Stage I & II Environmental Site Assessment 396 Lane Cove Road & 1 Giffnock Avenue Macquarie Park, NSW

22 June 2006

Prepared for: **Australand Industrial No.122 Pty Ltd** C/- Winten Property Group Level 10, 61 Lavender Street Milsons Point NSW 2061

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This document was prepared for the purpose described in our proposal dated 4 May 2006.

From a technical perspective, the subsurface environment at any site may present substantial uncertainty. It is a heterogeneous, complex environment, in which small subsurface features or changes in geologic conditions can have substantial impacts on water and chemical movement. Uncertainties may also affect source characterisation assessment of chemical fate and transport in the environment, assessment of exposure risks and health effects, and remedial action performance.

HLA's professional opinions are based upon its professional judgement, experience, and training. These opinions are also based upon data derived from the testing and analysis described in this document. It is possible that additional testing and analysis might produce different results and/or different opinions. HLA has limited its investigation to the scope agreed upon with its client. HLA believes that its opinions are reasonably supported by the testing and analysis that have been done, and that those opinions have been developed according to the professional standard of care for the environmental consulting profession in this area at this time. That standard of care may change and new methods and practices of exploration, testing, analysis and remediation may develop in the future, which might produce different results. HLA's professional opinions contained in this document are subject to modification if additional information is obtained, through further investigation, observations, or validation testing and analysis during remedial activities.

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EXECUTIVE SUMMARY

Introduction

HLA-Envirosciences Pty Limited (HLA) was engaged by Winten Property Group on behalf of Australand Industrial No.122 Pty Ltd (AI 122) to undertake a Stage I & II Environmental Site Assessment (ESA) of the properties located at 396 Lane Cove Road and 1 Giffnock Avenue, Macquarie Park, NSW (the Site). The Site is currently owned by Dick Smith Investments Pty Ltd and is occupied by office/warehouse space and a mechanics workshop. The ESA was undertaken to evaluate for the presence of potential soil and groundwater contamination, which may represent a potential environmental liability to AusItraland Industrial N0.122 Pty Ltd, and to classify soils for future off-site disposal.

Site Setting

The Site is located within a commercial/industrial area. Adjacent commercial/industrial properties are considered to represent a low risk of contamination to the Site.

Geology & Hydrogeology

Subsurface conditions encountered at the Site comprised filling materials extending to an approximate average depth of 0.45 metres below ground surface (m bgs), overlying clay soils derived from the underlying shale bedrock. Bedrock was encountered at an approximate average approximate depth of 1.5 m bgs. Groundwater has not been encountered at the Site to the maximum depth of the investigation of 5.0 m bgs.

Site History

Reviewed available information relating to past use of the Site indicated that the Site was agricultural land until the early 1980s when the Site was developed to its present state.

Potential Contamination Sources

The reviewed site history information, discussions with site employees and observations made during site inspections identified the following areas of potential concern:

- Possible use/application of pesticides associated with former agricultural activities;
- Possible use of imported fill materials for raising and levelling of the Site;
- UST and associated infrastructure;
- Demolition of former (agricultural) buildings; and
- Mechanics Workshop.

Results

Twenty two soil bores were completed to depths ranging between 0.3 and 5.0 m bgs and two surface grab samples were collected. This soil sampling density is in general accordance with NSW EPA (1995) requirements. Four groundwater monitoring wells were installed however groundwater did not accumulate and was therefore not sampled. Soil samples were obtained for analytical testing to evaluate concentrations of identified contaminants of potential concern (COPC). The COPC comprised: total petroleum hydrocarbons (TPH); benzene, toluene, ethylbenzene and xylenes (BTEX); orgaono-chlorine and organo-phosphate pesticides (OCP and OPP); polychlorinated biphenyls (PCB); polycyclic aromatic hydrocarbons (PAH); volatile halogenated compounds (VHC); asbestos; and metals.

