Asbestos & Lead Paint Risk Assessment Report

Building Ref: H02

Darlington Campus

The Darlington Centre

16/05/2012

Noel Arnold & Associates Pty Ltd
Level 2 / 11 Khartoum Road
North Ryde NSW 2113
Ph: (02) 9889 1800 Fax: (02) 9889 1811
www.noel-arnold.com.au

Limitations

Please note that there are limitations associated with this report due to a range of factors, including but not limited to the scope of works, survey methodology and inaccessible area. To ensure its contextuyal integrity, the report must be read in its entirety and should not be copied, distributed or referred to in part only.
Refer to the Full Statement of Limitations detailed in the report for further information.

Report prepared by:	Report reviewed by:		
		NATA WORLD RECOGNISED ACCREDITATION	This document is issued in accordance with NATA's accreditation requirements. Accredited for compliance with ISO/IEC 17020 as a Type A Inspection Body. Accreditation No. 5450. Corporate Site: 18349. This document shall not be reproduced except in full.
Leigh Rampley	Nigel Johnson		
Hazardous Materials	**Approved Signatory**		

How to use this Report

The table below outlines the layout of the Hazardous Materials Register and the information presented.

The first four columns detail the location of the hazardous materials. The Building, Level & Room ID numbers are based on the provided plans from USYD CIS.

Descriptive information about each item is presented in this column.

The unique sample number refers to the analytical report located at the rear of the report in Appendix A

Condition, Friability and Disturbance Potential identify the risk factors associated with the hazardous material. The item is then given a Risk Rating (Low, Medium, High).

Site and assessment details are recorded and presented at the top of each register

The type of hazard (asbestos or Lead Paint) is indicated here

THE UNIVERSITY OF SYDNEY

Asbestos & Lead Paint Register

Noel Arnold & Associates — A GREENCAP CONSULTING COMPANY

Campus:	Camperdown Campus			**Survey Date:**	7/03/2011
Building Name:	Carslaw Building	**No. Levels**	8	**Inspected By:**	Emma Harland
Building Number	F07	**Building Age:**	1962	**Building Size (m2):**	19052
Level Name:	Ground Floor	**Construction Type:**	Brick & Metal	**Roof Type:**	Metal

Building ID:	Level	Room	Specific Location	Feature – Material – Description	Hazard Type	Sample	Sample Status	Photo No	Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	Control Priority	Re-Inspect Date	Control Recommendation	Record of Works Undertaken
F07	Ground Floor	Room 123	South	Walls - Fibre cement sheeting	Asbestos	89322-F07-1	Positive	89322-F07-2345	20m2	Good	Non-Friable	Low	Low	Not Labelled	P4	Mar-12	Maintain in current condition. Remove under controlled conditions prior to refurbishment/demolition works.	
																	Yellow indicates **Low** Priority	
																	Orange indicates **Medium** Priority	
																	Red indicates **High** Priority	
																	* Shaded column indicates a positive item defined as lead-containing	

This column identifies the type of hazardous material (i.e. Asbestos or Lead) and the status of the material.
Positive indicates that the item contains the specified hazardous material.
Negative indicates that the item does not contain the specified hazardous material.
Where the material was not sampled, but is similar to another sample, or where the material was inaccessible at the time of inspection but is likely/unlikely to contain hazardous materials the sample is *Presumed Negative* or *Presumed Positive*.

The photo number refers to the photograph taken of the hazardous material included in the report.

An estimated amount of the hazardous material present is presented in this column.

Recommended re-inspect dates are provided in this column

Recommendations are provided in this colum, colour-coded to indicate the Risk Rating & Priority of the item.

