

**REGISTER OF HAZARDOUS
MATERIALS REPORT
RESIDENCES IN NORTHERN PRECINCT
TALLAWARRA LANDS,
YALLAH BAY ROAD, YALLAH
NSW**

Prepared for:

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Report Date: 15 March 2011
Project Ref: ENAUWOLL04009AD

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EXECUTIVE SUMMARY

Coffey Environments Australia Pty Ltd conducted a hazardous materials survey of the Residences in Northern Precinct, Tallawarra Lands on 18 November 2010. The survey was undertaken to facilitate the identification and location of hazardous materials to enable to enable removal prior to demolition.

From the site survey and laboratory analysis results a register of hazardous materials (Haz Mat) has been produced in accordance with the requirements of the National Occupational Health and Safety Commission Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC:2018(2005)] and other relevant legislation.

At the request of the client Coffey Environments attended site on the 11th of March to supervise removals of external asbestos cement debris by an AS1 Removalist (P&D Environmental PTY Ltd (refer to Coffey report ref. ENAUWOLL04009AD-R03) identified during the original survey. This report has been revised to reflect the changes to the asbestos register as a result of the removals work undertaken.

The asbestos information in this report is supplied on the understanding that the area surveyed is to be subject to demolition, and that all identified asbestos and other hazardous materials will be removed prior to, or as part of those works. Any asbestos or other hazardous materials remaining in situ at the conclusion of the project will need full material and location assessment in line with the requirements of [NOHSC:2018(2005)].

This contract was completed by Coffey Environments on the basis of a defined program of work and terms and conditions agreed with the Client. We confirm that in preparing this report we have exercised all reasonable skill and care bearing in mind the project objectives, the agreed scope of works and prevailing site conditions.

Full details of all asbestos and hazardous material assessments can be located within the register.

1 INTRODUCTION

Coffey Environments Australia Pty Ltd was commissioned by TRUenergy Tallawarra to conduct a hazardous materials survey ('The Survey') of Residences in Northern Precinct, Tallawarra Lands on 18 November 2010.

Paul Patton of Coffey Environments carried out the inspection and TRUenergy Tallawarra provided information regarding the site and its history. Other information was obtained from vendor manuals, standards, guidelines, regulations and other material available in the public domain.

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.

As the site is acknowledged to be programmed for future demolition / major refurbishment and as the site was not occupied, sampling techniques involved intrusive sampling where appropriate. The findings of the site investigation contained within this report should be used as the basis for the procurement of tender costs for the removal/remediation of the hazardous materials identified. This process should also include site tender escorts where appropriate.

No inspection can be guaranteed to locate all asbestos/hazardous materials in a specific location and therefore this assessment cannot be regarded as absolute. Future demolition and or renovation to site structures may expose situations, which were concealed or otherwise impractical to access during this assessment.

1.1 Background

The site has not been previously assessed by Coffey Environments.

The purpose of the survey was to comply with current regulations and to identify hazards within the building to enable hazardous materials to be removed prior to demolition.

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 a pre-demolition hazardous materials survey of the site, to locate asbestos containing materials (ACM's), lead paint systems, ozone depleting substances (ODS's), polychlorinated Biphenyls in light capacitors (PCB's) and synthetic mineral fibre (SMF) in accessible areas.
- Collect samples of suspect asbestos and lead paint 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. ODS's, PCB's and damaged, high risk SMF identified on a visual basis only.
- Document the details of materials identified including photographs of any samples taken
- Record, collate and report the findings.
- Deliver reports to the client as per project agreement.

2 METHODOLOGY

Hazardous material 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 (AS), synthetic mineral fibre (SMF) (in friable and exposed condition), lead based paint systems (Pb), Polychlorinated Biphenyls (PCB) and Ozone depleting substances (ODS – [CFC, HCFC or HFC]). Information was collected from the owners/occupiers/tenants of the site on relevant issues pertaining to the site. Based on all the available data and the status of the site at the time of inspection, where items suspected of containing hazardous materials were identified, visual and/or analytical characterisation (where required) was performed and reported in this Hazardous 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. Furthermore, only one of each type of fluorescent light fitting is inspected and the details of the capacitor identified within is checked against the 1997 ANZECC register for the Identification of PCB-Containing Capacitors. Sample collection was performed in a non-destructive and non-invasive manner.

Hazardous 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 prejudice to the health and safety of the surveyor & building occupants; 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 Action Classifications (Section 4 - Glossary).

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 are appropriately NATA certified for the analysis conducted.

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

3 RESULTS

3.1 Asbestos & Hazardous Materials Register

Assessment Date:	18 November 2010
Address:	Residences in Northern Precinct, Tallawarra Lands

DESCRIPTION

The survey is of several structures located in the north-eastern part of the Tallawarra Lands. The area comprises a main former Farmhouse (timber and 'fibro' cement construct with corrugated iron wall cladding and roof), with associated Garage (timber with corrugated iron wall cladding and roof), Stables (brick and concrete with corrugated iron roof) and former Dairy buildings (brick and concrete with corrugated iron roof). There is a ramshackle timber and corrugated iron Stables to the south of the former Dairy. Several additional structures (approximately twenty two in number) are present throughout within the site boundary, varying in construct from sheds (timber, weatherboard, corrugated iron) to metal shipping containers. It should be noted that some are privately owned and will need to be removed by their respective owners upon termination of the lease agreement by TRUenergy.

See Photograph 1.

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 B)

At the request of the client Coffey Environments attended site on the 11th of March to supervise removals of external asbestos cement debris by an AS1 Removalist (P&D Environmental PTY Ltd (refer to Coffey report ref. ENAUWOLL04009AD-R03) identified during the original survey. This report has been revised to reflect the changes to the asbestos register as a result of the removals work undertaken.

Asbestos materials identified are listed in a separate register to the additional hazard groups.

Please Note: As the site is scheduled for demolition all positive findings have an A1 risk rating for removal.