Analysis of soil samples indicated concentrations of toluene, ethylbenzene and xylenes in soil marginally above NSW EPA (1994) assessment criteria adjacent to the UST on the 396 Lane Cove Road property. This impact is not considered to preclude site suitability for continued

commercial/industrial land use. Concentrations of other soil COPC were below the site assessment criteria in all remaining sample locations tested. Asbestos fibres were identified within cement sheeting fragments and underlying soil material on the south west boundary of the 396 Lane Cove Road property. Based on site observations, the area affected with asbestos is limited and is not considered to preclude site suitability for ongoing commercial/industrial land use.

Toxicity Characteristic Leaching Procedure (TCLP) analyses were undertaken on samples with the highest detected concentrations of selected metals (arsenic, cadmium, chromium, lead and nickel). Results of TCLP analyses indicated that the soil material on the Site is classifiable as 'Inert' waste in accordance with the NSW DEC (2004) *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes*.

This Inert Waste classification is consistent with HLA's interpretation of Table 1 of the NSW DEC (2004) Guidelines, which state that inert waste includes Virgin Excavated Natural Material (VENM), such as clay, gravel, sand, soil and rock, that is not mixed with any other waste and that has been excavated from areas that are not contaminated and do not contain sulphidic ores or soils.

Groundwater was not encountered on the Site.

Conclusions and Recommendations

The results of this investigation indicate that:

- The Site is suitable for continued commercial/industrial land use; and
- For the purpose of off-site disposal, soils would be considered VENM which according to the NSW DEC (2004) Guidelines meets the classification of Inert Waste, with the exception of soils in the vicinity of the UST and the expected small area of asbestos impact.

To reduce potential environmental liability to AI 122, HLA recommends that:

- The UST be decommissioned by removal, if possible, which would allow for the excavation of impacted soils (if any), and appropriate sampling of the UST pit excavation to validate removal of contaminated soil. Excavated contaminated soils could be remediated through on-site landfarming techniques. The remediated soil could then be returned to the excavation. Alternatively, the excavated soil could be disposed off-site to an NSW EPA licensed facility. Additional sampling and analysis would be required to evaluate the waste classification of materials associated with the UST; and
- ACM and associated impacted soils located on the south west boundary of the 396 Lane Cove Road property be removed from site by appropriately licensed asbestos removal contractors.

1 INTRODUCTION

HLA-Envirosciences Pty Limited (HLA) was engaged by Australand Industrial No.122 Pty Ltd (AI 122) to undertake a Stage I & II Environmental Site Assessment (ESA) of the properties located at 396 Lane Cove Road and 1 Giffnock Avenue, Macquarie Park, NSW (the Site).The location of the Site is shown on Figure 1, and the Site layout is shown on Figure 2.

The Site is currently owned by Dick Smith Investments Pty Ltd (Dick Smith) and is occupied by several companies including but not limited to MAN B&W Diesel Australia Pty Ltd, Fulfilnet Australia Pty Ltd and DLink Australia Pty Ltd, and comprises an area of approximately 1.63 hectares. The Site is utilised for warehousing and distribution, office space, and a mechanics workshop.

HLA understands that AI 122 may purchase the Site. The findings of the ESA will be used to evaluate site suitability for future land use consistent with the City of Ryde land use zoning (Business Special - Employment), in which the Site is located. In general, this zoning pertains to commercial/industrial land use, however, subdivision and development for the purpose of child care centre and recreational use is permissible with development consent.

The ESA was completed with reference to NSW EPA and State Environmental Planning Policy 55 (SEPP55) requirements. Al 122 has advised HLA that there are currently no specific redevelopment plans for the Site, however, redevelopment into a multi-storey commercial premise with underground basement car-parking is contemplated.

2 OBJECTIVES

The objectives of the ESA were to:

- Evaluate the Site history;
- Describe the current Site conditions;
- Evaluate the potential sources and types of contamination at the Site;
- Evaluate for the presence of potential soil and groundwater contamination at the Site, to assess the extent of remediation required to render the Site suitable for continued commercial/industrial land use; and
- Provide an indication of the waste classification of soil materials.

3 SCOPE OF WORK

To achieve the project objectives, the scope of work completed was in accordance with HLA's Proposal of 4 May 2006 (the Proposal). Based on Site observations, works in addition to the scope specified within the Proposal were also completed.