Asbestos & Lead Paint Register

Campus:	Darlington Campus			**Survey Date:**	16/05/2012
Building Name:	The Darlington Centre	**No. Levels**	2	**Inspected By:**	Leigh Rampley
Building Number	H02	**Building Age:**	1891	**Building Size (m2):**	827
Level Name:	L02	**Construction Type:**	Brick	**Roof Type:**	Tile

Building ID:	Level	Room Number	Specific Location	Feature – Material – Description	Hazard Type	Sample	Sample Status	Photo No	Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	Control Priority	Re-Inspect Date	Control Recommendation	Record of Works Undertaken
H02	L02	All rooms	Various Throughout	Windows - Cream - Upper coloured paint system	Lead Paint	J105234-H02-LP-1	Positive 9.9%	J105234-H02-7909	15	Fair	-	-	-	-	-	May-17	Engage an appropiate contractor to remove peeling paint and paint over with a coat of lead-free coat as part of ongoing maintenance. Maintain in good condition. If refurbishment works are likely to involve the disturbance of confirmed lead containing paint, dust suppression techniques should be utilized.	
H02	L02	All rooms	Various Throughout	Window beading - Mastic sealant	Asbestos	J105234-H02-1	Negative											
H02	L02	All areas	Throughout	Windows & door frames - Purple (Dark) - Upper coloured paint system - skirting and doors	Lead Paint	LeadCheck	Negative											
H02	L02	All areas	Various Throughout	Window frames - White - Lower coloured paint system	Lead Paint	J105234-H02-LP-2	Positive 5.4%	J105234-H02-7910	15 unit/s	Fair	-	-	-	-	-	May-17	Engage an appropiate contractor to remove peeling paint and paint over with a coat of lead-free coat as part of ongoing maintenance. Maintain in good condition. If refurbishment works are likely to involve the disturbance of confirmed lead containing paint, dust suppression techniques should be utilized.	
H02	L02	All areas	Throughout	Skirting board - White - Lower coloured paint system	Lead Paint	Similar to J105234-H02-LP-2	Presumed Positive	J105234-H02-7911	10 m2	Fair	-	-	-	-	-	May-17	Engage an appropiate contractor to remove peeling paint and paint over with a coat of lead-free coat as part of ongoing maintenance. Maintain in good condition. If refurbishment works are likely to involve the disturbance of confirmed lead containing paint, dust suppression techniques should be utilized.	
H02	L02	All areas	Various Throughout	Door frame - White - Lower coloured paint system	Lead Paint	Similar to J105234-H02-LP-2	Presumed Positive	J105234-H02-7912	10 m2	Fair	-	-	-	-	-	May-17	Engage an appropiate contractor to remove peeling paint and paint over with a coat of lead-free coat as part of ongoing maintenance. Maintain in good condition. If refurbishment works are likely to involve the disturbance of confirmed lead containing paint, dust suppression techniques should be utilized.	
H02	L02	Exterior	Various Throughout	Window frames - White - Lower coloured paint system	Lead Paint	J105234-H02-LP-3	Positive 2.3%	J105234-H02-7916	15 unit/s	Poor	-	-	-	-	-	May-13	Engage an appropiate contractor to remove peeling paint and paint over with a coat of lead-free coat as part of ongoing maintenance. Maintain in good condition. If refurbishment works are likely to involve the disturbance of confirmed lead containing paint, dust suppression techniques should be utilized.	
H02	L02	Exterior	Various Throughout	Window beading - Mastic sealant	Asbestos	J105234-H02-2	Negative											
H02	L02	Verandah	Various	Windows & door frames - White - Lower coloured paint system	Lead Paint	Similar to J105234-H02-LP-3	Presumed Positive	J105234-H02-7917	8 m2	Fair	-	-	-	-	-	May-17	Engage an appropiate contractor to remove peeling paint and paint over with a coat of lead-free coat as part of ongoing maintenance. Maintain in good condition. If refurbishment works are likely to involve the disturbance of confirmed lead containing paint, dust suppression techniques should be utilized.	

Asbestos & Lead Paint Register

Campus:	Darlington Campus			**Survey Date:**	16/05/2012
Building Name:	The Darlington Centre	**No. Levels**	2	**Inspected By:**	Leigh Rampley
Building Number	H02	**Building Age:**	1891	**Building Size (m2):**	827
Level Name:	L02	**Construction Type:**	Brick	**Roof Type:**	Tile