Assessment by:	Paul Patton	Date of inspection:	18 November 2010	Register Review & Re-Inspection:	NA
Site Contact:	TRUenergy Tallawarra	Site Location:	Residences in Northern Precinct, Tallawarra Lands		

REGISTER OF ASBESTOS CONTAINING MATERIALS

Sample No.	Results	Photo ID	Description	Location	Friable	Asbestos Type	Product Type	Action	Quantity (m ² , m ³)	Comments
Residences in Northern Precinct, Tallawarra Lands										
CA2306	CH	02	Asbestos Cement Sheet	01 House: Internal: To walls of disused car parts store	N	1	1	A1	10 m ²	
Visual Obs	CR	04	CAF Gasket	01 House: Internal: Redundant gasket to wall of disused car parts store	N	3	1	A1	1 unit	
CA2309	CH	06	Asbestos Cement Sheet	01 House: Internal: To Bathroom walls, ceiling, door surrounds. Beading also asbestos cement.	N	1	1	A1	24 m ²	Note: panels present as double skin to bedroom, corridor and external BBQ area. Two non-asbestos.
CA2310	CH	07	Asbestos Cement Debris	01 House: Internal: On floor in Corridor to Bathroom	N	1	1	A1	1 m ²	Note: no longer present.
CA2312	CH	09	Asbestos Cement Sheet	01 House: Internal: To Corridor ceiling	N	1	1	A1	6 m ²	
CA2313	CH	10	Asbestos Cement Sheet 'Tilux'	01 House: Internal: To Kitchen walls	N	1	1	A1	20 m ²	Note: not present to north wall
As CA2310	CH	11	Asbestos Cement Sheet	01 House: Internal: To chimney flue in Kitchen	N	1	1	A1	1 m ²	
CA2314	CH	11	Asbestos Textile	01 House: Internal: Cloth wrap to chimney flue in Kitchen	N	1	1	A1	<1 m ²	
CA2315	CH	12	Asbestos Cement Sheet	01 House: Internal: To ceiling in Kitchen	N	1	1	A1	12 m ²	

Sample No.	Results	Photo ID	Description	Location	Friable	Asbestos Type	Product Type	Action	Quantity (m, m ² , m ³)	Comments
CA2316	CH	13	Asbestos Cement Sheet	01 House: Internal: To ceiling of Corridor	N	1	1	A1	8 m ²	
As CA2310	CH	13	Asbestos Cement Sheet	01 House: Internal: To walls of Corridor	N	1	1	A1	24 m ²	Note: Lower wall panels are non-asbestos
As CA2309	CH	14	Asbestos Cement Sheet	01 House: Internal: To walls & ceiling of Bedroom 1	N	1	1	A1	48 m ²	Note: Some panels (~6 m ²) are non-asbestos
As CA2309	CH	15	Asbestos Cement Sheet	01 House: Internal: To walls & ceiling of Bedroom 2	N	1	1	A1	48 m ²	
As CA2309	CH	16	Asbestos Cement Sheet	01 House: Internal: To walls & ceiling of Office	N	1	1	A1	44 m ²	Note: Lower wall panels are non-asbestos
As CA2310	CH	17	Asbestos Cement Sheet	01 House: Internal: Over Sunroom door to external	N	1	1	A1	1.5 m ²	
Visual Obs	Presume CR	18	Zelemite Board	01 House: External: To fuse board under awning	N	3	1	A1	<1 m ²	
As CA2310	CH	19	Asbestos Cement Sheet	01 House: External: Canopies over windows	N	1	1	A1	3 x 1.5 m ²	Note: over three windows only.
As CA2310	CH	20	Asbestos Cement Sheet	01 House: External: Panels to door surrounds and below and over windows to Sunroom	N	1	1	A1	10 m ²	
As CA2310	CH	21	Asbestos Cement Debris	01 House: External: Cement sheet debris under and adjacent house	N	-	-	NIL	~4 m ²	Removed by P&D Environmental on 11/03/2011.
Visual Obs	Presume CR	22	Asbestos Cement Sheet	01 House: External: To gable end north	N	3	1	A1	4 m ²	
CA2320	CH,AM	23	Asbestos Cement Sheet	08 Toilet: Internal: To walls	N	1	1	A1	6 m ²	
CA2223	CH	25	Asbestos Cement Sheet	12 Stables: Internal: To ceiling in RHS areas	N	1	1	A1	32 m ²	Note: beading to panels is asbestos cement
As CA2223	CH	-	Asbestos Cement Sheet	12 Stables: Internal: To partition to far stores on RHS	N	1	1	A1	2 m ²	

Sample No.	Results	Photo ID	Description	Location	Friable	Asbestos Type	Product Type	Action	Quantity (m, m ² , m ³)	Comments
Visual Obs	Presume CR	26	Zelemite Board	12 Stables: Internal: To fuse box on wall in middle stores	N	3	1	A1	<1 m ²	
Visual Obs	Presume CR	27	Zelemite Board	12 Stables: External: To fuse box on telegraph pole	N	3	1	A1	<1 m ²	
CA2223	CH	28	Asbestos Cement Sheet	13 Forge: Internal: To walls	N	1	1	A1	32 m ²	Note: some non-asbestos panels present.
Visual Obs	Presume CR	51	Asbestos Cement Sheet	01 House: External: Cement debris under Land Rover	N	-	-	NIL	2 m ²	Removed by P&D Environmental on 11/03/2011.
Visual Obs	Presume CR	52	Asbestos Cement Sheet	01 House: External: Cement panel to chimney stack	N	3	1	A1	1 m ²	
No Asbestos Detected (NAD)										
CA2318	NAD	-	Floor Tiles	01 House: Internal: Blue and white tiles to Sunroom	N	0	0	-	8 m ²	
CA2319	NAD	-	Tile adhesive	01 House: Internal: To blue and white tiles to Sunroom	N	0	0	-	2 m ²	
CA2304	NAD	43	Fibre Cement sheet	02 Shed: panels to left hand wall	N	0	0	-		
-	NAD	44	-	03 Shipping Container	N	0	0	-	1 Unit	Note: locked and privately owned
-	NAD	45	-	04 Shipping Container	N	0	0	-	1 Unit	
-	NAD	46	-	05 Corrugated Iron Shed	N	0	0	-	1 Unit	
-	NAD	47	-	06 Corrugated Iron Shed / Shipping Container	N	0	0	-	1 Unit	Note: locked.
-	NAD	48	-	07 Metal Trailer	N	0	0	-	1 Unit	Note: locked and privately owned
CA2322	NAD	49	Floor Tiles	09 Demountable Toilets	N	0	0	-	6 m ²	

