REPORT

REGISTER OF ASBESTOS MATERIALS

75 George Street
PARRAMATTA NSW 2150

PREPARED FOR: **STOCKLAND CORPORATION LIMITED**

PROJECT NO.: N200176.01

DATE: 9 NOVEMBER 2004

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EXECUTIVE SUMMARY

MPL Group Pty Ltd (MPL) conducted an investigation into the presence and likely risks of exposure to asbestos materials at 75 George Street, Parramatta, NSW during October 2004.

No asbestos materials requiring urgent attention were identified at the site.

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

1.0 INTRODUCTION

MPL Group Pty Ltd (MPL) was commissioned by Stockland Corporation Limited to conduct an asbestos survey of the Site located at 75 George Street Parramatta.

The survey was undertaken during October 2004.

Mr Alan Kelly (Hazardous Materials Technician) of MPL carried out the inspection and Ryan Juhas (Stockland representative) and site contacts 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 anticipated activities at the site. This report is not to be used as a reference document for the purposes of demolition.

1.1 BACKGROUND

The site has not been previously assessed by MPL.

The purpose of the survey was to comply with current regulations.

1.2 SCOPE

The scope of work required MPL to:

- Mobilise a technician to and from the site.
- Liaise with personnel and collect data on the history, use and function of the site.
- Conduct an Asbestos Survey of the site.
- Collect Samples of all suspected materials (where accessible) and submit the samples for analysis to the laboratory.
- Document the details of materials identified, including the current condition of the materials with supporting photographs.
- Record, collate and report the findings.
- Deliver two bound Registers of Asbestos Materials to the client.

2.0 METHODOLOGY

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

The assessment involved the investigation for the presence of materials containing asbestos and information was collected from the owners/occupiers/tenants of the site on relevant issues pertaining to the site. Based on the all available data and the status of the Site at the time of inspection, where items suspected of containing asbestos were identified, visual and/or analytical characterisation (where required) was performed and reported in this Asbestos Materials Register. In addition, asbestos situations identified and/or situations identified as not containing asbestos were recorded within the digital HAZMAN database register (managed by MPL), based on the data obtained during the survey.

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

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

a) without contravention of relevant statutory requirements or codes of practice;
b) without demolition or damage to finishes and structure; and
c) excluding plant and equipment that was 'in service' and operational.

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

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

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

Action 1 (A1) Restrict access and target for removal

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

- Friable or poorly bonded to substrate, located in accessible areas
- Severely water damaged
- Further damage or deterioration likely
- Friable asbestos material located in air conditioning ducting
- Asbestos debris in reasonably accessible areas
- Stored asbestos material

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

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

- Removal extremely difficult
- Complete enclosure achievable
- Most of the surface already inaccessible
- Disturbance of, or entry into, enclosure unlikely

Action 3 (A3) Remove during maintenance or refurbishment

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

- Asbestos cement debris in rarely accessed areas
- Firmly bonded to substrate
- Damage unlikely
- Readily visible for further assessment
- Asbestos gaskets and brake linings

Action 4 (A4) No action required, unless disturbed

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

- Negligible risk of exposure
- Inaccessible and fully contained
- Stable and damage unlikely

The following terms used to describe the condition of hazardous materials are used in this report.

- **Good** - The material is in sound condition and unlikely to pose a significant health, environmental or commercial risk in its present state.
- **Average** - The material is generally in sound condition, with some isolated areas of damage, which may pose a potential health, environmental or commercial risk if left in its present state.
- **Poor** - The material is damaged and/or deteriorated, with the potential to pose a significant health, environmental or commercial risk if left in its present state.

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 National Occupational Health and Safety Commission (NOHSC) Guidelines, relevant Statutory Regulations, Codes of Practice and MPL Work Instructions. Laboratories undertaking analysis are appropriately NATA certified for the analysis conducted.

The presence of asbestos in bulk samples are determined by Polarised Light Microscopy (PLM) with dispersion staining techniques.

