore not accessible at the time of the Survey.

As detailed above, an assessment of the resultant risks has been prioritised through the use of following Action Classifications (i.e. Action 1 – Action 4). These action classifications apply to asbestos materials identified during the survey and are detailed within this report

Action 1 (A1) Restrict access and target for imminent removal

Unacceptable risk due to likely exposure and/or environmental damage. As a guide, the material conforms to one or more of the points listed below:

- Friable or poorly bonded to substrate, located in accessible areas;
- Severely water damaged, or unstable;
- Further damage or deterioration likely;
- Friable asbestos material located in air conditioning ducting;
- Asbestos debris in reasonably accessible areas; and,
- Reasonably accessible stored asbestos material.

Action 2 (A2) Restrict access or enclose, encapsulate or seal

Elevated risk due to likely exposure and/or environmental damage. As a guide, the material conforms to one or more of the points listed below:

- High removal risks or not feasible;
- Complete enclosure achievable;
- Friable or poorly bonded to substrate, with bonding achievable;
- Possibility of disturbance through contact; and,
- Possibility of deterioration caused by weathering.

Action 3 (A3) Remove during maintenance or refurbishment

Possibility of an elevated risk due to potential exposure from the ongoing degradation of the material, or potential environmental damage. As a guide, the material conforms to one or more of the points listed below:

- Asbestos debris in rarely accessed areas;
- Disturbance or damage unlikely other than during maintenance or service;
- Readily visible for further assessment; and,
- Asbestos friction materials, gaskets and brake linings.

Action 4 (A4) No action required, unless disturbed

Elevated risk unlikely, unless conditions or site activities change. As a guide the material conforms to one, or more, of the points listed below:

- Firmly bonded to substrate and readily visible for inspection;
- Inaccessible and fully contained; and,
- Stable and damage unlikely.

2.1 Asbestos Fibre Identification

Samples taken from suspected asbestos containing materials are representative of the material sampled, individually identified, transported, analysed and reported in accordance with the National Occupational Health and Safety Commission (NOHSC) Guidelines, relevant Statutory Regulations, Codes of Practice and Coffey Environments Work Instructions. Laboratories undertaking analysis for Coffey are NATA certified for the analysis conducted. Additional sampling referred to in previous assessments (undertaken by Amdel) is not referenced with NATA accredited analysis, and sampling should therefore be considered indicative unless NATA accredited laboratory reports for analysis are available.

The presence of asbestos in a bulk sample is determined by Polarised Light Microscopy (PLM) with dispersion staining techniques.

Where air monitoring is undertaken, the NIOSH Membrane Filter Method is used, determining the quantity of airborne fibres. Supplementary testing (where required) is conducted using Scanning Electron Microscopy (SEM) with Energy Dispersive X ray Analysis (EDAX) for the determination / characterisation of asbestos fibres.

3 RESULTS

3.1 Asbestos Materials Register

ASSESSMENT DATE: 3 August 2006

ADDRESS: Caritas, Corner Forbes Street and Burton Street, Darlinghurst NSW

DESCRIPTION

Caritas consists of a three storey stone hospital, known as the outpatients building, a two storey brick building, known as the inpatients building, a two storey brick building with slate roof and detached garage, known as the anxiety building and a two storey brick cottage, used for parking and recreational purposes. The outpatient building is constructed around a central court yard. The buildings are identified in **Figure 1**.

The site is occupied and utilised on a full-time basis.

Internally, floor layouts vary relevant to department operations and activities. Concrete floors are covered with carpet and sheet vinyl or linoleum. Ceiling materials include fibre cement sheet, plasterboard and spray applied fire rating material direct to concrete soffits.

The above information is a brief site description only.

For Action Classification, Material Descriptors and Register Terminology Coding please refer to Section 4- GLOSSARY

This register is to be read in conjunction with the whole report. Additional information is attached (Appendix A)

Asbestos materials identified are listed in order of Action required.

Assessment by:	Maria Bowen	Date of inspection:	3 August 2006	Register Review & Re-Inspection:	August 2007
Site Contacts:	Don Day and Peter Davies	Site Location:	Caritas, Corner Forbes Street and Burton Street, Darlinghurst NSW		

