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ASBESTOS REGISTER

NO. NT0687-G

Department of Infrastructure

Lot 8, Kalkarindji

January 2015

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Asbestos Register
Department of Infrastructure
Lot 8, Kalkarindji



Prepared for:
Department of Infrastructure
GPO Box 61
Palmerston NT 0831

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Prepared by:
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Written/Submitted by:



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Statement of Limitations

This report has been prepared in accordance with the agreement between Department of Infrastructure and AEC Environmental (Greencap subsidiary).

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 Department of Infrastructure 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 AEC Environmental (Greencap subsidiary).

Asbestos Register

Department of Infrastructure

Lot 8, Kalkarindji

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1.0 INSTRUCTIONS

Greencap was contracted by Department of Infrastructure (“the client”) to compile this Asbestos Register for Lot 8, Kalkarindji.

The property was inspected in December 2014. The inspection procedure used was in accordance with the Northern Territory Australian *Work Health & Safety (National Uniform Legislation) Regulations 2012, Chapter 8 Asbestos, Part 3 Management of Asbestos and Associated Risks*. Reasonable steps have been taken to identify asbestos-containing materials (ACM) in the building. Inaccessible areas and areas requiring destruction or demolition have not been inspected. An intrusive or destructive audit is required if demolition or significant alterations are contemplated.

2.0 PURPOSE OF AN ASBESTOS REGISTER

An asbestos register inspection survey is a non-destructive inspection to identify accessible and visually evident ACM. The purpose of an asbestos register is to ensure that persons conducting a business or undertaking, (which includes workers, contractors, clients and other stakeholders) and persons with management or control of a workplace are aware of the location, type, condition and risk, in order to avoid inadvertent disturbance of the ACM.

Importantly, an asbestos register details the type condition and location of accessible ACM to assist with the adoption of appropriate & regulatory asbestos management practices.

It is a requirement of asbestos management regulations that regular inspections of the asbestos are conducted by a competent person, firstly to identify the type, condition and location of asbestos and secondly to assess any changes in the state of the asbestos.

It is important to note that this report is not intended for use as a pre demolition or pre refurbishment survey. If demolition, significant alterations or refurbishment incorporating demolition or structural disturbance is contemplated, please contact Greencap for information regarding recommendations relevant to an intrusive audit.

3.0 REGULATORY FRAMEWORK FOR ASBESTOS MANAGEMENT

On the 1st January 2012, The Northern Territory implemented the nationally harmonized *Work Health & Safety (National Uniform Legislation) Regulation*. The regulations proclaim that a Person with Management or Control of a Workplace must ensure that an asbestos register is prepared and is kept and accessible at the workplace. Additionally, a Person Conducting a Business or Undertaking (PCBU) must ensure that exposure of a person to airborne asbestos is eliminated so far as is reasonably practicable.

Furthermore, a Person with Management or Control of a Workplace must ensure that a written Asbestos Management Plan (AMP) is prepared and is available and accessible, with established policies and procedures for the management of asbestos at a workplace, together with procedures for detailing incidents or emergencies involving ACM at the workplace. These policies should be strictly adhered to and enforced by the Person with Management and Control of a Workplace and other persons (as defined) so that safe work practices in relation to asbestos management are in place as prescribed and required under the regulations.

Please contact Greencap for assistance with the development of an Asbestos Management Plan.

A copy of the register must be kept at the workplace and be available for inspection by:

- Workers who have carried out, carry out or intend to carry out work at the workplace
- Health and Safety Representatives
- A person conducting a business or undertaking who has carried out, carries out or intends to carry out, work at the workplace, (e.g. Contractors)
- A person conducting a business or undertaking who has required, requires, or intends to require work to be carried out at the workplace.

4.0 LIMITATIONS

Asbestos is known to have been used in some 3,000 building products, the most common being in fibro cement products, vinyl flooring, electrical switchboards and insulation materials to hot water and steam pipes. However, asbestos can also be found in many other products located in **inaccessible components** of buildings, plant and equipment including the following areas:

- Interior parts of air conditioning systems
- Wall cavities, slabs, underside of floors
- Interior workings of plant and equipment
- Services, in ceiling or floor spaces or underground
- Wall “chased” lagged pipework
- Floor coverings subsequently overlaid
- Where asbestos products have been removed (e.g. vinyl floor coverings), then residue may exist under skirting boards and/or subsequently laid floor coverings.

Whilst this report provides approximate measurements and quantities of some materials found, we stress that they are approximate only. Accurate details would require a further visit to the site.