Hazardous Materials Report
Residences in Northern Precinct, Tallawarra Lands

Sample No.	Results	Photo ID	Description	Location	Friable	Asbestos Type	Product Type	Action	Quantity (m, m ² , m ³)	Comments
-	NAD	50	-	10 Shipping Container	N	0	0	-	1 Unit	
-	NAD	32	-	17 Chicken Coop	N	0	0	-	1 Unit	
-	NAD	33	-	18 Corrugated Iron Shed	N	0	0	-	1 Unit	Note: locked and no access internally.
-	NAD	34	-	19 Corrugated Iron Shed	N	0	0	-	1 Unit	Note: locked and no access internally. Panels present internally.
-	NAD	35	-	20 Corrugated Iron Shed	N	0	0	-	1 Unit	Note: locked and no access internally. Panels present internally.
-	NAD	36	-	21 Shipping Container	N	0	0	-	1 Unit	Note: locked and privately owned
-	NAD	37	-	22 Metal Box	N	0	0	-	1 Unit	Note: locked and privately owned
-	NAD	39	-	24 Derelict Shed	N	0	0	-	1 Unit	Note: heavy undergrowth
-	NAD	40	-	25 Derelict Shed	N	0	0	-	1 Unit	Note: heavy undergrowth
CA2326	NAD	-	Linoleum	26 Corrugated Iron Stables: Internal: To floor	N	0	0	-	6 m ²	
CA2227	NAD	-	Fibre Cement Debris	01 House: External: To floor under house	N	0	0	-	3 x 2 m ²	Removed.
CA2228	NAD	-	Fibre Cement Debris	01 House: External: To floor east side of house	N	0	0	-	2 m ²	Removed.

REGISTER OF HAZARDOUS MATERIALS

Haz	Sample No.	Results	Photo ID	Description	Location	Friable	Action	Quantity (m ² , m ³)	Comments
Pb	CA2307	5.1%	03	Paint 'cream'	01 House: Internal & External: To walls of disused car parts store	NA	A1	10 m ²	Poor condition – flaking prevalent throughout.
Pb	As CA2307	5.1%	-	Paint 'cream'	01 House: External: To corrugated iron wall cladding	NA	A1	100 m ²	Poor condition – flaking prevalent throughout.
Pb	CA2308	9.3%	05	Paint 'red'	01 House: External: To water tank, roof, timber doors and awning struts	NA	A1	120 m ²	Poor condition – flaking prevalent throughout.
Pb	CA2311	12%	08	Paint 'blue'	01 House: Internal: To Corridor walls	NA	A1	14 m ²	Poor condition – flaking prevalent throughout.
Pb	CA2317	0.036%	-	Paint 'white'	01 House: Internal: To Corridor, Lounge, Bedroom 1 & Bedroom 2, Office and Sunroom walls & ceiling	NA	NA	60 m ²	Not classified as a lead based paint system.
Pb	CA2305	0.33%	-	Paint 'green'	02 Shed: To external cladding	NA	NA	24 m ²	Not classified as a lead based paint system.
Pb	As CA2307	5.1%	-	Paint 'cream'	08 Toilet: Internal: To corrugated iron wall cladding	NA	A1	12 m ²	Poor condition – flaking prevalent throughout.
Pb	As CA2307	5.1%	24	Paint 'cream'	11 Garage: External: To corrugated iron wall cladding	NA	A1	50 m ²	Poor condition – flaking prevalent throughout.
Pb	As CA2308	9.3%	24	Paint 'red'	11 Garage: External: To corrugated iron roof	NA	A1	30 m ²	Poor condition – flaking prevalent throughout.
Pb	As CA2307	5.1%	29	Paint 'cream'	14 Tin Shed: External: To doors	NA	A1	4 m ²	Poor condition – flaking prevalent throughout.
Pb	As CA2307	5.1%	30	Paint 'cream'	15 Chicken Coop: External: To corrugated iron wall	NA	A1	3 m ²	Poor condition
Pb	As CA2308	9.3%	31	Paint 'red'	16 Weatherboard Shed: External: To corrugated iron wall and roof	NA	A1	14 m ²	Note: locked and no access internally.

Hazardous Materials Report
Residences in Northern Precinct, Tallawarra Lands

Haz	Sample No.	Results	Photo ID	Description	Location	Friable	Action	Quantity (m, m ² , m ³)	Comments
Pb	CA2325	0.84%	-	Paint 'brown'	16 Weatherboard Shed: To door	NA	NA	2 m ²	Not classified as a lead based paint system. Note: locked and no access internally.
Pb	As CA2307	5.1%	38	Paint 'cream'	23 Corrugated Iron Shed: External: To three panels	NA	A1	4 m ²	
Pb	As CA2307	5.1%	41	Paint 'cream'	26 Corrugated Iron Stables: Internal / External: To panels	NA	A1	4 x 2 m ²	
Pb	As CA2308	9.3%	41	Paint 'red'	26 Corrugated Iron Stables: Internal / External: To panels	NA	A1	4 x 2 m ²	
Pb	As CA2307	5.1%	42	Paint 'cream'	27 Corrugated Iron Shed: Internal: To panels	NA	A1	8 m ²	
Pb	CA2329	0.02%	-	Paint 'green'	01 House: To railings running up to Stables	NA	NA	2 m ²	Not classified as a lead based paint system.
ODS	Visual Obs	R22 HCFC		AC Unit to Bathroom	01 House: External: On wall to bathroom	N	A1	1 Unit	
SMF	Visual Obs	SMF		Redundant fire hose	27 Corrugated Iron Shed: Internal: To floor	Y	A1	1 Unit	
SMF	Visual Obs	SMF		Fire blanket	01 House: Internal: Kitchen on wall	Y	A1	1 Unit	
SMF	Visual Obs	SMF		Rheem HWS	12 Stables: Internal: Hot Water Cylinder	N	A1	1 Unit	

3.2 No Access Areas

The following areas were not accessible on the day of the inspection:

- Internals of 03 Shipping Container, 06 Shed / Container, 18, 19 & 20 Corrugated Iron Sheds – rented out and locked, keyholders not present.
- 01 House Roof – height restriction

3.3 Limited Access Areas

The following areas were not accessible on the day of inspection:

- Throughout – heavy undergrowth around structures.