Sample No.	Lab Results	Photo No.	Description	Location	Condition	Sealed	Friability	Activity / Accessible	Labelled	Risk	Action	Comments
Yes^^	CR	1	Lagged Pipes	Basement Plant Room, Outpatients and Inpatients Building	G	Y	Y	L	N	M	A3	
MPL006 (ES006)	NAD	NA	Lagged Pipes	Plant room (previously extending extending through subfloor area), Outpatients Building	-	-	-	-	-	-	-	Pipes removed in area where extend beneath subfloor. Pipe leading to area sampled.
Yes^^	CR	NA	Lagged pipes and debris.	Numerous locations through sub floor, Outpatients building	G	Y	F	L	N	M	A3	
Visual	Suspect Asbestos	2	Switchboard backing	Basement Plant Room, Outpatients Building	G	N	N	L	N	M	A3	
Visual	Suspect Asbestos	3	Storage Container	Basement Kiln Room, Outpatients Building	G	Y	N	L	N	M	A3	
Visual	Suspect Asbestos	4	Fibro-cement sheeting, ceiling	Veranda, Outpatients Building,	G	Y	N	M	N	M	A3	
MPL 009 (ES009)	CH	5	Cement sheeting on external wall/ Fascia.	Ground Courtyard, Outpatients Building	G	Y	N	M	N	M	A3	
Visual	Suspect Asbestos	6	Ceiling	Toilet, Outpatients Building	G	Y	N	M	N	M	A3	
Yes^^	CH	NA	Lagged Pipes near ceilings	Basement Toilet, Outpatients Building	G	Y	Y	L	N	M	A3	
Visual	Suspect Asbestos	7	Fibro-cement sheeting	Eave, Outpatients Building	G	Y	N	L	N	M	A3	
Yes*	CR	NA	Spray material on timber beams	Ceiling Cavity, Inpatients Building	P	N	F	L	N	L	A3	

Sample No.	Lab Results	Photo No.	Description	Location	Condition	Sealed	Friability	Activity / Accessible	Labelled	Risk	Action	Comments
NA^^	Suspect Asbestos	NA	Paint substance/ Sealant	Underside of original metal deck roof within ceiling cavity, Inpatient Building.	G	N	N	L	N	L	A3	
Visual	Suspect Asbestos	8	Sprayed Insulating Material	Underside of second floor veranda ceiling, Inpatient Building.	Av	N	F	M	N	#	#	Not all sprayed insulating material contains asbestos. Coffey recommend the material be sampled and analysed for asbestos fibres. The building material should be managed as an asbestos containing material until sampling and analysis is undertaken.
MPL 007 (ES007)	NAD	NA	Lagged Pipes	Storage Space, Inpatient Building	-	-	-	-	-	-	-	
Yes*^	CH	9	Lagged Pipes	Basement Service tunnels (adjacent to plant room). Pipes are metal clad. Inpatients Building.	G	Y	F	L	N	M	A3	Loose fragments indicated to have been removed in 1987, however no clearance certificate available.
MPL008 (ES008)	NAD	NA	Boiler Gasket	Basement Plant Room, Inpatients Building	-	-	-	-	-	-	-	
Visual^	Suspect Asbestos	NA	Lagged Pipe	Service Duct, North side of stairs between first and 2nd floors.	G	Y	F	L	N	M	A3	
Visual^	Suspect Asbestos	NA	Canvas lagged pipe and AC sheeting	West wall of Store outside switch room, Ground Floor.	G	Y	F	L	N	M	A3	
Yes*^	CR	NA	Insulation and asbestos lagged pipes	Ceiling Space, Inpatient Building	G	N	F	L	N	M	A3	JET 2003 indicates material is safely contained.

* Material previously sampled by Amdel Laboratories, 1985 not specifically identified to be NATA accredited.

^ Building material visually assessed or sampled material identified by New Environment, 2003, does not specifically correlate to photograph identified.

^^ Building material indicated to be present by Caritas personnel, not visually identified during the site inspection.

4 GLOSSARY

The following terminology is used within the register to describe the materials identified:

Condition

G	Good	The material is in sound condition with none to very minor damage or deterioration.
Av	Average	The material is generally in sound condition, with some areas of damage or deterioration.
P	Poor	The material is extensively damaged and/or deteriorated.

Sealed

Y	Yes	The material, and asbestos fibres are fully coated, sealed or enclosed
N	No	The material is only partially sealed, coated or enclosed or asbestos fibres are not fully sealed.

Friability

F	Friable	This material, when dry, is easily crumbled, pulverised or reduced to powder by hand pressure e.g.: pipe lagging/ insulation. Such materials release fibres more readily than bonded products.
B	Bonded	Asbestos fibres are bound within the matrix of the material and therefore are not friable, i.e. asbestos cement sheet or vinyl floor tiles. Such materials do not readily release fibres unless subject to action such as abrading or breakage.
E	Exposed Fibres	This is a bonded material which has visible exposed fibres due to damage or deterioration of the material matrix. Fibres may be released from the damaged area under less action than if completely bonded.