Building ID:	Level	Room Number	Specific Location	Feature – Material – Description	Hazard Type	Sample	Sample Status	Photo No	Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	Control Priority	Re-Inspect Date	Control Recommendation	Record of Works Undertaken
H02	L02	Exterior	Throughout	Walls - White - Lower coloured paint system	Lead Paint	LeadCheck	Positive	J105234-H02-7919	50 m2	Good	-	-	-	-	-	May-17	Maintain in good condition. If refurbishment works are likely to involve the disturbance of confirmed lead containing paint, dust suppression techniques should be utilized.	
H02	L02	All areas	Throughout	Ceiling - Cream - Upper coloured paint system - coving	Lead Paint	Similar to J105234-H02-LP-1	Presumed Positive		10 m²	Fair	-	-	-	-	-	May-17	Engage an appropiate contractor to remove peeling paint and paint over with a coat of lead-free coat as part of ongoing maintenance. Maintain in good condition. If refurbishment works are likely to involve the disturbance of confirmed lead containing paint, dust suppression techniques should be utilized.	

Asbestos & Lead Paint Register

Campus:	Darlington Campus			**Survey Date:**	16/05/2012
Building Name:	The Darlington Centre	**No. Levels**	2	**Inspected By:**	Leigh Rampley
Building Number	H02	**Building Age:**	1891	**Building Size (m2):**	827
Level Name:	L01	**Construction Type:**	Brick	**Roof Type:**	Tile

Building ID:	Level	Room	Specific Location	Feature – Material – Description	Hazard Type	Sample	Sample Status	Photo No	Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	Control Priority	Re-Inspect	Control Recommendation	Record of Works Undertaken
H02	L01	100-105 & 110	Various Throughout	Windows - Cream - Upper coloured paint system	Lead Paint	Similar to J105234-H02-LP-1	Presumed Positive	J105234-H02-7921	15	Good							Maintain in current good condition If refurbishment works are likely to involve the disturbance of confirmed lead containing paint engage an appropriate contractor and dust suppression techniques should be utilized.	
H02	L01	100-105 & 110	Various Throughout	Door frame - White - Lower coloured paint system	Lead Paint	Similar to J105234-H02-LP-2	Presumed Positive	J105234-H02-7922	10 m2	Fair	-	-	-	-	-	May-17	Engage an appropriate contractor to remove peeling paint and paint over with a coat of lead-free coat as part of ongoing maintenance. Maintain in good condition. If refurbishment works are likely to involve the disturbance of confirmed lead containing paint, dust suppression techniques should be utilized.	
H02	L01	100-105 & 110	Throughout	Skirting board - White - Lower coloured paint system	Lead Paint	Similar to J105234-H02-LP-2	Presumed Positive		10 m2	Fair	-	-	-	-	-	May-17	Engage an appropriate contractor to remove peeling paint and paint over with a coat of lead-free coat as part of ongoing maintenance. Maintain in good condition. If refurbishment works are likely to involve the disturbance of confirmed lead containing paint, dust suppression techniques should be utilized.	
H02	L01	100-105 & 110	Various Throughout	Window beading - Mastic sealant	Asbestos	Similar to J105234-H02-1	Presumed Negative											
H02	L01	100-105 & 110	Various Throughout	Window beading – Original windows - Mastic sealant	Asbestos	Similar to J105234-H02-2	Presumed Negative											
H02	L01	100-105 & 110	Various Throughout	Windows & doors - White - Lower coloured paint system	Lead Paint	Similar to J105234-H02-LP-3	Presumed Positive	J105234-H02-7928	10 m2	Fair	-	-	-	-	-	May-17	Engage an appropriate contractor to remove peeling paint and paint over with a coat of lead-free coat as part of ongoing maintenance. Maintain in good condition. If refurbishment works are likely to involve the disturbance of confirmed lead containing paint, dust suppression techniques should be utilized.	
H02	L01	100-105 & 110	Various Throughout	Windows & door frames - Cream - Upper coloured paint system	Lead Paint	Similar to J105234-H02-LP-1	Presumed Positive	J105234-H02-7929	10 m2	Good	-	-	-	-	-	May-17	Maintain in current good condition If refurbishment works are likely to involve the disturbance of confirmed lead containing paint engage an appropriate contractor and dust suppression techniques should be utilized.	
H02	L01	Exterior	West	Fire door - Double - Fire door core	Asbestos	No-Not Practical	Presumed Positive	J105234-H02-7925	1 unit/s	Good	Friable	Low	Low	Not Labelled	P3	May-13	Label and maintain current good condition. Confirm status when required once isolated. Remove under controlled conditions by a Class A (friable) licensed contractor prior to demolition or refurbishment.	
H02	L01	Exterior	West	Door - White - Upper coloured paint system	Lead Paint	LeadCheck	Negative											
H02	L01	Central Garden Verandah	Various	Balcony posts - Black - Upper coloured paint system	Lead Paint	LeadCheck	Negative											