The structures annotated a to f are trailers and vehicles owned by the licensee and will be removed from site upon termination of the lease.

4 GLOSSARY

4.1 Asbestos Risk Assessment

Coffey Environments adopt the following material and location assessment algorithms in order to assess the risks associated with individual **asbestos containing materials** located;

The asbestos information in this report is supplied on the understanding that the area surveyed is to be subject to major refurbishment /demolition, and that the identified asbestos and other hazardous materials will be removed as part of those works.

Action

A1	Action 1	Remove prior to demolition, refurbishment or maintenance
		All asbestos and other hazardous materials to be removed prior to demolition, refurbishment or maintenance.

The asbestos information contained within this report is insufficient to meet the requirement for risk assessment for a management plan. Any asbestos remaining in situ at the conclusion of the project will need full material and location assessment in line with the requirements of [NOHSC:2018(2005)]. For all other hazardous materials the risk score will be assigned according to the surveyor's assessment of the situation.

Coffey Environments will adopt the following material assessments for asbestos in order to assess the risks associated with individual **asbestos containing materials** located;

Friable

Variable	Score	Description
Friable	Y	Asbestos cement debris, or material which when dry may become crumbled, pulverised or reduced to powder by hand pressure.
	N	Bonded i.e. non-friable material

Materials Assessment

Variables	Scores	Examples of Score Descriptions
Asbestos Type	0	No asbestos
	1	Chrysotile only
	2	Amphibole asbestos (excluding crocidolite)
	3	Crocidolite

Variables	Scores	Examples of Score Descriptions
Product Type	0	No asbestos detected
	1	Bonded asbestos in good condition
	2	Friable asbestos in good condition or cement in poor condition
	3	Friable asbestos in poor condition

Coffey Environments will adopt the following material and location assessment algorithms in order to assess the risks associated with individual **hazardous materials other than asbestos** located;

Friable

Variable	Score	Description
Friable	Y	Unsealed SMF
	N	Sealed SMF
	NA	Applicable to ODS, PCB, Lead in paint

The following material descriptors are used in the register:

CH	Chrysotile (white) asbestos detected
CR	Crocidolite (blue) asbestos detected
AM	Amosite (brown) asbestos detected
SMF	Synthetic Mineral Fibre
PCB	Polychlorinated Biphenyls
NAD	No Asbestos Detected

Section 2	Methodology	Contains important information regarding the survey and report methods
Section 4	Glossary	Explains all terminology and ratings used.
Section 5	Recommendations	Contains generic information and recommendations applicable to hazardous materials and their management.
Section 6	Limitations	Limitations regarding scope, methodology.
Appendix A	Photographs	Cross - reference from register, where available.

Appendix B	Legislative Requirements	Tabulates legislative requirements state-by-state. (accurate to last periodic update by Coffey Environments)
Appendix C	Certificates of Analysis	Contains results of sample analysis from the survey. See previous reports for referred samples.

5 RECOMMENDATIONS

5.1 Asbestos Materials Identified

Asbestos

Friable ACM exhibits the greatest risk to human health as fibres are released upon minimal disturbance.

- 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)].

Coffey Environments Asbestos Consultancy Service (ACS) is able to assist with all aspects of Asbestos Risk Management.

5.2 Hazardous Materials Identified

Ozone Depleting Substances (Refrigerants)

CFCs and HCFCs -Air-conditioning systems may contain refrigerants.

A licensed contractor who will recycle and reuse the refrigerant should decommission CFC and HCFC based equipment that is being disposed of.

Lead-based Paint

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

- Removal to be undertaken prior to any demolition, partial demolition, renovation or refurbishment.

Polychlorinated Biphenyls (Capacitors Only)

It may not be considered feasible to inspect every light fitting within a premises as information available in the Public Domain on the identification of PCB-containing capacitors is limited. However, all metal capacitors should be treated as containing PCB unless determined otherwise.

All capacitors containing or suspected as PCB or the fluorescent light fittings should be removed.

PCB is a potential environmental hazard and must be handled in accordance with Worksafe Guidance Notes. Post removal, provision should be made for appropriate storage/disposal of PCB-containing capacitors.

Synthetic Mineral Fibre

Un-bonded or bonded SMF that has severely deteriorated has the potential of becoming airborne. Health effects that may occur with exposure to certain SMF materials include; irritation of the skin, eyes and upper respiratory tract.

Prior to any demolition, partial demolition, renovation or refurbishment, synthetic mineral fibre materials likely to be disturbed by those works should be removed in accordance with the NOHSC Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC:2006 (1990)].

6 STATEMENT OF 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's instruction, 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.

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.

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.

The survey brief is to identify every reasonably accessible ACM. Reasonably accessible does not extend to searching for concealed ACM beneath concrete encased structural beams or beneath concrete floors, behind another ACM, or any other locations which, to access, would cause structural damage that could potentially destabilise the structure or the building. Given the way in which ACM was used in the construction of buildings, some may only be detected during the course of subsequent demolition.

Any areas within the remit of the survey but not described within the body of the report or in the Asbestos Material Assessments should be regarded by the client as un-surveyed, and potentially containing amphibole asbestos. A competent person should assess such areas before any work affecting them is carried out.