Works included an assessment of historical and current activities conducted on the Site to identify past and present potentially contaminating activities that may have occurred. Upon completion of the historical review and identification of potential areas and contaminants of concern, an intrusive investigation comprising sampling and analysis was designed and undertaken.

In summation, the following scope of work was undertaken during the ESA:

- A review of historical and Site background information, including:
 - Review of Land Title Office records to evaluate previous site owners and possible land use;
 - Review of published geological and soil maps for the local area to gain an understanding of expected sub-surface conditions;
 - Review of available Department of Natural Resources (DNR) historic and current aerial photographs to gain an understanding of land use changes over time;
 - Review of DNR's database for registered groundwater bores in the Site's vicinity, to evaluate expected hydrogeological conditions;
 - Review of WorkCover NSW database for the storage of dangerous goods at the Site; and
 - Site inspections with Dick Smith personnel, including an evaluation of surrounding land uses.
- Sampling of soil from 22 exploratory soil bores (BH01 to BH17 and HA01 to HA05) and two surface grab sample (SS01 and MS01) locations across the Site;
- Installation of four groundwater monitoring wells (MW01 to MW04) and the gauging of the monitoring wells to assess the presence of groundwater;
- Laboratory analysis of soil samples using National Association of Testing Authorities (NATA) registered methods; and
- Preparation of this report detailing the methodologies used, reviewing the results obtained and providing conclusions regarding the land use suitability of the Site.

Investigative work was conducted with reference to the following applicable guidelines:

- Sampling Design Guidelines (NSW EPA, 1995) were considered during design of the sampling and analysis plan;
- *Guidelines for the Site Auditor Scheme* (NSW DEC, 2006) provided the soil assessment criteria and were used to apply the NSW EPA decision processes for assessing redevelopment of urban sites;
- Guidelines for Consultants Reporting on Contaminated Sites (NSW EPA, 1997) – were followed throughout the investigation and during preparation of this report;
- Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-liquid Wastes (NSW DEC, 2004) – were utilised to assess the waste classification of soil materials;
- National Environmental Protection (Assessment of Site Contamination) Measure (NEPC 1999) – was considered throughout the entire investigation;
- Guidelines for the Laboratory Analysis of Contaminated Soils (NEPM Schedule B(3)) were used to ensure laboratory analysis of samples

obtained from the Site was undertaken using appropriate methods to acceptable levels of accuracy and precision;

 Managing Land Contamination: Planning Guidelines SEPP55 – Remediation of Land (DUAP, 1998) – stages outlined in this document were followed in order to provide any planning authorities the information required to carry out their planning functions.

4 SITE IDENTIFICATION

Site Owner	Dick Smith Investments Pty Ltd
Site Address	396 Lane Cove Road and 1 Giffnock Avenue, Macquarie Park
Lot and DP Number	Lot 1 DP 1069715 and Lot 21 DP 602327
County / Parish	Cumberland / Hunters Hill
Local Government Authority	Ryde
Current Zoning	Business Special - Employment
Distance from Sydney CBD	Approximately 12km north-west
Site Area	1.628ha
Site Elevation	Approximately 55 m
Coordinates	326500 E, 6255900 N
Locality Map	Refer to Figure 1
Site Layout	Refer to Figure 2

Notes:

- (1) Elevation is approximate and relative to Australian Height Datum (AHD), per Parramatta River 1:25000 Topographic Map 9130-3-N
- (2) Coordinates sourced from UBD Digital Street Directory Version 2.0
- (3) Site area based on Survey Drawings completed by Michael S. Dunn Surveying (December 2005)
- (4) Site coordinates relate to the corner of Lane Cove Road and Waterloo Street

HLA

5 SITE HISTORY & BACKGROUND INFORMATION

The following sections summarise the information obtained during the Stage I ESA, site inspection observations and discussions with site employees undertaken during completion of the Stage II ESA. The information includes but is not limited to, an evaluation of current and historical site use.