Labelled

Y	Yes	The asbestos situation is labelled so as to be noticeable from normal approaches
N	No	The situation is not labelled as above

Activity

L	Low	Very little or no activity with the potential to disturb the material. Monthly occupancy or less, or inaccessible due to height or enclosure.
M	Moderate	Moderate activity with the potential to disturb the material. Weekly access / occupancy.
H	High	Regular activity with the potential to disturb the material. Daily access / occupancy

Risk

L	Low	Poses a negligible or low risk to occupants of the area due to the material being one which doesn't readily release fibres unless seriously disturbed. Usually applies to bonded products in at least average condition, or materials with no or low accessibility.
M	Medium	Moderate risk due to the material status and/or activity in the area. Usually applies to bonded materials in a state of minor deterioration and in moderate to high activity levels, or accessible friable materials in good condition.
H	High	There is a short term exposure risk to anyone entering the area. Usually a friable or poorly bonded material in an average or poor condition in accessible areas. Also relates to friable material in air plenums with no air monitoring regime in place.
E	Extreme	There is an immediate exposure risk to anyone entering the area due to friable material which has already been disturbed. Immediate action is required to restrict access and stop the spread of fibres as well as plan for decontamination and remedial works. *Such situations are rare and would not normally be reported within the register as the client would be advised of the urgency at the time of the survey and control measures applied before the development of the register.*

Action

A1	Action 1	**Restrict access and remove** As a guide, the material conforms to one, or more, of the following: Friable or poorly bonded to substrate, located in accessible areas Severely water damaged, or unstable Further damage or deterioration likely Friable asbestos material located in air conditioning ducting Asbestos debris and stored asbestos in reasonably accessible areas
A2	Action 2	**Enclose, encapsulate or seal** As a guide, the material conforms to one, or more, of the following: High removal risks or not feasible Complete enclosure achievable Friable or poorly bonded to substrate, with bonding achievable Possibility of disturbance through contact Possibility of deterioration caused by weathering
A3	Action 3	**Remove during refurbishment or maintenance** As a guide, the material conforms to one, or more, of the following: Asbestos debris or stored material in rarely accessed areas Further disturbance or damage unlikely other than during maintenance or service Readily visible for further assessment Asbestos friction materials, gaskets and brake linings
A4	Action 4	**No remedial action** As a guide, the material conforms to one, or more, of the following: Firmly bonded to substrate and readily visible for inspection Inaccessible and fully contained Stable and damage unlikely

Material Descriptors

CH	Chrysotile Asbestos	AM	Amosite Asbestos
CR	Crocidolite Asbestos	NAD	No Asbestos Detected
NAD+	No Asbestos Detected (due to the very low concentration of asbestos fibres and the non-homogenous nature of the vinyl floor tiles, false negative results may be obtained. There fore the accuracy of all such results cannot be guaranteed).		

Acronyms

NOHSC National Occupational Health and Safety Commission
NATA National Association of Testing Authorities, Australia
A/C Air Conditioning
F/C Fibre Cement
PLM Polarised Light Microscopy
SEM Scanning Electron Microscopy
EDAX Energy Dispersive X-ray Analysis

5 RECOMMENDATIONS

5.1 Asbestos Materials Identified

The recommendations, conclusions or stability of asbestos materials contained in this report shall not abrogate a person of their responsibility to work in accordance with Statutory Requirements, Codes of Practice, Guidelines, Material Safety Data Sheets, Work instructions or reasonable work practices.

5.1.1 Friable & Bonded Asbestos

Asbestos containing materials (ACM) are referred to as either friable or bonded. Friable asbestos is in the form of a powder, or can be crumbled, pulverized or reduced to powder by hand pressure when dry. ***Friable asbestos*** includes materials such as sprayed and thermal insulation, pipe lagging and millboard, and can release fibres with only minimal disturbance.

Bonded asbestos products are ones in which the asbestos fibres are bound within the matrix of the material. Bonded asbestos is difficult to damage or cause the release of fibres by hand and includes materials such as asbestos cement sheeting (fibre cement or fibro), vinyl floor tiles and zelemite electrical switchboards. However, bonded asbestos containing materials that have been subjected to weathering, physical damage, water damage, fire or other conditions may contain exposed fibres which could be released upon disturbance.

5.1.2 Control Measures

Friable ACM exhibits the greatest risk to human health as fibres are released upon minimal disturbance. As such removal and replacement would be the preferred option if such materials were found in accessible areas or air conditioning systems.

Alternatively removal and replacement may not be the preferred option for bonded ACM in a good and stable condition as the risk associated with removal could be high.

The selection of the most appropriate control measure should be determined from risk assessments and detailed knowledge of the workplace and activities. The following general principles may be applied:

- If the ACM is friable, in a poor/unstable condition and accessible with risk to health from exposure, immediate access restrictions should be applied and removal is required as soon as practicable using a licensed removalist;
- If the ACM is friable and accessible but in a stable condition, removal is preferred. However, if removal is not immediately practicable, short-term control measures (i.e. restrict access, sealing, enclosure etc) may be employed until removal can be facilitated;
- If the ACM is bonded and in a poor/unstable condition; minimising disturbance and removal or encapsulation may be appropriate controls;
- For bonded ACM's in a good and stable condition, ongoing maintenance and periodic inspection would be appropriate controls;
- Any remaining identified ACM's or presumptions should be appropriately labelled, where possible, and regularly inspected to ensure they are not deteriorating resulting in a potential risk to health; and,
- Prior to any demolition, partial demolition, renovation or refurbishment, asbestos containing materials likely to be disturbed by those works should be removed in accordance with the *NOHSC Code of Practice for the Safe Removal of Asbestos 2nd Edition* [NOHSC:2002 (2005)].