The work involved in preparing an Asbestos Register is based on visual inspection of the building and/or plant and equipment. As well, representative samples of suspect materials are collected and reasonable assumptions are made from those samples. These samples may not be a true representation of every element, part or component of the area of material concerned. Further, it is becoming increasingly apparent that some building materials containing asbestos have been removed and replaced by non-ACM, particularly cement sheeting. In numerous cases only partial removal has occurred, leaving asbestos product remaining and this is often painted. While appropriate sampling has occurred the only sure determinant is to sample and analyse every section or piece in question. Full clarification would require a further visit to the site to obtain and analyse appropriate samples.

This asbestos register includes known asbestos building products detected in the course of the inspection. Additionally, where applicable, assumptions made on where asbestos is likely to be found are also stated. In some cases, builders have been known to mix asbestos into materials that would not normally contain asbestos (e.g. mortar, plaster, renders etc.) and, unless stated otherwise, these have not been sampled during the course of this survey. If an inaccessible area is suspected of having asbestos, it may need further verification. The decision regarding this will remain purely at the discretion of the client.

It is important to note that this report is not intended for use as a pre demolition or pre refurbishment survey. If demolition, significant alterations or refurbishment incorporating demolition or structural disturbance is contemplated, please contact Greencap for information regarding recommendations relevant to an intrusive audit.

There is no known instrument available for in-situ asbestos detection. Asbestos is a naturally occurring mineral of inert characteristics. **For the above reasons, including the inaccessibility of many asbestos products, no guarantee can be given, express or implied, that the inspection will reveal all the ACM that may be located in the workplace described in this report.**

This report should be read in conjunction with any other asbestos related reports and or communication / documentation prepared for the property. No individual section of this report should be read in isolation without taking the whole report into account. If the report is to be copied for whatever reason the whole of the report should be included.

5.0 INSPECTION REPORT

An inspection of the buildings was undertaken using a systematic procedure developed by Greencap. As previously stated, the identification of asbestos and/or products containing asbestos cannot be carried out with any known in-situ measuring instrument and final confirmation of asbestos can only be determined by laboratory analysis. The inspection procedure developed relies on identifying ACM by visual means. Representative samples of materials that are considered to contain asbestos are often taken for analysis to confirm the presence of asbestos.

Full details of all asbestos products located within the property are found within the next section of this report. Section 7.0 outlines suggested management procedures.



6.0 ASBESTOS REGISTER


6.1 Areas where Asbestos has been Identified

It was common practice until the late 1970s for small diameter hot water pipes to be concealed in walls and to be partially or totally insulated with brown or white asbestos. Confirmation or otherwise as to the presence of these "chased" pipes is simply not possible with a non-destructive visual inspection. Appropriate precaution must be observed if the walls are disturbed in the vicinity of concealed hot water pipes. Refer to Section 7.0 - Policies and Management Procedures, where reference is made to the possibility of hot water pipes (with asbestos) concealed ("chased") in walls.

ASBESTOS CONTAINING MATERIAL DISTURBANCE

Before commencing any works that are likely to disturb building materials on the site, the asbestos management plan controller must be contacted.

| INTERNAL | | | |
|--|--|---|--------------------|
| Location | Type of Material |  | |
| 1. Ceiling linings throughout (65m ²) | Fibre cement sheet material containing white (Chrysotile) asbestos (sample no. 2014-3) | | |
| Recommendation and Action | | | |
| Refer to Section 7.0: Policies & Management Procedures | | | |
| Situational Asbestos Risk Assessment: | | | |
| Friability | Condition | Signage | Risk Rating |
| Non friable | Stable | Install 7 small warning signs | Low |
| Location | Type of Material |  | |
| 2. Bulkhead for redundant air-con duct, south side of house, including infill panels (12m ²) | Fibre cement sheet material containing white (Chrysotile) asbestos (sample no. 2014-4) | | |
| Recommendation and Action | | | |
| Refer to Section 7.0: Policies & Management Procedures | | | |
| Situational Asbestos Risk Assessment: | | | |
| Friability | Condition | Signage | Risk Rating |
| Non friable | Stable | Install 3 small warning signs | Low |

| INTERNAL (cont'd) | | | |
|--|--|---|--------------------|
| Location | Type of Material | | |
| 3. Kitchen sink, sound deadener | Black bituminous lump containing white (Chrysotile) asbestos (sample no. 2014-5) |  | |
| Recommendation and Action | | | |
| Refer to Section 7.0: Policies & Management Procedures | | | |
| Situational Asbestos Risk Assessment: | | | |
| Friability | Condition | Signage | Risk Rating |
| Non friable | Stable | Install 1 small warning sign | Low |

6.2 Suspect Materials Tested – No Asbestos Detected

| Location | Material Tested | Result |
|--|--|---------------|
| EXTERNAL | | |
| Infill panels below front windows (11 x 0.75m ²) | Cement sheet material (sample no.2014-1) | No asbestos |
| Infill panel above front door (<1m ²) | Cement sheet material (per sample no.2014-1) | No asbestos |
| INTERNAL | | |
| Internal wall linings throughout | Cement sheet material (sample no.2014-2) | No asbestos |

7.0 POLICIES & MANAGEMENT PROCEDURES

NOTE: This is not an 'Asbestos Management Plan'

It is important to note that if ACM are disturbed, asbestos fibres may be released, thereby resulting in a health risk. Great care therefore must be exercised in the immediate and ongoing management of any ACM.