5.1 Current Land Use

The Site is utilised as mixed office space, warehousing and distribution, mechanical repairs, car parking areas and landscaped garden areas.

5.2 Section 149 Certificates

A copy of the Planning Certificates from the City of Ryde Council, issued under Section 149 of the Environmental Planning and Assessment Act 1979 were obtained for both properties. No indication of contaminating activities, investigation orders or remediation orders was included in the certificates.

Annexure A of the Certificate indicated that other permissible land use under the zoning may include child care centres and recreational use. Other information contained within the certificate stated the following:

- "The land does not include or comprise critical habitat under the Ryde Planning Scheme;
- "The land is not affected by Sections 38 or 39 of the Coastal Protection Act, 1979;
- The land is not affected by Section 15 of the Mine Subsidence Compensation Act, 1961, proclaiming land to be a Mine Subsidence District;
- The Site is affected by a Tree Preservation Order;
- The Site is not affected by road widening or re-alignment; and
- Council has not adopted a policy to restrict development of the Site by reason of the likelihood of land slip, flooding, bushfire, tidal inundation, subsidence, acid sulphate soil or any other risk".

Copies of the certificates are included in Appendix A.

5.3 Historical Certificates of Title

A review of Certificates of Title through the Land Titles Office was undertaken to provide details of historical ownership and possible use of the Site, as summarised below. **396 Lane Cove Road**

- 1981 to date: MIFF Pty Ltd (including a lease to the Sydney County Council of substation No. 5395);
- 1981-1993: Lease to Dick Smith (Wholesale) Pty Ltd;
- 1980-1981: Dick Smith (Wholesale) Pty Ltd;
- 1979-1980: Local Government Superannuation Board;
- 1975-1979: Eutectic (Australia) Pty Ltd;
- 1920s-1975 (approximately): during this period, the Lane Cove property comprised four separate titles, herein denoted as A to D (refer Appendix A), as summarised below:
 - A: 1947-1975: members of the Papallo family. The titles records indicated that occupations of the Papallo family included: motor mechanic, manager, storeman, boot maker. 1943-1947: Joseph Phillip Harrington (electrician). 1920-1943: Bridget Harrington (wife of

396 Lane Cove Road & 1 Giffnock Avenue, Macquarie Park, NSW

electrician). 1916-1920: Robert Holmes (machinist). 1914-1916: Philippa Werner (married woman);

- **B**: 1920-1975: members of the Gall family (builders foreman, supervisor and carter). 1916-1920: Robert Holmes (machinist). 1914-1916: Philippa Werner (married woman);
- **C**: 1947-1975: Papallo family (see above). 1918-1947: Joseph Phillip Harrington (electrician). 1914-1918: Philippa Werner (married woman);
- D: various owners, including: 1966-1973 (Sanjan No. 2 Pty Ltd); 1943-1966 (Maud Walters, widow); 1938-1943 (Arthur Redding, labourer); 1919-1938 (Bartolo Butta, fruiterer); 1916-1919 (Iguazio Allotta, orchardist) and; 1914-1916 (Antonio Caffarella, fruiterer)
- 1887-1914: John Schweikert (orchardist).

1 Giffnock Avenue

- 1984 to date: MIFF Pty Ltd;
- 2002 to date: (Lease to D Link Australia Pty Limited);
- 1984-1988: (Lease to Samuelson Film Services (Australia) Pty Limited);
- 1980-1984: (Lease to Second Low Land Australia Pty Limited);
- 1979-1984: Local Government Superannuation Board;
- 1975-1979: Eutectic (Australia) Pty Ltd;
- 1974-1975: Canalete Pty Limited;
- 1973-1974: I.C.D Traders Pty Limited;
- 1966-1973: Sanjan No.2 Pty Limited;
- 1943-1966: Maud Elizabeth Walters, widow;
- 1938-1943: Arthur William Redding, labourer;
- 1919-1938: Bartolo Butta, fruiterer;
- 1916-1919: Iguazio Allotta, orchardist;
- 1914-1916: Antonio Caffarella, fruiterer; and
- 1887-1914: John Schweikert (orchardist).