Further assessment of risk through airborne fibre monitoring can assist with decisions on the most appropriate, and urgency of, control measures.

Other control measures such as training and communication strategies, control of contractors and administrative procedures must be considered as part of the overall Asbestos Management Plan.

Coffey Environments Occupational Health and Safety Team is

able to assist with all aspects of Asbestos Risk Management

6 BIBLIOGRAPHY

National Institute for Occupational Safety and Health [NIOSH (U.S.A.)], *Manual of Analytical Methods, Elements by ICP, Method 7300*, 4th Edition, Issue 2 - 1994

National Occupational Health and Safety Commission (NOHSC), *Approved Criteria for Classifying Hazardous Substances*, 1008 - 2002

National Occupational Health and Safety Commission (NOHSC), *Code of Practice for the Management and Control of Asbestos in Workplaces*, 2018 – 2005

National Occupational Health and Safety Commission (NOHSC), *Code of Practice for the Safe Removal of Asbestos 2nd Edition*, 2002 – 2005

National Occupational Health and Safety Commission (NOHSC), *Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition*, 3003 - 2005

New South Wales Legislation

Occupational Health and Safety Act, 2000

Occupational Health and Safety Regulation, 2001

Occupational Health and Safety (Asbestos Removal Work) Regulation, 1995

Working with asbestos-cement (fibro) products, WorkCover of New South Wales.

7 LIMITATIONS

Coffey Environments has conducted work concerning the environmental status of the property which is the subject of this report, and has prepared this report on the basis of that assessment.

The work was conducted, and the report has been prepared, in response to specific instructions from the client to whom this report is addressed, within the time and budgetary requirements of the client, and in reliance on certain data and information made available to Coffey Environments. The analyses, evaluations, opinions and conclusions presented in this report are based on those instructions, requirements, data or information, and they could change if such instructions etc. are in fact inaccurate or incomplete.

Investigations have been based on inspections conducted in accordance with relevant guidelines and standards, and normal industry practice, having regard to the client instructions, and interpretations of conditions are based on the data from those inspections and, where relevant and conducted, testing. To the best of our knowledge, they represent a reasonable interpretation of the condition of the site as able to be inspected. However there can be no guarantee that conditions at specific points not able to be inspected do not vary from the interpreted conditions based on the available observations/data.

In order to determine actual environmental conditions at specific intermediate points away from those observed/tested to date, those specific points would need to be inspected/tested.

It is also noted that sub-surface conditions can change with time, and the report is based on data that was gathered at the time of the report. Coffey Environments will not update the report and has not taken into account events occurring after the time its assessment was conducted.

This inspection and report does not include the following non accessible areas:

- Detached Garage of Anxiety Building.

Subsurface drains and pipes may be constructed of asbestos cement but this could not be assessed. Any subsurface pipes, particularly those constructed of fibro-cement or concrete, should be assumed to contain asbestos until otherwise assessed.

This report has been provided by Coffey Environments for the sole use of the client and only for the purpose for which it was prepared. Any representation contained in the report is made only for the client.

Compliance Survey

Asbestos Compliance Surveys are non-destructive and as such are not intended for use or referral for the purpose of demolition, refurbishment, renovations or structural alterations. In the event of future demolition, refurbishment, renovation or structural alterations further investigation, which may entail destructive testing, shall be required.

No inspection can be guaranteed to locate all asbestos in a specific location. The assessment cannot be regarded as absolute, without extensive invasion of structures. Future demolition and or renovation to site structures may expose situations, which were concealed or otherwise impractical to access during this assessment.

Coffey assessors take samples at any situations known, or suspected, to contain Asbestos. Where the analysis determines that No Asbestos is Detected (NAD) the samples are listed in the report to provide information for future assessments.

Where no samples are taken the situation is considered "asbestos free". This assessment is based on the knowledge and experience of Coffey Assessors, or on research conducted by Coffey Enviroments.

Representative sampling is defined as one like sample per consistent material type, situation or item. In these instances only one test sample will be collected for analytical confirmation and the results expressed as consistent and typical of the building.

Due to the very low concentration of asbestos fibres and the non-homogenous matrix of vinyl floor tiles, false negative results may be obtained. Therefore the accuracy of all results cannot be guaranteed.

Notably, with some asbestos containing bulk material it can be very difficult, or impossible to detect the presence of asbestos using the polarised light microscopy analytical method, even after ashing or disintegration of samples. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or attributed to the fact that, very fine fibres have been distributed individually throughout the materials.

The analysis of many asbestos products used as a component of insulation materials, may be compromised in instances where the material has been heat affected, as heat may alter the morphology of the fibrous material.

The Client must not rely on an Inspection or report as indicating that a site or a building is "asbestos free". All that the report can be relied upon to show is that no asbestos was found (or that only such asbestos was found as was reported to be found) in the course of the Inspection. The findings of the report must be considered together with the specific scope and limitations of the type of inspection undertaken.