Asbestos & Lead Paint Register

Campus:	Darlington Campus			**Survey Date:**	16/05/2012
Building Name:	The Darlington Centre	**No. Levels**	2	**Inspected By:**	Leigh Rampley
Building Number	H02	**Building Age:**	1891	**Building Size (m2):**	827
Level Name:	L01	**Construction Type:**	Brick	**Roof Type:**	Tile

Building ID:	Level	Room	Specific Location	Feature – Material – Description	Hazard Type	Sample	Sample Status	Photo No	Extent	Condition	Friability	Dist. Potential	Risk Rating	Current Label	Control Priority	Re-Inspect	Control Recommendation	Record of Works Undertaken
H02	L01	Central Garden Verandah	Various	Balcony posts - White - Lower coloured paint system	Lead Paint	LeadCheck	Positive	J105234-H02-7924	5 units	Good	-	-	-	-	-	May-17	Maintain in current good condition. If refurbishment works are likely to involve the disturbance of confirmed lead containing paint, dust suppression techniques should be utilized.	

Photo No: J105234-H02-7909 Result: Lead Paint Positive 9.9%

Location-Level:	L02
Room-Location:	All rooms - Various Throughout
Feature-Material:	Windows - Cream - Upper coloured paint system

Photo No: J105234-H02-7910 Result: Lead Paint Positive 5.4%

Location-Level:	L02
Room-Location:	All areas - Various Throughout
Feature-Material:	Window frames - White - Lower coloured paint system

Photo No: J105234-H02-7911 Result: Lead Paint Presumed Positive

Location-Level:	L02
Room-Location:	All areas - Throughout
Feature-Material:	Skirting board - White - Lower coloured paint system

Photo No: J105234-H02-7912 Result: Lead Paint Presumed Positive

Location-Level:	L02
Room-Location:	All areas - Various Throughout
Feature-Material:	Door frame - White - Lower coloured paint system

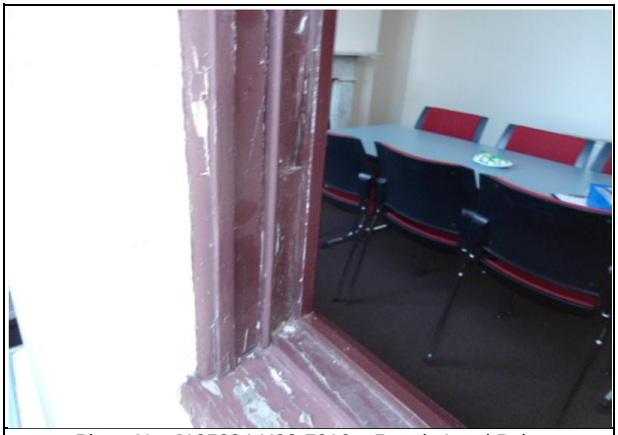

Photo No: J105234-H02-7916 Result: Lead Paint Positive 2.3%

Location-Level:	L02
Room-Location:	Exterior - Various Throughout
Feature-Material:	Window frames - White - Lower coloured paint system

Photo No: J105234-H02-7917 Result: Lead Paint Presumed Positive

Location-Level:	L02
Room-Location:	Verandah - Various
Feature-Material:	Windows & door frames - White - Lower coloured paint system

Photo No: J105234-H02-7919 Result: Lead Paint Positive

Location-Level: L02
Room-Location: Exterior - Throughout
Feature-Material: Walls - White - Lower coloured paint system

Photo No: J105234-H02-7921 Result: Lead Paint Presumed Positive

Location-Level: L01
Room-Location: 100-105 & 110 - Various Throughout
Feature-Material: Windows - Cream - Upper coloured paint system