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

3.0 LIMITATIONS

This report and the associated services performed by MPL Group Pty Ltd are in accordance with the scope of services set out in the contract between MPL and the Client. The scope of services was defined by the requests of the Client, by the time and budgetary constraints imposed by the Client, and by the availability of access to the site.

MPL derived the data in this report primarily from visual inspections, examination of available records, interviews with individuals with information about the site, and if requested, limited sample collection and analysis made on the dates indicated. In preparing this report, MPL has relied upon, and presumed accurate, certain information (or absence thereof) provided by government authorities, the Client and others identified herein. Except as otherwise stated in the report, MPL has not attempted to verify the accuracy or completeness of any such information.

Limitations also apply to analytical methods used in the identification of substances (or parameters). These limitations may be due to non-homogenous material being sampled (i.e. the sample to be analysed may not be representative), low concentrations, the presence of 'masking' agents and the restrictions of the approved analytical technique. As such, non-statistically significant sampling results can only be interpreted as 'indicative' and not used for quantitative assessments.

No warranty, undertaking, or guarantee, whether expressed or implied, is made with respect to the data reported or to the findings, observations, conclusions and recommendations expressed in this report. Furthermore, such data, findings, observations, conclusions and recommendations are based solely upon existence at the time of the investigation. The passage of time, manifestation of latent conditions or impacts of future events (e.g. changes in legislation, scientific knowledge, land uses, etc) may require further investigation at the site with subsequent data analysis and re-evaluation of the findings, observations, conclusions and recommendations expressed in this report.

This report has been prepared on behalf of and for the exclusive use of the Client, and is subject to and issued in connection with the provisions of the agreement between MPL and the Client. MPL accepts no liability or responsibility whatsoever and expressly disclaims any responsibility for or in respect of any use of or reliance upon this report by any third party or parties. It is the responsibility of the Client to accept if the Client so chooses any recommendations contained within and implement them in an appropriate, suitable and timely manner.

3.1 COMPLIANCE SURVEY

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

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

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

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

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

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

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

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

The Client must not rely on an inspection or report as indicating that a site or a building is "asbestos free". All that the report can be relied on 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.

3.2 DEMOLITION SURVEY

This assessment will involve the sampling and documentation of suspected hazardous materials and visual or analytical identification. However, for these facilities to be demolished, a 'Destructive Inspection' will be undertaken to identify all reasonable occurrences of hazardous materials. Of particular concern are fire-proofing of structural steel and insulation of pipes through wall and floor penetrations.

While reasonable care and attention to detail by the surveyors will be undertaken, no assessment can be regarded as absolute. The proposed future demolition of structures may reveal incidents of asbestos or other hazardous materials in-situ which were concealed and were not otherwise accessible for inspection.

Where limitations on access or restriction to sampling occur, MPL will document these areas or materials.

This assessment will involve the representative sampling and documentation of suspected hazardous materials and visual or analytical identification. Only 'typical' suspected occurrences will be inspected and sampled, e.g. fire-doors and capacitors in fluorescent light fittings.

4.0 RESULTS

4.1 ASBESTOS MATERIALS REGISTER

ASSESSMENT DATE: 19 October 2004

ADDRESS: 75 George Street, Parramatta, NSW 2150

DESCRIPTION OF BUILDING/S

The building is comprised of eight levels and utilised on a regular basis. The total site area is 9,690sq/m and originally constructed in 1985.

Externally, it consists of a concrete roof, concrete and brick walls and metal eaves. The gutters and downpipes are metal. Internally, the building consists of concrete and brick walls with acoustic tile ceilings. The floors are concrete and the floor coverings are carpet and sheet vinyl.