Coffey Environments Pty Ltd

Figures

Asbestos Materials Report
Caritas, Corner Forbes and Burton Street, Darlinghurst NSW

Figure 1: Building Location Plan

Photographs

Asbestos Materials Report
Caritas, Corner Forbes and Burton Street, Darlinghurst NSW

Photograph 1: Lagged pipes, Basement Plant Room Outpatients Building

Photograph 2: Electrical switchboard backing, Plant Room, Outpatients Building

Photograph 3: Storage Container, Basement Plant Room, Outpatients Building

Photograph 4: Veranda Ceiling, Outpatients Building

Photograph 5: Cement sheeting on external wall/ Fascia, Courtyard, Outpatients Building

Photograph 6: Ceiling of Toilet, Outpatients Building

Photograph 7: Fibrocement sheeting, eaves, Outpatients Building

Photograph 8: Sprayed insulating material, second floor veranda ceiling, Inpatients Building

Photograph 9: Lagged pipes, Basement Service Tunnels Plant Pump Room, Inpatients Building.

Appendix A
Legislative Requirements and Additional Information

Asbestos Materials Report
Caritas, Corner Forbes and Burton Street, Darlinghurst NSW

LEGISLATIVE REQUIREMENTS — ASBESTOS

This document has been produced for information only and is under regular review due to frequent changes in legislation and guidance. It contains information relating to the column headings only and not, for instance, in relation to asbestos removal. It is the duty of employers, premise owners and controllers of premises etc to ensure they are familiar with the latest applicable state legislation and guidance.

STATE. Primary Asbestos Legislation	Asbestos Survey Requirements	Asbestos Resurvey Requirements	Reporting Requirements	Labelling/Signage Requirements	Other Requirements
WESTERN AUSTRALIA WA Occupational Safety and Health Act 1984 WA occupational Health and Safety Regulations 1996	Employer, main contractor, self-employed person or person having control of the workplace to ensure that presence and location of asbestos at the workplace is identified. The process of identification and assessment of risks arising from asbestos hazards are to be conducted in accordance with the Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC: 2018 (2005)].	Annual review of register and management plan under NOHSC: 2018(2005). A visual inspection of ACM should be undertaken as part of any review	Under NOHSC:2018(2005): Maintain a register on the premises which includes date of assessment, location & types of asbestos, analysis, risk assessments, control measures, and details of competent person who undertook the assessment. Details of presumptions made and likely asbestos in inaccessible areas to be included	Under NOHSC:2018(2005): Warning signs & labels to be used in conjunction with the workplace register to warn people of the presence of ACM. Competent person to determine number and position of labels. Areas containing ACM to be signposted.	Health (Asbestos) Regulations 1992
AUSTRALIAN CAPITAL TERITORY Occupational Health and Safety Act 1989 Dangerous Substances Act 2004	Not legislated specifically. However compliance with employers duty under 1989 Act to ensure people are not exposed to risk is measured against relevant codes of practice i.e.: NOHSC:2018(2005): Identify ACM and create a register.	None stipulated in legislation. Annual review of register and management plan under NOHSC:2018(2005). A visual inspection of ACM should be undertaken as part of any review	None stipulated in legislation. Under NOHSC:2018(2005): Maintain a register on the premises which includes date of assessment, location & types of asbestos, analysis, risk assessments, control measures, and details of competent person who undertook the assessment. Details of presumptions made and likely asbestos in inaccessible areas to be included	None stipulated in legislation. Under NOHSC:2018(2005): Warning signs & labels to be used in conjunction with the workplace register to warn people of the presence of ACM. Competent person to determine number and position of labels. Areas containing ACM to be signposted.	Regulatory regime for management of asbestos is currently under review by the ACT Taskforce.
NEW SOUTH WALES Occupational Health and Safety Act 2000 Occupational Health and safety Regulation 2001	Controller of work premises responsibility An asbestos register for any place of work is to be recorded, prepared and maintained.	Not specified in OHS Regulation. Under National Asbestos Code of Practice [NOHSC: 2002 (1988)] the register shall be regularly updated. Re-inspections between 1 and 3 years depending on risk.	Asbestos register to contain details of the type, location and condition asbestos materials plus any action taken to control ACM plus relevant details.	Not specified in OHS Regulation. Under National Asbestos Code of Practice [NOHSC: 2002 (1988)]. All identified asbestos in a building or other structure should be labelled so that it is clearly visible to persons using the area, until it is finally removed.	Regulation states that controller of premises must ensure that risk assessment and controls to be in accordance with NOHSC:2002(1988). Current policy reflects observance of the most recent publication in relation to working with asbestos i.e. (NOHSC:2018(2005))

LEGISLATIVE REQUIREMENTS — ASBESTOS

This document has been produced for information only and is under regular review due to frequent changes in legislation and guidance. It contains information relating to the column headings only and not, for instance, in relation to asbestos removal. It is the duty of employers, premise owners and controllers of premises etc to ensure they are familiar with the latest applicable state legislation and guidance.