Photo No: J105234-H02-7922 Result: Lead Paint Presumed Positive

Location-Level: L01
Room-Location: 100-105 & 110 - Various Throughout
Feature-Material: Door frame - White - Lower coloured paint system

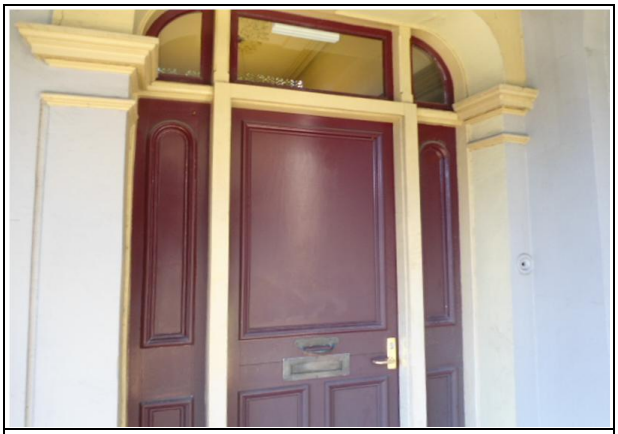

Photo No: J105234-H02-7928 Result: Lead Paint Presumed Positive

Location-Level: L01
Room-Location: 100-105 & 110 - Various Throughout
Feature-Material: Windows & doors - White - Lower coloured paint system

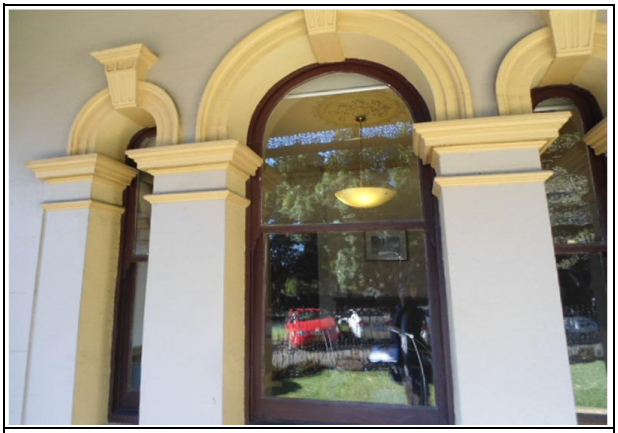

Photo No: J105234-H02-7929 Result: Lead Paint Presumed Positive

Location-Level: L01
Room-Location: 100-105 & 110 - Various Throughout
Feature-Material: Windows & door frames - Cream - Upper coloured paint system

Photo No: J105234-H02-7925 Result: Asbestos Presumed Positive

Location-Level: L01
Room-Location: Exterior - West
Feature-Material: Fire door - Double - Fire door core

Photo No: J105234-H02-7924 Result: Lead Paint Positive

Location-Level:	L01
Room-Location:	Central Garden Verandah - Various
Feature-Material:	Balcony posts - White - Lower coloured paint system

Areas Not Accessed

The Darlington Centre

Area / Item	Not Accessed	Comments
Height restricted areas of site and ceiling where safe lifting platforms were not provided	All	
Inaccessible ceiling spaces	All	
Inaccessible culverts and floor trenches or tunnels	All	
Wall cavities	All	
Building façade fixing brackets	All	
Under carpeted floor coverings	All	Fixed throughout
Within internal walls partitioning	All	
Behind ceramic wall tiles throughout	All	
Inside mechanical equipment	All	
Gaskets, mastics & sealants to pipework, ductwork, mechanical equipment & construction/expansion joints	Some	
Waterproof membranes	All	
Fire door cores	All	
Within air conditioning re-heat boxes	All	
Within electrical switchboard cupboard or backing	Some	
Roof	All	
Roof spaces	Some	L02 Ceiling hatches - no access
Bulkheads	All	
Above suspended ceiling tiles	All	
Fire places and chimney shafts	All	
Within timber large box heaters to floor	All	
L01 Kitchen and freezers	Some	Limited access due to food prep/equipment and staff

It is noted that Hazardous Materials may be contained within or behind those areas identified in the above table. Caution should be exercised when accessing these areas, particularly in relation to potential disturbance of the building fabric or concealed spaces.