ACTION CLASSIFICATIONS

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

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

Action 3 (A3) - Remove during normal maintenance or refurbishment

Action 4 (A4) - No action required, unless disturbed

MATERIAL LEGEND

CH – Chrysotile (white) asbestos

CR – Crocidolite (blue) asbestos

AM – Amosite (brown) asbestos

NAD – No asbestos detected

This Register is to be read in conjunction with the whole report. MPL offer advice, upon request, on required Asbestos Management Plans (see Appendix A Legislative Requirements and Additional Information).

Asbestos materials identified are listed in order of Action required.

4.1.1 Asbestos Material Identified

Action	Location	Description	Type of Asbestos	Condition	Status
A3	Lift Motor Room, Roof of Building	Brake linings to the lift motor	CH - White	Good	Sealed - Not Friable
Risk Rating	**Sample Reference**	**Photograph**	**Area of Asbestos**	**Recommendation**	
Low	Sample DT-233	Photograph 1	0.5m2	Label. Advise service personnel. Replace with non-asbestos product at next service	

Other Material Sampled - No Asbestos Detected

Action	Location	Description	Type of Asbestos	Condition	Status
Nil	Roof of Building	Gaskets to the chillers & motors (x2)	NAD	N/A	N/A
Risk Rating	**Sample Reference**	**Photograph**	**Area of Asbestos**	**Recommendation**	
N/A	Sample DT-232	N/A	N/A	N/A	

Action	Location	Description	Type of Asbestos	Condition	Status
Nil	Throughout the Building	Fire proof insulation to the cable risers & pipe penetrations	NAD	N/A	N/A
Risk Rating	**Sample Reference**	**Photograph**	**Area of Asbestos**	**Recommendation**	
N/A	Sample DT-236	N/A	N/A	N/A	

Action	Location	Description	Type of Asbestos	Condition	Status
Nil	Within the ceiling space - All Levels	Insulation within the inline heater banks (approx 16 on each level)	NAD	N/A	N/A
Risk Rating	**Sample Reference**	**Photograph**	**Area of Asbestos**	**Recommendation**	
N/A	Sample DT-237	N/A	N/A	N/A	

5.0 RECOMMENDATIONS

5.1 ASBESTOS MATERIALS IDENTIFIED

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

In accordance with current NOHSC Guidelines and relevant Statutory Regulations, we recommend that identified asbestos materials are labelled and an appropriate Asbestos Management Plan be implemented.

Information on the management, or removal, of these materials can be obtained by contacting MPL.

5.1.1 Asbestos

Asbestos Brake Linings

Asbestos brake linings to the lift motors present a negligible risk to the occupants of the building.

It is recommended to alert service personnel by appropriately labelling the lift motor as containing asbestos and introduce preventative strategies to restrict actions such as cutting, drilling or abrading, which may cause asbestos fibres to become airborne. Brake linings should be replaced with non-asbestos materials at the next service interval.

6.0 BIBLIOGRAPHY

National Occupational Health and Safety Commission (1988) Guide to the Control of Asbestos Hazards in Buildings and Structures [NOHSC:3002 (1988)]. Australian Government Publishing Service. Canberra.

National Occupational Health and Safety Commission (1999) Approved Criteria for Classifying Hazardous Substances [NOHSC:1008 (2002)]. Australian Government Publishing Service. Canberra.

National Occupational Health and Safety Commission (NOHSC), List of Designated Hazardous Substances, 10005 - 1999

New South Wales Occupational Health and Safety Act, 2000

New South Wales Occupational Health and Safety Regulation, 2001

New South Wales Construction Safety Act, 1912 Part D Sections 84A to 84J 'Construction work involving Asbestos or Asbestos Cement', amended 1984, 1986 & 1990

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

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

7.0 GLOSSARY

The following abbreviations, chemical symbols and units of measurement may appear in the report.