Risk ratings have been assigned to each ACM, the definitions of which are described below.

| Friability | | Friable Asbestos Materials | | Non-Friable / Bonded Asbestos Materials | |
|-----------------------|------|--|---|---|-----------------------|
| Condition | | Unsatisfactory / Deteriorated / Exposed Fibres | Satisfactory / Not Exposed / Friable When Exposed | Unsatisfactory (Poor / Damaged) | Satisfactory (Stable) |
| Percentage Asbestos | | | | | |
| Disturbance Potential | High | Very High | Very High | High | Medium |
| | Med | Very High | High | Medium | Low |
| | Low | High | Medium | Low | Low |

- Very High** The ACM in this category includes damaged or exposed friable asbestos such as insulation materials, which are likely to pose an unacceptable risk. Such occurrences require immediate remedial action in the form of removal, sealing or temporary encapsulation prior to removal.
- High** The ACMs rated in this category are generally in poor or damaged condition and has potential to pose an unacceptable risk. Remedial action should be undertaken as soon as reasonably practicable.
- Medium** The ACMs rated in this category do not pose an immediate or significant risk provided they are not disturbed. Items in this category include encapsulated friable materials (e.g. Fire Doors) and bonded materials with some damage. Remedial action is not required immediately; however any uncontrolled disturbance could alter the rating to high or very high.
- Low** Asbestos materials rated in this category are generally in a stable condition and do not pose a significant risk provided they are not disturbed. The material has not deteriorated significantly, and unless it's condition changes, removal is not seen as necessary in the medium term.

The following is provided for information and a guide on the specific actions required:

- 7.1 Adopt procedures that restrict access to the ACM.
- 7.2 Persons having management or control of a workplace should ensure all staff, contractors and sub-contractors are aware of the presence of asbestos on the site, particularly prior to work being carried out on ACM.
- 7.3 When changes to the workplace are required affecting ACM, management, staff, contractors and sub-contractors should be aware that breakage, cutting or machining of ACM is likely to cause asbestos fibres to be released, resulting in an increased health and safety risk.
- 7.4 Within prescribed parameters, when either friable or non-friable materials are to be removed, NT regulations stipulate that only licensed asbestos removal companies can remove the materials. For further information contact Greencap or NT WorkSafe.

- 7.5 In accordance with the Northern Territory legislation, asbestos registers must be reviewed / updated whenever the management plan is reviewed, whenever further asbestos is identified or when asbestos materials are removed, disturbed, sealed or enclosed, or before demolition or refurbishment.
- 7.6 In accordance with the Code of Practice: How to Manage and Control Asbestos in the Workplace, warning signs must be installed for ACM. Contact Greencap regarding sign installation.
- 7.7 Any person who intends to carry out work should first be shown this asbestos register and sign the control form in Section 9.
- 7.8 Vinyl tile and vinyl sheet flooring manufactured prior to 1982, in many cases, contained asbestos. It is safe practice therefore, in the event of renovation work or other activities disturbing such flooring, to assume that the material does in fact contain asbestos. Laboratory testing at the time of works would verify the existence or otherwise of asbestos. If the existence of asbestos has been positively identified within this report then no further testing would be required.
- 7.9 It was common practice until the late 1970s for small diameter hot water pipes to be concealed in walls and to be partially or totally insulated with brown or white asbestos. Confirmation or otherwise as to the presence of these "chased" pipes is simply not possible with a non-destructive visual inspection. Appropriate precaution must be observed if the walls are disturbed in the vicinity of concealed hot water pipes.
- 7.10 In the event that the subject workplace has been found to contain products-containing friable asbestos, e.g. pipe lagging, woven asbestos rope material, then please take note of specific recommendations within this section of the report. In broad terms, great care should be taken at all times not to disturb the friable asbestos, signage must at all times be present and, finally, removal should take place as soon as reasonably practicable, or as recommended in this report.
- 7.11 If roof cladding contains asbestos (e.g. "Deep 6" corrugated fibre cement), the following special restrictions are recommended:
 - Limit access to the roof to suitably trained and qualified persons, adopting appropriate safety measures
 - Prepare and review safe work plan before any work is undertaken on the roof
 - Incorporate annual audit of the roof to monitor its condition (incorporate airborne monitoring tests into audit results).
- 7.12 All work which could involve disturbing the materials containing asbestos should be carried out in accordance to the requirements of the Code of Practice: How to Manage and Control Asbestos in the Workplace and the Code of Practice: How to Safely Remove Asbestos. A copy of this publication should be kept with the Asbestos Register.
- 7.13 In the event of further ACM being located at the property, the Asbestos Register must be reviewed / updated.
- 7.14 A copy of the Asbestos Register must be kept at the workplace at all times and be available for inspection.