STATE. Primary Asbestos Legislation	Asbestos Survey Requirements	Asbestos Resurvey Requirements	Reporting Requirements	Labelling/Signage Requirements	Other Requirements
QUEENSLAND Workplace Health & Safety Act 1995 Workplace Health & Safety Regs 1997	Building Owner Responsibility. All workplaces built before 1990 require register of 'Asbestos Materials' before 31 Oct 2004 or before being dismantled, demolished, sold or leased.	Annual Reinspection for Asbestos Materials * Or earlier if the nature or location of the works in the vicinity of the asbestos materials changes.	Report must state the location, type and form of asbestos materials. Also whether the asbestos material is friable or poorly bonded or in an unstable condition. Plus any potential health risks to occupants of the building because of the presence of asbestos materials.	All buildings with asbestos materials must have a notice in a prominent place in the building stating there is an asbestos register and where it can be viewed.	* Asbestos Materials defined as installed thermal or acoustic insulation containing asbestos, in the '97 Regs.
From 01.01.2008 or immediately if not previously compliant	Must comply with the Asbestos Management Code [NOHSC:2018(2005)] **by 1st Jan 2008** (immediately if not compliant with repealed division of Regs) or prior to being altered, dismantled, demolished, sold or leased.	Annual review of register & Management plan after 01.01.08 A visual inspection of ACM should be undertaken as part of any review	Maintain a register on the premises which includes date of assessment, location & types of asbestos, analysis, risk assessments, control measures, and details of competent person who undertook the assessment. Details of presumptions made and likely asbestos in inaccessible areas to be included.	Warning signs & labels to be used in conjunction with the workplace register to warn people of the presence of ACM. Competent person to determine number and position of labels. Areas containing ACM to be signposted.	Develop & implement an asbestos management plan.
VICTORIA Occupational Health & Safety Act 2004 Occupational Health and Safety (Asbestos) Regulations 2003	Occupier's responsibility to determine whether asbestos is present and if so identify the type, location, friability and condition of ACM. Also to conduct risk assessment on the basis of the above plus likely disturbances.	Undertake review and revision of risk assessment when condition of asbestos changes, remedial work has been carried out or the assessment is no longer valid. Maximum review timeframe is 5 years.	Reports must include the type, location, friability & condition of asbestos, identification of inaccessible areas and risk assessment including dates.	The regulations require that the presence and location of asbestos is clearly identified, and that where practicable, the identification is by labelling.	
TASMANIA Workplace Health & Safety Act 1995. Workplace Health and Safety Regulations 1998	Reasonable steps to be taken to identify the presence of any asbestos. Then carry out a risk assessment on potential exposure to airborne asbestos fibres.	Regularly inspect any asbestos identified to ensure that it does not deteriorate or constitute a health risk, and record the date and findings of each inspection in the register.	Maintain a register in relation to asbestos identified and findings of each inspection in the register and make the register available.	In any area building, structure or mine containing asbestos & regular maintenance or repair work is likely; provide and fix signs or labels to alert those persons of the location of the asbestos and any precautions that should be taken.	

LEGISLATIVE REQUIREMENTS — ASBESTOS

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STATE. Primary Asbestos Legislation	Asbestos Survey Requirements	Asbestos Resurvey Requirements	Reporting Requirements	Labelling/Signage Requirements	Other Requirements
SOUTH AUSTRALIA Occupational Health, Safety & Welfare Act 1986. OHSW Regulations 1995	Owner to take reasonable steps to identify any asbestos installed in a building and assess the associated risk.	Regular inspections (at least annually) by a competent person.	Reports must include the following: Assess degree of stability, location, type & condition of asbestos. Steps that can be taken to restrict access & prevent disturbance. The owner must supply the register (plus any alterations) to the occupier if not the same person.	Asbestos warning signs shall be affixed to or adjacent to identified asbestos materials. The signs shall conform to AS 1319 - 1994, Safety Signs for the Occupational Environment.	Approved Code of Practice for Asbestos Work (excluding Asbestos Removal) SA
NORTHERN TERRITORY Work Health Act & Regulations (Adopted NOHSC Codes of Practice)	Employer, main contractor, self-employed person or person having control of the workplace to ensure that presence and location of asbestos at the workplace is identified. The process of identification and assessment of risks arising from asbestos hazards are to be conducted in accordance with the Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC: 2018 (2005)].	Annual review of register and management plan under NOHSC: 2018(2005). A visual inspection of ACM should be undertaken as part of any review	Under NOHSC:2018(2005): Maintain a register on the premises which includes date of assessment, location & types of asbestos, analysis, risk assessments, control measures, and details of competent person who undertook the assessment. Details of presumptions made and likely asbestos in inaccessible areas to be included.	Under NOHSC:2018(2005): Warning signs & labels to be used in conjunction with the workplace register to warn people of the presence of ACM. Competent person to determine number and position of labels. Areas containing ACM to be signposted.	NOHSC:2018(2005) adopted by NT as an Approved Code of Practice (also NOHSC 2002 and 3003)