It must be assumed that materials visually assessed as presumed asbestos contain amphibole asbestos, unless sampled and analysed to prove otherwise. All areas where access was not possible must also be presumed to contain asbestos until proven otherwise.

Coffey Environments 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 potential future assessments.

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. It is advisable to presume that materials similar to those positively identified as asbestos also contain asbestos until proved otherwise. It should not be

presumed that materials similar in appearance to those tested and found not to contain asbestos also do not contain asbestos.

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.

Internal building materials should be assumed to contain asbestos and lead-based paint, and any fluorescent lights inside the buildings should be assumed to contain PCB capacitors until otherwise assessed.

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.

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.

The following limitations and restrictions to specific materials, installations and locations are commonly found during surveys of this nature, even if safe access can be provided through consultation with the client this inspection and report may not include the following areas:

- **Risers / Ceiling, Floor or Wall Cavities, and Voids** - may be completely blocked or bricked in. Occasionally may only be detected if shown on building construction plans or during demolition
- **Columns / Structural Elements** - these will not be penetrated if doing so will damage the stability of the building
- **Roofs / External Areas** - these will not be checked if safe access cannot be achieved
- **Confined Spaces** - these will not be checked if safe access cannot be achieved
- **Restricted Access** - areas subject to restricted access will not be checked unless special arrangements have been made through the client within the remit of the survey
- **Lifts / Shafts** – these will not be checked for safety reasons unless a lift engineer accompanies the surveyor
- **Live Plant or Electrical Installations** - live electrical installations including fuse boxes, electrical control cabinets, distribution panels etc. are not routinely checked for safety reasons. Electrical equipment will only be examined if it is locked off and an isolation certificate has been issued. Under exceptional circumstances, when arranged by the client, examination of non-isolated equipment may take place under the supervision of an electrician

- **Boilers** - may contain asbestos internally, which is not visible or accessible until the unit is dismantled. Note: Where a bulk sample is obtained from a non-dismantled boiler it should not be regarded as definitive of all materials contained within the boiler's structure
- **Live Refrigerators / Cold Rooms / Mechanical Equipment / Heater Units / Kilns** - may contain asbestos internally, which is not visible or accessible until the unit is isolated and dismantled
- **Safes** - the walls of some safes cannot be penetrated even where access arrangements have been made.

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 AUSTRALIA PTY LTD

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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.

Appendix A Photographs

**Hazardous Materials Report
Residences in Northern Precinct, Tallawarra Lands**

Photograph 1: Residences, Northern Precinct, Tallawarra Lands.



Photograph 2: 01 House, Internal: Car parts store, cement panels.



Photograph 3: 01 House, Internal: Car parts store, cream lead paint to walls.



Photograph 4: 01 House, Internal: Car parts store, gasket.



Photograph 5: 01 House, External: Red lead paint to tanks and roof, cream lead paint to walls.



Photograph 6: 01 House, Internal: Cement panels to Bathroom.



Photograph 7: 01 House, Internal: Cement panel debris to Bathroom. Note removed no longer present.



Photograph 8: 01 House, Internal: Corridor, blue lead paint to walls.



Photograph 9: 01 House, Internal: Cement panel ceiling to Corridor.



Photograph 10: 01 House, Internal: Cement panels to Kitchen wall.



Photograph 11: 01 House, Internal: Cement panels and cloth wrap to Kitchen chimney flue .



Photograph 12: 01 House, Internal: Cement panels to Kitchen ceiling.



Photograph 13: 01 House, Internal: Cement panels to Corridor ceiling & walls.



Photograph 14: 01 House, Internal: Cement panels to Bedroom 1 ceiling & walls.



Photograph 15: 01 House, Internal: Cement panels to Bedroom 2 ceiling & walls.



Photograph 16: 01 House, Internal: Cement panels to Office ceiling & walls.



Photograph 17: 01 House, Internal: Cement panel to Sunroom above door.



Photograph 18: 01 House, External: Zelemite panel to fuse board.



Photograph 19: 01 House, External: Cement panels over windows.



Photograph 20: 01 House, External: Cement panels above and below windows.



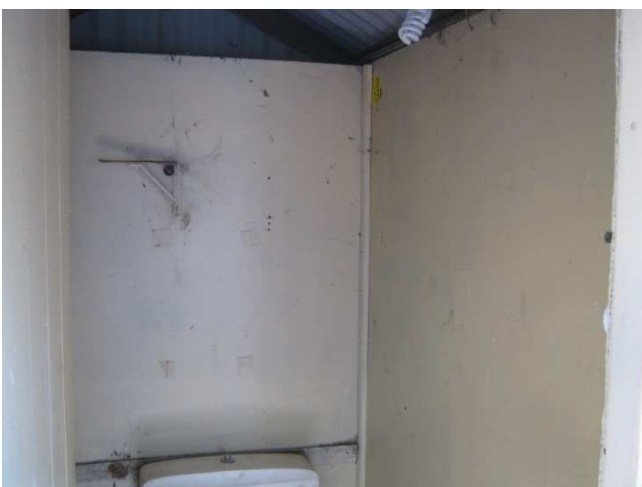
Photograph 21: 01 House, External: Cement panel debris under house. *Removed by P&D Environmental.*



Photograph 22: 01 House, External: Cement panels to gable end.



Photograph 23: 08 Toilet, Internal: Cement panels to walls.



Photograph 24: 11 Garage, External: Red lead paint to roof, cream lead paint to walls.



Photograph 25: 12 Stables, Internal: Cement panels to ceiling.



Photograph 26: 12 Stables, Internal: Zelemite panel to fuse board.



Photograph 27: 12 Stables, External: Zelemite panel to fuse board.



Photograph 38: 13 Tin Shed & Forge, Internal: Cement panels to walls.



Photograph 29: 14 Tin Shed, External: Cream lead paint to doors & windows.



Photograph 30: 15 Chicken Coop, Internal: Cream lead paint to RHS wall.



Photograph 31: 16 Shed, External: Red lead paint to roof & side. Locked no access.



Photograph 32: 17 Chicken Coop.