In summary, and based on the titles information reviewed, the properties appeared to comprise agricultural (orchards) and residential land until the late 1970s. After this, the Site appears to have been purchased by investment companies and then developed in the early 1980s. This appears to be consistent with anecdotal information provided by Mr Cres James, General Manager Dick Smith Investments (DSI), who indicated that the Site was undeveloped, former orchards when DSI purchased the Site in the early 1980s.

5.4 Aerial Photographs

The following information was derived from reviewing historical aerial photographs for the Site and the surrounding area. Enlarged sections of selected aerial photographs are included as Figures 3 to 6.

Photograph Details	Description
March 1930 Map 3424 Black and White (Figure 3)	<u>Site</u> : comprises agricultural land (orchards) and approximately eight small buildings. The buildings are assumed to comprise residence/s and structures associated with the orchard activities. Small, apparently unpaved, access tracks are present. <u>Surrounds</u> : generally comprise agricultural land, although bushland is present to the south-east (opposite side of Land Cove Road).

Photograph	Description
Details	Description
May 1951	Site & Surrounds: no significant changes to site or surrounding
Map 472-41	properties visible from 1930 photograph.
Run 8	properties visible from 1000 priotograph.
Black and White	
1961	Site: comprises agricultural land, which appears to be paddock and
Map 1049-5191	orchards. A residential-type building and two smaller buildings front
Run 28E	onto Lane Cove Road and two residential-type buildings and sheds
Black and White	front onto Waterloo Road.
(Figure 4)	Surrounds: agricultural land present to the north, west and south. A
(rigulo i)	drive-in theatre present to the south-east. A service station facility
	appears to be located approximately 200 m to the north.
July 1970	Site: no significant changes to site visible from 1961 photograph
Map 1911-5148	Surrounds: lands immediately to the south, west and north appear to
Run 13	be vacant and undeveloped. In general, significant developments
Black and White	(commercial and/or industrial) are present in the site vicinity, although
	are typically located down-topographic gradient of the site.
April 1978	Site: remains undeveloped.
Map 2707-85	Surrounds: increase in commercial/industrial-type developments in the
Run 12	site vicinity. Land immediately to the south-west (currently vacant as of
Black and White	date of this report) has a warehouse type building. Coolinga Street
	and Giffnock Avenue are now present.
August 1986	Site: is developed, with layout appearing similar to current features.
Map 3529	Surrounds: increase in commercial/industrial-type developments in the
Run 18	site vicinity. Building immediately to the south-west is still visible.
Colour	Drive-in theatre has been replaced by a commercial-type building.
(Figure 5)	
October 1994	Site & Surrounds: no significant changes to site or surrounding
Map 4244	properties visible from the 1986 photograph, with the exception that
Run 8	the building immediately to the south-west has been removed.
Colour	
March 2002	Site & Surrounds: no significant changes to site or surrounding
Map 4724	properties visible from the 1994 photograph.
Run 8	
Colour	
December 2005	Site & Surrounds: no significant changes to site or surrounding
Map 4938	properties visible from the 2002 photograph, with the exception that
Run 8	the south-east corner of the site is occupied the works compound
Colour	associated with the construction of the underground railway station.
(Figure 6)	

Based on reviewed information, the Site was utilised for agricultural purposes from the 1930's until the early 1980's when Dick Smith Wholesale Pty Ltd took ownership of the Site. Based on aerial photographs, the Site was developed to its present state between 1980 and 1986.

5.5 Dangerous Goods

HLA requested WorkCover NSW to undertake a search of the Stored Chemical Information Database to identify if historical dangerous goods license information was available for the Site. WorkCover information (refer Appendix A) indicated that:

- Dangerous goods license was held at the 1 Giffnock Avenue property until 18 January 2001. The dangerous goods stored included Sodium Hydroxide, Hydrochloric Acid, Terpene Hydrocarbons, Ethanol, Carbon Disulfide, Diethyl Ether, Hexanes, Acetonitrile, Methanol, Toluene and 2-Butanol. The Class 3 dangerous goods were stored in WorkCover approved cabinets indoors. The Class 8 dangerous goods were stored in 20 L kegs in plastic bunded trays of sufficient capacity. Given the dangerous goods were stored in approved, suitable containers, and the good condition of the concrete surface in the warehouse, the potential for spills to have affected the subsurface is considered to be low; and
- No license to store dangerous goods was found for the 396 Lane Cove Road property. However on underground storage tank (UST) is located on the property based on the existence of a vent pipe and anecdotal information obtained from Mr Cres James.