Appendix B
Asbestos Maintenance Log

Asbestos Materials Report
Caritas, Corner Forbes and Burton Street, Darlinghurst NSW

ASBESTOS MAINTENANCE LOG				
The following log should be maintained by the responsible person. It should contain information relating to the ongoing maintenance or control measures associated with ACM including removal, remedial works, repairs, inspection, monitoring and clearance details etc.				
Site:	**Carlitas, Corner Forbes and Burton Street, Darlinghurst NSW**			
Date	**Scope / Location**	**Carried out by**	**Result/Comments**	**Entered by**
3 August 2006	Asbestos Survey conducted	Coffey Environments	Register produced & delivered	Coffey Environments

Appendix C
Certificate(s) of Analysis

Asbestos Materials Report
Caritas, Corner Forbes and Burton Street, Darlinghurst NSW

Envirolab Services Pty Ltd
ABN 37 112 535 645
54 Frenchs Rd Willoughby NSW 2068
ph 02 9958 5901 fax 02 9958 5909
email: tnotaras@envirolabservices.com.au

CERTIFICATE OF ANALYSIS 6639

Client:
Coffey Environment Sydney
Level 16 Citigroup Centre
2 Park St
Sydney
NSW 2000

Attention: Maria Bowen

Sample log in details:

Your Reference:	ENVISYDN00113AA, Haz Mat Survey Caritas
No. of samples:	4 Materials
Date samples received:	10/09/06
Date completed instructions received:	10/09/06

Analysis Details:
Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Note, even after disintegration it can be difficult to detect the presence of asbestos in some asbestos -containing bulk materials using PLM and dispersion staining. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.

Report Details:

Date results requested by:	17/09/06
Date of Preliminary Report:	Not Issued
Issue Date:	15/09/06

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This document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025.
Tests not covered by NATA are denoted with *.

Results Approved By:

Nobuo Tam
Chemist

Client Reference: ENVISYDN00113AA, Haz Mat Survey Caritas

Envirolab Ref	Sample ID	Sample Description	Asbestos ID in materials
8836-1	BS001	1g fibrous material	No asbestos detected
8836-2	BS007	2.5g fibrous material	No asbestos detected
8836-3	BS009	2.5g tile fragment	No asbestos detected
8836-4	BS003	0.3g plaster fragments	Chrysotile asbestos detected

Method ID	Methodology Summary
[illegible]	[illegible]

Received by: CN9272281

CHAIN OF CUSTODY

Laboratory Name: ENVIROLAB SERVICES
Address: 54 FRENCHS RD WILLOUGHBY
Phone Number: 9958 6801 [illegible]
Contact: TANIA [illegible]
FAX: 9958 6808 [illegible]

Coffey Job No.: [illegible]
Project Name: [illegible]
Location: [illegible] NSW
LAB Quote Reference:

Results Expected By/On:	[illegible] days
Fax Results To:	Mario [illegible]
Fax Number:	02 [illegible]
Phone Number:	02 [illegible]
Invoice To:	[illegible] Office

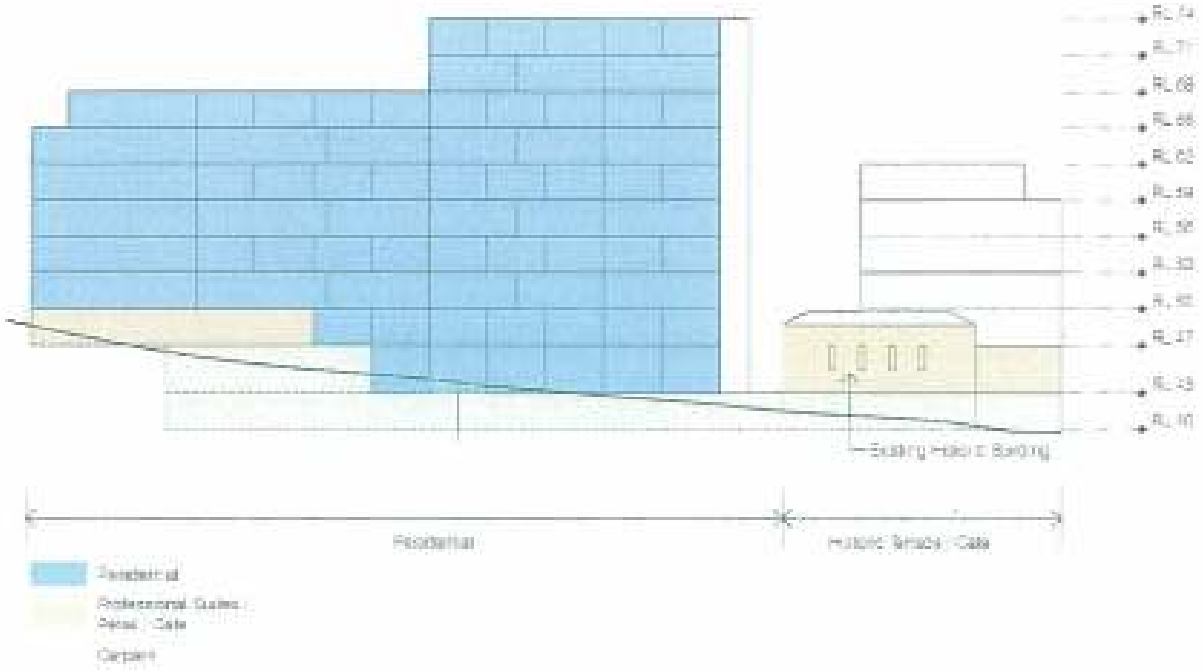
Sample I.D.	Location	Date	Time	Sample Type	Preservation	Filtered	Containers	Analysis Required	Remarks
[illegible]		2.6.06		x				x	
[illegible]		2.6.06		x				x	
[illegible]		2.6.06		x				x	
[illegible]		2.6.06		x				x	