Photograph 33: 18 Corrugated Iron Shed. Locked no access.



Photograph 34: 19 Corrugated Iron Shed. Locked no access.



Photograph 35: 20 Corrugated Iron Shed. Locked no access.



Photograph 36: 21 Shipping Container.



Photograph 37: 22 Metal Shed.



Photograph 38: 23 Corrugated Iron Shed.



Photograph 39: 24 Derelict Shed.



Photograph 40: 25 Derelict Shed.



Photograph 41: 26 Corrugated Iron Stables.



Photograph 42: 27 Corrugated Iron Shed.



Photograph 43: 02 Shed.



Photograph 44: 03 Shipping Container.



Photograph 45: 04 Shipping Container.



Photograph 46: 05 Shed.



Photograph 47: 06 Corrugated Iron Shed / Container.



Photograph 48: 07 Trailer.



Photograph 49: 09 Demountable Toilet.



Photograph 50: 10 Shipping Container.



Photograph 51: External Cement debris under Land rover. *Removed by P&D Environmental.*



Photograph 52: External Cement panel to house chimney stack.



Appendix B

Legislative Requirements

**Hazardous Materials Report
Residences in Northern Precinct, Tallawarra Lands**

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
<p>COMMONWEALTH Occupational Health and Safety (Commonwealth Employment) Act 1991 Occupational health and Safety (Safety Standards) Regulations 1994 Occupational Health and Safety Act 2000</p>	<p>All asbestos surveys are to be conducted in accordance Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC:2018(2005)] and in accordance with the relevant State or Territory Legislation.</p>	<p>Re-inspections are required at a maximum of 1 year depending on risk. All asbestos re-surveys are to be conducted in accordance Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC:2018(2005)].</p>	<p>Asbestos register to contain details of the type, location and condition asbestos materials plus any action taken to control ACM plus relevant details. All reporting requirements are to be conducted in accordance Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC:2018(2005)].</p>	<p>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. All labelling/signage requirements are to be conducted in accordance Code of Practice for the Management and Control of Asbestos in Workplaces [NOHSC:2018(2005)].</p>	

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STATE Primary Asbestos Legislation	Asbestos Survey Requirements	Asbestos Resurvey Requirements	Reporting Requirements	Labelling/Signage Requirements	Other Requirements
<p>NEW SOUTH WALES Occupational Health and Safety Act 2000 Occupational Health and safety Regulation 2001</p>	<p>Controller of work premises responsibility An asbestos register for any place of work is to be recorded, prepared and maintained.</p>	<p>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.</p>	<p>Asbestos register to contain details of the type, location and condition asbestos materials plus any action taken to control ACM plus relevant details.</p>	<p>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.</p>	<p>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))</p>

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STATE Primary Asbestos Legislation	Asbestos Survey Requirements	Asbestos Resurvey Requirements	Reporting Requirements	Labelling/Signage Requirements	Other Requirements
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.	

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STATE Primary Asbestos Legislation	Asbestos Survey Requirements	Asbestos Resurvey Requirements	Reporting Requirements	Labelling/Signage Requirements	Other Requirements
AUSTRALIAN CAPITAL TERRITORY Building Act 2004; Construction Occupations (Licensing) Act 2004; Part 3.4 of the Dangerous Substances (General) Regulations 2004; Dangerous Substances (General) Regulations 2004; Environment Protection Act 1997; and Occupational Health and Safety Act 1989	Part 3.4 of the Dangerous Substances (General) Regulations 2004. A person in control of non-residential premises must have an asbestos management plan for the premises.	Part 3.4 of the Dangerous Substances (General) Regulations 2004. A review of asbestos management plan no longer than 5 years after the day it was made.	Part 3.4 of the Dangerous Substances (General) Regulations 2004. 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.	Part 3.4 of the Dangerous Substances (General) Regulations 2004. 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.	

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STATE Primary Asbestos Legislation	Asbestos Survey Requirements	Asbestos Resurvey Requirements	Reporting Requirements	Labelling/Signage Requirements	Other Requirements
<p>QUEENSLAND Workplace Health & Safety Act 1995 Workplace Health & Safety Regs 1997</p> <p>From 01.01.2008 or immediately if not previously compliant</p>	<p>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.</p> <p>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.</p>	<p>Annual Reinspection for Asbestos Materials * Or earlier if the nature or location of the works in the vicinity of the asbestos materials changes.</p> <p>Annual review of register & Management plan after 01.01.08 A visual inspection of ACM should be undertaken as part of any review.</p>	<p>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.</p> <p>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.</p>	<p>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.</p> <p>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.</p>	<p>* Asbestos Materials defined as installed thermal or acoustic insulation containing asbestos, in the '97 Regs.</p> <p>Develop & implement an asbestos management plan.</p>

LEGISLATIVE REQUIREMENTS — ASBESTOS

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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

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STATE Primary Asbestos Legislation	Asbestos Survey Requirements	Asbestos Resurvey Requirements	Reporting Requirements	Labelling/Signage Requirements	Other Requirements
<p>NORTHERN TERRITORY Work Health Act & Regulations (Adopted NOHSC Codes of Practice)</p>	<p>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)].</p>	<p>Annual review of register and management plan under NOHSC: 2018(2005). A visual inspection of ACM should be undertaken as part of any review.</p>	<p>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.</p>	<p>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.</p>	<p>NOHSC:2018(2005) adopted by NT as an Approved Code of Practice (also NOHSC 2002 and 3003)</p>

Appendix C Certificate(s) of Analysis

**Hazardous Materials Report
Residences in Northern Precinct, Tallawarra Lands**

Lead in Paint Our Reference:	UNITS	SE83343-2	SE83343-4	SE83343-5	SE83343-8	SE83343-1 4
Your Reference Sample Matrix	----- -----	CA2305 Paint	CA2307 Paint	CA2308 Paint	CA2311 Paint	CA2317 Paint
Date Extracted (Metals)		24/11/2010	24/11/2010	24/11/2010	24/11/2010	24/11/2010
Date Analysed (Metals)		24/11/2010	24/11/2010	24/11/2010	24/11/2010	24/11/2010
Lead in paint	%	0.33	5.1	9.3	12	0.036