5.6 DEC (NSW EPA) Register

The NSW EPA register did not contain notices relating to the Site or nearby sites under the provisions of the Contaminated Land Management Act 1997 (refer Appendix A).

5.7 Previous Environmental Reports

Groundwater Wells were observed within the helipad and within the carpark area of the south eastern portion of the Site suggesting that previous investigations have been undertaken. HLA accessed one of the monitoring wells. Groundwater was not encountered to the maximum depth of the available measuring tape of 8 m bgs. No previous environmental investigation reports have been provided for review.

5.8 Anecdotal Information

Anecdotal information provided by Cres James (Dick Smith) indicates that an underground storage tank (UST) located on the 396 Lane Cove Road property is relatively small and was installed to provide petrol during periods of low supply.

6

SITE CONDITION AND SURROUNDING ENVIRONMENT

The following section details site-related information. The information includes, identification of topographical features, review of published geological and hydrogeological data, site inspection findings and surrounding land uses. The data were gathered to provide an indication of the potential contamination issues at the Site.

6.1 Site Location & Topography

The Site is located within the Macquarie Park business district.

Review of the Parramatta River 1:25 000 Topographic Map 9130-3-N indicated that the Site is located on a north trending, broad 'spur'. The Lane Cove River is located to the north (1.25 km) and the east (1.6 km) of the Site. The elevation of the area is approximately 55 m AHD. HLA's site inspection indicated that the Site surface falls gently to the north west within the north western portion of the 396 Lane Cove Road property and 1 Giffnock Avenue property and to the northeast within the south eastern portion of the 396 Lane Cove Road property. The 1 Giffnock Avenue property is approximately 2 m lower than the 396 Lane Cove Road property.

6.2 Condition of Site Boundary

Land use surrounding the Site includes:

- Northeast: Waterloo Street with commercial/industrial properties beyond. A Mobil Service Station is located topographically down gradient to the north east of the Site beyond Waterloo Street;
- Southeast: Lane Cove Road with a work site for the Chatswood to Epping Tunnel on the opposite corner of Lane Cove Road and Waterloo Street;
- Southwest: Vacant property, carpark area and commercial properties; and
- Northwest: Giffnock Avenue with commercial properties beyond.

Based on local and regional topography, the potential for impact to the subject site from surrounding properties is considered to be low.

The Site boundaries were largely unfenced, with garden areas along the property boundaries with the exception of the following:

- South eastern boundary of the 1 Giffnock Avenue property is bound by a cyclone fence;
- The south western boundary of the 396 Lane Cove Road property is bound by a cyclone fence; and
- A works compound for the Chatswood Epping tunnel is located in the south eastern corner of the 396 Lane Cove Road property.

No visible evidence of soil erosion was observed at the boundaries, nor were there any observed encroachments to the Site from adjoining lands. The potential for activities currently undertaken on off-site properties to be sources of contamination to the subject Site, based on our observations of current activities, is considered to be low.

6.3 Surface Water and Flood Potential

No surface water was present on the Site at the time of inspection. Based on topography and elevation, the potential for flooding is considered to be low.

6.4 Proximity to Local Sensitive Environments

Identified sensitive environmental receptors of contamination potentially sourced from the Site include tributaries of the Lane Cove River located to the north east and north west of the Site. Reference to historical aerial photography indicates commercial developments have been built over these drainage lines and as such the nearest surface water is likely to be a tributary of the Lane Cove River approximately 1 km to the north west of the Site.

The potential for contamination to the identified receptors from current site activities is considered to be low, based on our observations of site conditions.