Envirolab Services
Job No: 015706 [illegible]
Received By: AH
[illegible] 6653 [illegible]

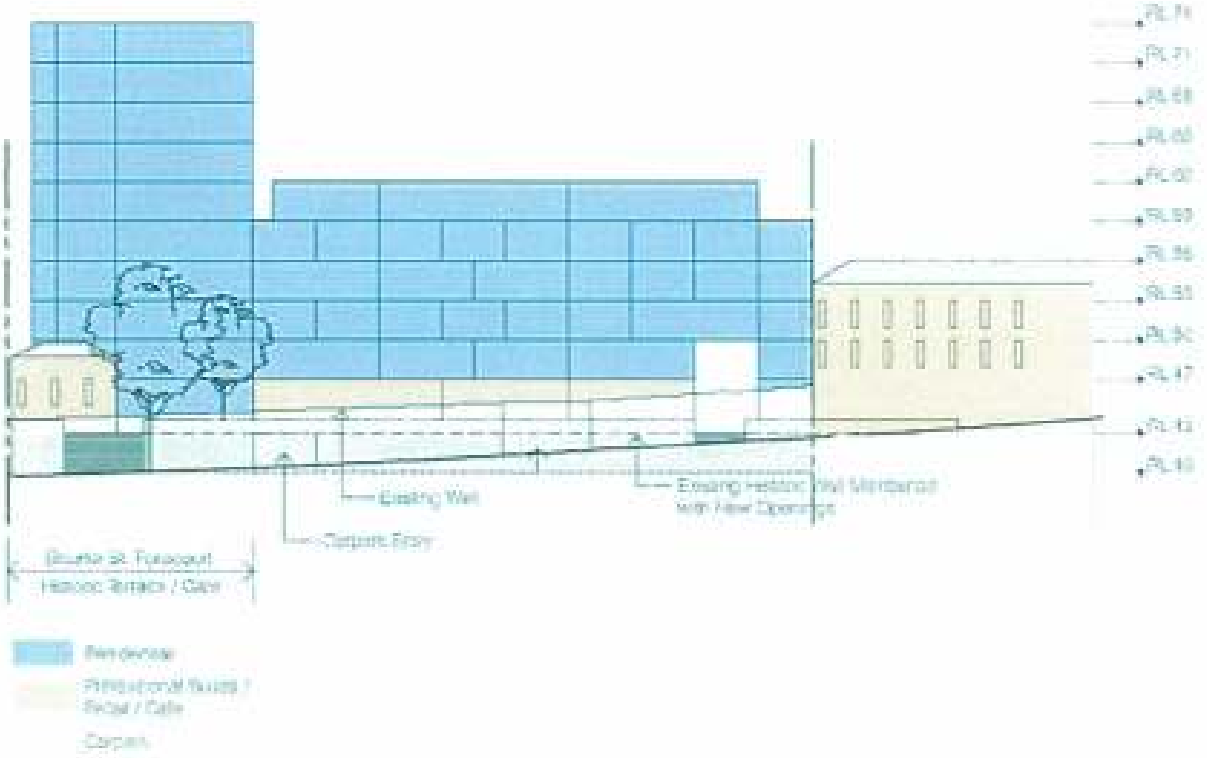
Relinquished By (Name):	Mario [illegible]	Received By (Name):	Aileen	Relinquished By (Name):		Received By (Name):	
Date:	[illegible]	Date:	2.6.06	Date:		Date:	
Company:	Coffey Env. Sydney	Company:	Envirolab	Company:		Company:	
Time:		Time:		Time:		Time:	
Signature:	[signature]	Signature:	[signature]	Signature:		Signature:	

Comments:

BASCEM Pty Ltd
Suite [illegible] Elizabeth Street
[illegible] NSW [illegible]
Ph: [illegible]
Fax: [illegible]
Email: [illegible]@[illegible].com.au



Option 2 - North Elevation
(Burton Street)



Option 2 - West Elevation
(Bourke Street)