Lead in Paint Our Reference:	UNITS	SE83343-2 1	SE83343-2 5
Your Reference Sample Matrix	----- -----	CA2325 Paint	CA2329 Paint
Date Extracted (Metals)		24/11/2010	24/11/2010
Date Analysed (Metals)		24/11/2010	24/11/2010
Lead in paint	%	0.84	0.020



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Asbestos ID in materials Our Reference: Your Reference	UNITS -----	SE83343-1 CA2304, Cement Panel	SE83343-3 CA2306, Cement Panel	SE83343-6 CA2309, Cement Panel	SE83343-7 CA2310, Cement Panel	SE83343-9 CA2312, Cement Panel
Sample Matrix	-----	Material	Material	Material	Material	Material
Date Analysed		24/11/2010	24/11/2010	24/11/2010	24/11/2010	24/11/2010
Sample Description		35x25mm Cement sheet fragments	30x15mm Cement sheet fragments	25x20mm Cement sheet fragments	65x50mm v	80x65mm Cement sheet fragments
Asbestos ID in materials	-	No asbestos detected Organic fibres detected*	Chrysotile asbestos detected	Chrysotile asbestos detected	Chrysotile asbestos detected Organic fibres detected*	Chrysotile asbestos detected

Asbestos ID in materials Our Reference: Your Reference	UNITS -----	SE83343-1 0 CA2313, Cement Panel	SE83343-1 1 CA2314, Textile cloth	SE83343-1 2 CA2315, Cement Panel	SE83343-1 3 CA2316, Cement Panel	SE83343-1 5 CA2318, Floor tiles
Sample Matrix	-----	Material	Material	Material	Material	Material
Date Analysed		24/11/2010	24/11/2010	24/11/2010	24/11/2010	24/11/2010
Sample Description		<1g Cement sheet fragments	40mm length textile material	<1g Cement sheet fragments	<1g Cement sheet fragments	40x20mm Vinyl sheet fragments
Asbestos ID in materials	-	Chrysotile asbestos detected Organic fibres detected*	Chrysotile asbestos detected	Chrysotile asbestos detected Organic fibres detected*	Chrysotile asbestos detected Organic fibres detected*	No asbestos detected



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Asbestos ID in materials Our Reference:	UNITS	SE83343-1 6	SE83343-1 7	SE83343-1 8	SE83343-1 9	SE83343-2 0
Your Reference	-----	CA2319, Black Jack	CA2320, Cement Panel	CA2322, Floor Tile	CA2323, Cement Panel	CA2324, Cement Panel
Sample Matrix	-----	Material	Material	Material	Material	Material
Date Analysed		24/11/2010	24/11/2010	24/11/2010	24/11/2010	24/11/2010
Sample Description		40x30mm Fibrous tar sheet	<1g Cement sheet fragments	50x40mm Vinyl sheet	20x10mm Cement sheet fragments	35x30mm Cement sheet fragments
Asbestos ID in materials	-	No asbestos detected Organic fibres detected*	Chrysotile asbestos detected Amosite asbestos detected	No asbestos detected Organic fibres detected*	Chrysotile asbestos detected	Chrysotile asbestos detected Organic fibres detected*

Asbestos ID in materials Our Reference:	UNITS	SE83343-2 2	SE83343-2 3	SE83343-2 4
Your Reference	-----	CA2326, Linoleum	CA2327, Cement Panel	CA2328, Cement Panel
Sample Matrix	-----	Material	Material	Material
Date Analysed		24/11/2010	24/11/2010	24/11/2010
Sample Description		70x35mm Vinyl sheet	35x25mm Cement sheet fragments	40x15mm Cement sheet fragments
Asbestos ID in materials	-	No asbestos detected Synthetic Mineral Fibres detected*	No asbestos detected Organic fibres detected*	No asbestos detected Organic fibres detected*



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Method ID	Methodology Summary
SEP-033	Digestion of Paint Chips - Samples are digested by heating with nitric acid for the analysis of lead by ICPOES.
AN602	Analysed using in house method AN602 - Qualitative identification of Asbestos Fibres, Synthetic Mineral Fibres and Organic Fibres in bulk samples (including building materials and soils) using Polarised Light Microscopy and Dispersion Staining Techniques. Our NATA Accreditation does not currently cover the identification of Synthetic Mineral Fibres and Organic Fibres, however, according to new NATA requirements, the reporting of these fibres is compulsory if detected.



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QUALITY CONTROL	UNITS	LOR	METHOD	Blank	Duplicate Sm#	Duplicate Base + Duplicate + %RPD	Spike Sm#	Matrix Spike % Recovery Duplicate + %RPD
Lead in Paint								
Date Extracted (Metals)				24/11/2010	[NT]	[NT]	LCS	24/11/2010
Date Analysed (Metals)				24/11/2010	[NT]	[NT]	LCS	24/11/2010
Lead in paint	%	0.001	SEP-033	<0.0010	[NT]	[NT]	LCS	93%

QUALITY CONTROL	UNITS	LOR	METHOD	Blank
Asbestos ID in materials				
Date Analysed				[NT]



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SGS Australia Pty Ltd
ABN 44 000 964 278

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Environmental Services Unit 16/33 Maddox Street Alexandria NSW 2015 Australia
t +61 (0)2 8594 0400 f +61 (0)2 8594 0499 www.au.sgs.com

Result Codes

[INS] : Insufficient Sample for this test	[RPD] : Relative Percentage Difference
[NR] : Not Requested	* : Not part of NATA Accreditation
[NT] : Not tested	[N/A] : Not Applicable
[LOR] : Limit of reporting	

Report Comments

Sampled by the client

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy.

This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

Sample # 1,15-16,18,22-24: ashed after initial stereo microscope examination, re-examined and trace analysis performed on all samples. No respirable fibres detected using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam.

Samples analysed as received. Solid samples expressed on a dry weight basis.