6.5 Geology & Hydrogeology

Geology

Review of published information indicates that the Site is situated in a location where:

- Bedrock is expected to be representative of Triassic aged Wianamatta Group shales (Ashfield Shale) comprising black to dark grey shale with laminate;
- Soils above shale bedrock are expected to be representative of the Glenorie Erosional Soil Landscape Group and would likely be shallow to moderately deep (<100cm) clay soils (Soil Conservation Service NSW Sydney 1:100,000 Soil Landscape Series Sheet 9130); and
- There is no known occurrence of acid sulphate soils within the Site according to the Acid Sulfate Soil Risk Map: *Prospect/Parramatta River*, Edition 2, December 1997.

Limited inspection of excavation works located on Giffnock Avenue to the west of the Site indicated a very shallow clay horizon overlying shale bedrock. No groundwater seepage was noted in the excavation walls.

Based on HLA's experience and observation of road cuttings associated with the M2 Motorway, there is a potential for the shale to be interbedded with sandstone.

Hydrogeology

A search of the Department of Natural Resources (DNR) indicated that no registered groundwater bores are located within a 0.5 km radius of the Site (refer Appendix A).

It is anticipated that shallow intermittent groundwater may exist at the Site, generally at the interface between clay soils and shale bedrock. Based on local topography, groundwater is expected to flow to the north west in the north western and western portions of the Site and to the north east in the north eastern portion of the Site.

6.6 Site Inspections

An HLA Associate Environmental Scientist (Alex Latham) undertook an initial site inspection on 19 May 2006 to assess the current use and conditions of the Site. The initial site inspection was undertaken in the company of Mr Stuart Vaughan (WPG) and Mr Cres James (Dick Smith Investments). Additional site inspections were undertaken by Ben Pearce (Project Environmental Scientist) during completion of the Stage II ESA.

Photographs taken during the site inspections are presented in the Plates section of this report. Observed site conditions are summarised below and pertinent information relating to facilities are shown on Figure 2.

6.6.1 396 Lane Cove Road

396 Lane Cove Road was occupied by MAN B&W Diesel Australia Pty Ltd, fulfilNET Australia Pty Ltd and AW Edwards at the time of the investigation. Pertinent site features are detailed below:

- An office and mechanics work shop building occupies the south western portion of the property. The eastern and western portions of the building comprise office space while the centre portion of the building houses a warehouse and a mechanics workshop for MAN B&W (Plate 1);
- The concrete floor within the MAN B&W workshop area was noted to be in good condition and was covered with an epoxy sealant (Plate 2);
- Oils drums were observed within the MAN B&W workshop. No staining of the floor of the workshop was observed and operations within the workshop appear to be clean;
- A basement level car park exists at the north western end of the Site building;
- A vent pipe suggesting the presence of a UST was observed adjacent to the air conditioning plant along the north eastern boundary of the building. No evidence of UST fill or dip points were observed (Plate 3);
- A raised helipad was observed in the north western portion of the Site. The helipad was surfaced with turf and appeared to be constructed from soil fill material to a level approximately 4 m above grade (Plate 4). Inspection of the criblock retaining wall fronting Coolinga Street indicated materials comprised clay, shale and crushed sandstone. The source of fill material in the helipad is not known, however it is potentially sourced from the Site as a result of cut and fill operations associated with the construction of the underground basement car park;
- A works compound for the Chatswood to Epping Tunnel project occupies the north eastern portion of the Site. Access to the compound was not obtained HLA;
- An electrical substation lies midway along the north eastern site boundary. No staining was observed around the substation;
- An asphalt paved carpark area adjacent to the north eastern edge of the building appears in good condition (Plate 5);
- Gardens areas line the south eastern and north eastern site boundary. No signs of stressed vegetation were observed;
- A layer (up to 500 mm) of road base fill was noted beneath the car park area. Approximately 100 mm of crushed sandstone fill was noted beneath the concrete slab in the warehouse area;
- No unusual odours were observed emanating from drains or any other on site features;

- An Above Ground Storage Tank (AST) is located midway along the south western edge of the building (Plate 6). Based on anecdotal information (Cres James), this structure was installed approximately one year ago. The AST is located on a concrete pad. No visible evidence of leaks or spills were noted. The AST appeared to be in good condition; and
- Possible asbestos containing material fragments were observed within a limited area midway along the south western boundary of the Site (Plate 7).