Scope of Works

The scope of works for this project were as follows:

- Undertake a NATA-Accredited survey of the site in accordance with the requirements of ISO 17020
- Inspect representative and accessible areas of the site to identify asbestos & lead paint materials
- Identify the likelihood of asbestos in inaccessible areas
- Identify the types of asbestos-containing materials and lead-based paints and their condition
- Assess the risks posed by the materials
- Compile an up-dated asbestos materials register for the site

- Collect samples of suspected asbestos and lead paint containing materials for analysis in a NATA-Accredited laboratory
- Take photographs of suspected asbestos-containing and lead paint materials
- Recommend control measures and actions necessary to manage any asbestos and lead paint related risks
- Make comments for ongoing management of the asbestos and lead paint materials if they are to remain in-situ

Methodology

Asbestos

This component of the assessment was carried out in accordance with the guidelines documented in the *Code of Practice: How to Manage and Control of Asbestos in the Workplace (WorkCover NSW, 2011)*. Samples of suspected asbestos-containing materials were collected during the survey and were analysed in Noel Arnold & Associates' NATA-accredited laboratory for the presence of asbestos by Polarised Light Microscopy. Refer to **Appendix A** for information.

Lead Paint

Representative painted surfaces were tested for the presence of lead using the LeadCheck paint swab method in several locations. This method can detect lead in paint at concentrations of 0.5% and above, and may indicate lead in some paint films as low as 0.2%. The sampling program was representative of the various types of paints found within the site, concentrating on areas where lead based paints may have been used (eg. Exterior gloss paints, window and door architraves, skirting boards etc). The objective of lead paint identification in this survey is to highlight the presence of lead-based paints within the building, not to specifically identify every source of lead-based paint. Paint chips that were indicated as "positive" via LeadCheck swabs were subsequently collected and analysed in an external NATA-Accredited laboratory for % weight/volume of lead. Refer to **Appendix A** for information.

All Building, Level and Room ID numbers are based on the floor plans used during the audit as provided by USYD CIS.

To assess the health risk posed by the presence of asbestos-containing material, all relevant factors must be considered. These factors include:

- Evidence of physical damage;
- Evidence of water damage;
- Proximity of air plenums and direct air stream;
- Friability of asbestos material;
- Requirement for access for building operations;
- Requirement for access for maintenance operations;
- Likelihood of disturbance of the asbestos material;
- Accessibility;
- Exposed surface areas; and
- Environmental conditions

These aspects are in turn judged upon: (i) potential for fibre generation, and, (ii) the potential for exposure. Where these factors have indicated that there is a possibility of exposure to airborne fibres, appropriate recommendations for repair, maintenance or abatement of the asbestos-containing materials are made.

Condition

The condition of the asbestos products identified during the survey is usually reported as either being good or poor.

Good :- refers to asbestos materials, which have not been damaged or have not deteriorated.
Fair :- refers to the asbestos material having suffered minor cracking or de-surfacing.
Poor :- describes asbestos materials which have been damaged or their condition has deteriorated over time.

Friability

The friability of asbestos products describes the ease of which the material can be crumbled, and hence to release fibres.

Friable asbestos :- (e.g. limpet beam insulation, pipe lagging) can be easily crumbled and is more hazardous than non-friable asbestos products.

Non-Friable asbestos :- commonly known as bonded asbestos, is typically comprised of asbestos fibres tightly bound in a stable non-asbestos matrix. Examples of non-friable asbestos products include asbestos cement materials (sheeting, pipes etc), asbestos containing vinyl floor tiles and electrical backing boards.

Accessibility/Disturbance Potential

Asbestos products can be classified as having low, medium or high accessibility/disturbance potential.

Low accessibility describes asbestos products that cannot be easily disturbed, such as materials in building voids, set ceilings, etc.

Medium accessibility describes asbestos products that are visible but normal access is impeded, such as materials behind cladding material or are present in a ceiling space or are height restricted.

High accessibility asbestos products can be easily accessed or damaged due to their close proximity to personnel, e.g. asbestos cement walls or down pipes.

Risk Status

The risk factors described above are used to rank the health risk posed by the presence of asbestos-containing materials.