Acronyms

NOHSC	National Occupational Health and Safety Commission
NATA	National Association of Testing Authorities, Australia

Chemical Elements, Compounds and Descriptors

CH	Chrysotile Asbestos
CR	Crocidolite Asbestos
AM	Amosite Asbestos
NAD	No Asbestos Detected
A1	Action One
A2	Action Two
A3	Action Three
A4	Action Four
A/C	Air Conditioning
PLM	Polarised Light Microscopy
SEM	Scanning Electron Microscopy
EDAX	Energy Dispersive X-ray Analysis

Units of Measurement

m	metre	L	litre
m^2	square metres	mg/L	milligrams per litre
m^3	cubic metres	mg/kg	milligrams per kilogram
km	kilometre	fibre/mL	fibres per millilitre
mg	milligram	mL	millilitre
kg	kilogram		

PHOTOGRAPHS

Photograph 1: Brake linings to the lift motors within the Lift Motor Room.

APPENDICES

APPENDIX A

Legislative Requirements and Additional Information

LEGISLATIVE REQUIREMENTS

Asbestos Materials

State legislation has adopted the guidelines documented in the National Occupational Health and Safety Commission (NOHSC), *Guide to the Control of Asbestos Hazards in Buildings and Structures*, 3002 (1988).

In summary, an Asbestos Management Plan is required as part of an organisation's overall approach to risk management, involving:

- the identification of asbestos materials in the workplace;
- the clear labelling of asbestos materials to prevent inadvertent work on the material;
- documentation of the location and condition of asbestos materials;
- procedures controlling the repair and removal of asbestos materials; and
- an ongoing re-assessment program.

Where the assessment process has revealed a likelihood of exposure to asbestos fibres, all practicable steps need to be taken to eliminate or minimise that risk.

The condition and location of the asbestos will determine the period between assessments of asbestos materials. In some cases a visual assessment will be required on an annual basis. Where the asbestos is in good condition and unlikely to be disturbed, visual assessment at three-yearly intervals may be adequate. Annual inspections are required for buildings under South Australian Statutory Regulations.

ADDITIONAL INFORMATION

Asbestos Materials

Asbestos is the fibrous form of mineral silicates belonging to the serpentine and amphibole groups of rock-forming minerals, including amosite (brown asbestos), crocidolite (blue asbestos), chrysotile (white asbestos), tremolite, actinolite, anthophyllite or any mixture containing one or more of these.

Asbestos has been used in over 3000 products from heat insulating materials to vinyl coverings. Inhalation of asbestos fibres can result in asbestosis, lung cancer or mesothelioma. Asbestos is classified as a hazardous substance National under the Occupational Health and Safety Commission (NOHSC), *Approved Criteria for Classifying Hazardous Substances*, 1008 - 2002 and as a cancer-causing agent.

APPENDIX B

Certificates of Analysis

Certificate of Analysis

Testing Facility: Perth

CLIENT: Stockland Corporation Ltd JOB No: **N01761AI**
ORDER No: 20017601
SAMPLED BY: A Kelly (MPL)
SAMPLE DATE: 19/10/04
No of SAMPLES: 4
LOCATION: 75 George Street, Parramatta, NSW 2150

TEST METHOD: Qualitative identification of asbestos types in bulk samples by polarised light microscopy, including dispersion staining technique using MPL Laboratories Method WILAB 1. Accreditation does not cover the identification of Synthetic Mineral Fibres.

Sample No.	Sample Description (Approximate Dimensions)	Identification Type
DT232	Gasket 10x5x1mm	No Asbestos Detected
DT233	Scrapings <1cc	Chrysotile Asbestos Detected
DT236	Fibrous Insulation Material <5cc	No Asbestos Detected (Fibres Consistent with Synthetic Mineral Fibres)
DT237	Fibrous Insulation Material 15x10x2mm	No Asbestos Detected (Fibres Consistent with Synthetic Mineral Fibres)

Approved Identifier
Date: 5/11/2004

Approved Signatory
Date: 5/11/2004

This Laboratory is accredited by the National Association of Testing Authorities, Australia. The tests reported herein have been performed in accordance with its terms of accreditation. This document shall not be reproduced except in full.
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