Date Organics extraction commenced:

NATA Corporate Accreditation No. 2562, Site No 4354

Note: Test results are not corrected for recovery (excluding Air-toxics and Dioxins/Furans*)

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Quality Control Protocol

Method Blank: An analyte free matrix to which all reagents are added in the same volume or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. A method blank is prepared every 20 samples.

Duplicate: A separate portion of a sample being analysed that is treated the same as the other samples in the batch. One duplicate is processed at least every 10 samples.

Surrogate Spike: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are added to samples before extraction to monitor extraction efficiency and percent recovery in each sample.

Internal Standard: Added to all samples requiring analysis for organics (where relevant) or metals by ICP after the extraction/digestion process; the compounds/elements serve to give a standard of retention time and/or response, which is invariant from run-to-run with the instruments.

Laboratory Control Sample: A known matrix spiked with compound(s) representative of the target analytes. It is used to document laboratory performance. When the results of the matrix spike analysis indicates a potential problem due to the sample matrix itself, the LCS results are used to verify that the laboratory can perform the analysis in a clean matrix.

Matrix Spike: An aliquot of sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.



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Quality Acceptance Criteria

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: <http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf>

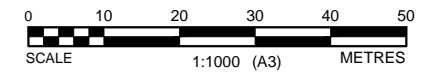
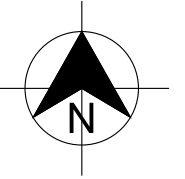


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Appendix D

Structures Site Plan

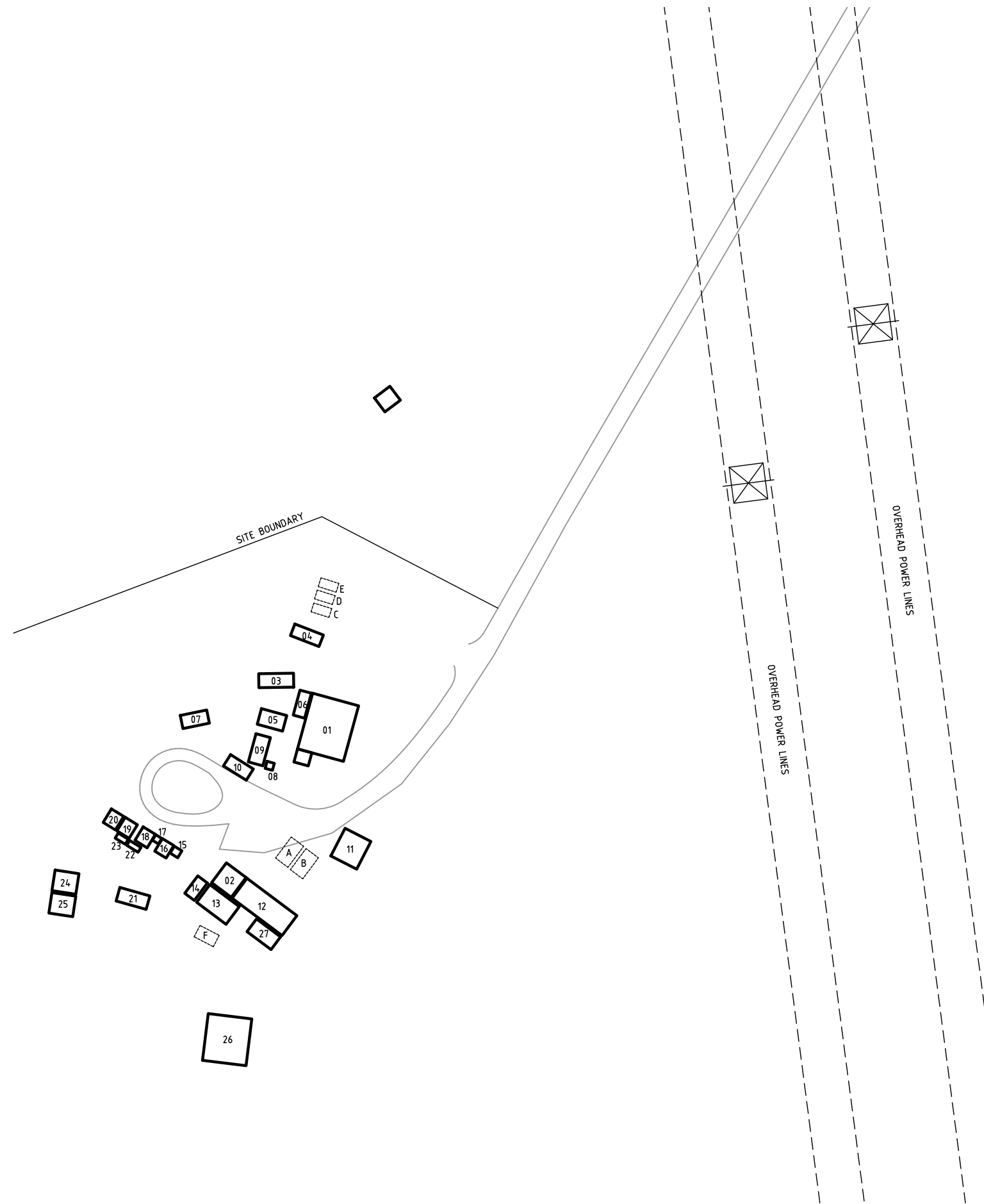
**Hazardous Materials Report
Residences in Northern Precinct, Tallawarra Lands**



NOTE:
ALL LOCATIONS ARE APPROXIMATE.
DIMENSIONS IN METRES.

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TRUEnergy Tallawarra

Project:
HAZARDOUS MATERIALS BUILDING SURVEY
RESIDENCES IN NORTHERN PRECINCT

Location:
TALLAWARRAH LANDS, YALLAH BAY RD
YALLAH, NSW

Drawing Title:
**APPROXIMATE LOCATION
OF STRUCTURES**

Drawn LZ	Date 24.11.10
Project - Drawing No. ENVIWOLL04009AD-D01	Figure No. Rev. 1 A