A ***low risk ranking*** describes asbestos materials that pose a low health risk to personnel, employees and the general public providing they stay in a stable condition, for example asbestos materials that are in good condition and have low accessibility.

A ***medium risk ranking*** applies to materials that pose an increased risk to people in the area.

Asbestos materials that possess a ***high-risk ranking*** pose a high health risk to personnel or the public in the area of the material. Materials with a high-risk ranking will also possess a Priority 1 recommendation to manage the asbestos and reduce the risk.

Asbestos Priority Rating System for Control Recommendations

The following priority rating system is adopted to assist in the programming and budgeting of the control of asbestos risk identified at the site.

Priority 1 (P1): Organise Remedial Works Immediately

An area has asbestos containing materials, which are either damaged or are being exposed to continual disturbance. Due to these conditions, there is an increased potential for exposure and/or transfer of the material to other parts with continued unrestricted use of this area. Representative asbestos fibre monitoring should be conducted in the building area during normal building operation where recommended. Prompt abatement of the asbestos hazard is recommended. As an interim, restrict access.

Priority 2 (P2): Organise Remedial Works Within 3 months

An area has asbestos containing materials with a potential for disturbance due to the following conditions:

- Material has been disturbed or damaged and its current condition, while not posing an immediate hazard, is unstable.
- The material is accessible and can when disturbed, present a short-term exposure risk.
- Demolition, renovation, refurbishment, maintenance, modification or new installations, involving air-handling system, ceilings, lighting, fire safety systems or floor layout.

Appropriate abatement measures should be taken as soon as practicable. A negligible health risk exists if materials remain undisturbed under the control of an asbestos management plan.

Priority 3 (P3): No Remedial Works Required

An area has asbestos-containing materials, where:

- The condition of the friable asbestos material is now stable and has low potential of being disturbed or
- The material is currently in a non-friable condition, may have slight damage but do not present an exposure risk unless cut, drilled, sanded or otherwise abraded.

Negligible health risks are present if materials are left undisturbed under the control of an asbestos management plan. Defer any major action unless materials are to be disturbed as a result of maintenance, refurbishment or demolition operations.

Priority 4 (P4): No Remedial Works Required

The asbestos material is in a non-friable form and in good condition. It is most unlikely that the material can be disturbed under normal circumstances and can be safety subjected to normal traffic. Even if it were subjected to minor disturbance the material poses a negligible health risk. These materials should be left and their condition monitored during subsequent reviews. As with any asbestos materials, these materials must be removed prior to renovations that may impact on the materials.

Labelling Requirements

Materials confirmed or suspected to contain asbestos should be clearly labelled in accordance with the *Code of Practice: How to Safely Manage and Control Asbestos in the Workplace (WorkCover NSW, 2011)* and relevant state based regulations.

Statement of Limitations

This report has been prepared in accordance with the agreement between the Unitversity of Sydney and Noel Arnold & Associates Pty Ltd.
Within the limitations of the agreed upon scope of services, this work has been undertaken and performed in a professional manner, in accordance with generally accepted practices, using a degree of skill and care ordinarily exercised by members of its profession and consulting practice. No other warranty, expressed or implied, is made.
This report is solely for the use of the University of Sydney and any reliance on this report by third parties shall be at such party's sole risk and may not contain sufficient information for purposes of other parties or for other uses. This report shall only be presented in full and may not be used to support any other objective than those set out in the report, except where written approval with comments are provided by Noel Arnold & Associates Pty Ltd.

This report relates only to the identification of asbestos-containing materials used in the construction of the building and does not include the identification of dangerous goods or hazardous substances in the form of chemicals used, stored or manufactured within the building or plant.
'The following should also be noted:
While the survey has attempted to locate the asbestos-containing materials within the site it should be noted that the review was a visual inspection and a limited sampling program was conducted and/or the analysis results of the previous report were used. Representative samples of suspect asbestos materials were collected for analysis. Other asbestos materials of similar appearance are assumed to have a similar content.
Not all suspected asbestos materials were sampled. Only those asbestos materials that were physically accessible could be located and identified. Therefore it is possible that asbestos materials, which may be concealed within inaccessible areas/voids, may not have been located during the audit. Such inaccessible areas fall into a number of categories.
(a) Locations behind locked doors.
(b) In set ceilings or wall cavities.
(c) Those areas accessible only by dismantling equipment or performing minor localised demolition works.
(d) Service shafts, ducts etc., concealed within the building structure.
(e) Energised services, gas, electrical, pressurised vessel and chemical lines
(f) Voids or internal areas of machinery, plant, equipment, air conditioning ducts etc.
(g) Totally inaccessible areas such as voids and cavities created and intimately concealed within the building structure. These voids are only accessible during major demolition works.
(h) Height restricted areas.
(i) Areas deemed unsafe or hazardous at time of audit