8.0 CONCLUSIONS & RECOMMENDATIONS

The inspection carried out has **identified asbestos** in some of the building materials.

It is important to note that if ACM are disturbed, asbestos fibres may be released, thereby resulting in a health risk. Great care therefore must be exercised in the immediate and ongoing management of any products found to contain asbestos.

It is very important that the Policies & Management Procedures as listed in Section 7.0 are adopted.

The real risk is considered to occur only if ACM are disturbed in some way in contradiction to the recommendations listed in this report. It is important that implementation of the recommendations listed in this report be adopted.

In addition, it is important that trades people and any persons carrying out maintenance activities in the workplace are made aware of the asbestos register before commencing any work.

All work with ACM should be conducted in accordance with the guidelines set out in the:

- *Work Health and Safety (National Uniform Legislation) Act 2011*
- *Work Health and Safety (National Uniform Legislation) Regulations 2012*
- Code of Practice: How to Safely Remove Asbestos
- Code of Practice: How to Manage and Control Asbestos in the Workplace
- Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition [NOHSC: 3003 (2005)].

If the reader is in doubt in respect to any of the detail and or implications of the contents of this report, then they are invited to call the following:

| | |
|--------------|--------------|
| Greencap: | 08 8984 4244 |
| NT WorkSafe: | 08 8999 5010 |

Asbestos Register

Department of Infrastructure

Lot 8, Kalkarindji

Appendix A: Laboratory Test Results

| LOCATION | SAMPLE I/D NO. | LABORATORY RESULTS |
|---|----------------|-----------------------------|
| EXTERNAL | | |
| Infill panels below front windows | No.1 | No asbestos |
| Internal wall linings throughout | No.2 | No asbestos |
| INTERNAL | | |
| Internal ceiling linings throughout | No.3 | White (Chrysotile) asbestos |
| Bulkhead for redundant air-con duct, south side of house, including infill panels | No.4 | White (Chrysotile) asbestos |
| Kitchen sink, sound deadener | No.5 | White (Chrysotile) asbestos |

Asbestos Register

Department of Infrastructure

Lot 8, Kalkarindji

Appendix B: Laboratory Test Report

ASBESTOS IDENTIFICATION REPORT No. NT0689 A- KALKARINDJI

| | | | |
|-------------------|------------------------------|-------------------------|------------------|
| CLIENT: | Department of Infrastructure | RECEIVED IN LAB: | 18 December 2014 |
| ATTENTION: | Michael Lloyd | REPORT DATE: | 23 December 2014 |
| LOCALITY: | Lot 8, Kalkarindji | SAMPLED BY: | Paul Felvus |

Test Method: In house method LOP-002 Asbestos Identification by Polarised Light Microscopy including Dispersion Staining (Based on AS4964-2004 Method for the qualitative identification of asbestos in bulk samples)

| No | Location | Description | Asbestos | Organic Fibre |
|-----------------|--|---|------------|---------------|
| EXTERNAL | | | | |
| 1 | Infill panels below windows, front | Pale brown cement sheet | No | Yes |
| 2 | Internal wall linings throughout | Pale brown cement sheet painted pale yellow | No | Yes |
| 3 | Internal ceiling linings throughout | Pale grey cement sheet painted white | Chrysotile | Yes |
| 4 | Bulkhead for redundant A/C duct – south side of house, including infill panels | Pale grey cement sheet painted white | Chrysotile | Yes |
| 5 | Kitchen sink – sound deadener | Black bituminous lump | Chrysotile | |

Approved Identifier and Signatory



Naciye Haliloff

Please note that the results contained in this report relate only to the sample(s) submitted for testing. Sample Dimensions (all are 10x10x2mm) and Descriptions are approximate only. Chrysotile is commonly known as white asbestos, Amosite is commonly known as brown asbestos and Crocidolite as blue asbestos. SMF (Synthetic Mineral Fibre) is commonly known as glass fibre and was not detected. Organic Fibre includes natural fibres and synthetic organic fibre. A blank in the Organic Fibre column implies not detected.

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