In addition to areas that were not accessible, the possible presence of hazardous building materials may not have been assessed because it was not considered practicable as:

1. It would require unnecessary dismantling of equipment; and/or
2. It was considered disruptive to the normal operations of the building; and/or
3. It may have caused unnecessary damage to equipment, furnishings or surfaces; and/or
4. The hazardous material was not considered to represent a significant exposure risk; and/or
5. The time taken to determine the presence of the hazardous building material was considered prohibitive.

Only minor destructive auditing and sampling techniques were employed to gain access to those areas documented in Appendix A. Consequently, without substantial demolition of the building, it is not possible to guarantee that every source of hazardous material has been detected.

During the course of normal site works care should be exercised when entering any previously inaccessible areas or areas mentioned above and it is imperative that work cease pending further sampling if materials suspected of containing asbestos or unknown materials are encountered. Therefore during any refurbishment or demolition works, further investigations and assessment may be required should any suspect material be observed in previously inaccessible areas or areas not fully inspected previously, i.e. carpeted floors.

This report is not intended to be used for the purposes of tendering, programming of works, refurbishment works or demolition works unless used in conjunction with a specification detailing the extent of the works. To ensure its contextual integrity, the report must be read in its entirety and should not be copied, distributed or referred to in part only.

Appendix A

NATA Accredited Sample Analysis Results

Noel Arnold & Associates
A GREENCAP CONSULTING COMPANY

Risk Management Services

NOEL ARNOLD & ASSOCIATES PTY LTD
A.C.N. 006 318 010 A.B.N. 76 006 318 010
Level 2, 11 Khartoum Road,
North Ryde, NSW 2113 Australia
Phone: (02) 9889 1800
Fax: (02) 9889 1811
Email: sydney@noel-arnold.com.au
www.noel-arnold.com.au

Monday 21/05/2012

Our ref: C108078:J105234-H02

Kevin Duffy
The University of Sydney
Level 1, Services Building G12
The University of Sydney NSW 2006

Dear Kevin,

Re: Asbestos Identification Analysis - The Darlington Centre

This letter presents the results of asbestos fibre identification analysis performed on 2 samples collected by Leigh Rampley of Noel Arnold & Associates Pty Ltd on Wednesday 16 May, 2012. The samples were collected from The Darlington Centre.

All sample analysis was performed using polarised light microscopy, including dispersion staining in our Sydney Laboratory in accordance with Noel Arnold and Associates Pty Ltd Test Method NALAB 302 "Asbestos Identification Analysis" and following the guidelines of Australian Standard AS4964-2004.

The samples will be kept for six months and then disposed of, unless otherwise directed.

The results of the asbestos identification analysis are presented in the appended table.

Should you require further information please contact the Sydney Laboratory (02) 9889 1800.

Yours sincerely
NOEL ARNOLD & ASSOCIATES PTY LTD

Simon Day : Approved Identifier

Simon Day : Approved Signatory

NATA
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Sydney Laboratory
Sample Analysis Results

Site Location:		The Darlington Centre, Darlington Campus, University of Sydney	
	Sample ID	Sample Location/Description/Weight or Size	Analysis Result
1	J105234-H02 01	L02 - Interior - All rooms - Various Throughout - Window beading - Mastic sealant White-painted pink hardened mastic material ~ 10 x 10 x 1 mm	No Asbestos Detected
2	J105234-H02 02	L02 - Exterior - Various Throughout - Window beading - Mastic sealant Burgundy-painted cream hardened mastic material ~ 30 x 12 x 3 mm	No Asbestos Detected