6.6.2 1 Giffnock Aveue

1 Giffnock Avenue was occupied by D Link Australia Pty Ltd at the time of the investigation. Pertinent site features and observations are detailed below:

- A warehouse and distribution building constructed from concrete panels and glass is located centrally in the north eastern portion of the Site. The concrete floor of the warehouse was noted to be in good condition (Plate 8);
- The warehouse is used to store electrical communication products. No manufacturing was observed on Site;
- An asphalt paved carpark area adjacent to the north west and south west edge of the building appears in good condition (Plate 9);
- Garden areas beyond border the south east, north west and south west boundaries of the Site. No signs of stressed vegetation were observed (Plate 10);
- A steep embankment along the south eastern boundary indicates the majority of the Site, including the area occupied by the building, has been excavated (Plate 11);
- No unusual odours were observed emanating from drains or any other on site features;
- A thin layer (approx 200 mm) of road base fill was noted beneath the car park area. Approximately 300 mm of crushed sandstone fill was noted beneath the concrete slab in the warehouse area; and
- No potential asbestos containing material was observed on Site.

AREAS OF ENVIRONMENTAL CONCERN

Based on the site history information, inspection of the Site and surrounding land uses, identified potentially contaminating activities and areas of environmental concern (AEC) were:

- Possible use/application of pesticides associated with former agricultural activities undertaken at the Site;
- Possible use of imported fill materials for raising and levelling of the Site, particularly in the helipad and beneath the building on the 396 Lane Cove Road property and beneath the building at 1 Giffnock Avenue;
- UST and associated infrastructure. Data obtained to date indicated that one UST is present at the 396 Lane Cove Road property which was utilised for the storage of petroleum motor spirits (leaded and potentially unleaded fuels). No information regarding the status or size of the UST was made available to HLA;
- Demolition of former (agricultural) buildings;
- Electrical transformer located on the north eastern boundary of the 396 Lane Cove Road property;
- MAN B&W mechanics workshop; and
- Area of broken potential asbestos containing fragments located on the south western boundary of the 396 Lane Cove Road property.

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8 CONTAMINANTS OF POTENTIAL CONCERN (COPC)

COPC related to the areas described in Section 7 include:

- Total petroleum hydrocarbons (TPH) associated with storage and use of fuels and oils (eg: USTs and former AST) and may be present in fill materials;
- Benzene, toluene, ethylbenzene and xylenes (BTEX) associated with storage and use of fuels and solvents and may be present in fill materials;
- Polycyclic aromatic hydrocarbons (PAHs) associated with oils, creosote, tar, diesel fuels and the incomplete combustion of materials (eg: ash, slag etc) and may be present in fill materials;
- Heavy metals, principally arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), mercury (Hg), nickel (Ni), lead (Pb) and zinc (Zn) potentially associated with waste oil, maintenance activities and may be present in fill materials;
- Organochlorine and organophosphate pesticides (OCP, OPP) potentially associated with application of insecticides/termiticides and may be present in fill materials;
- Polychlorinated biphenyls (PCB) historically present in electrical equipment (e.g. transformers) and potentially associated with fill materials;
 - Volatile Halogenated Compounds (VHC) associated with degreasers potentially utilised at the Site (eg: workshop) and may be present fill materials; and
- Asbestos historically used in pre 1980's building materials. Often found in fill materials containing building demolition spoil.

9

SAMPLING AND ANALYSIS PLAN AND SAMPLING METHODOLOGY

The Stage II ESA comprised the completion of 17 soil borings (BH01 to BH17), five hand augers (HA01 to HA05) and two surface samples (MS01 and SS01) locations at the Site, on a grid to provide site coverage and targeted to AEC. In addition, four groundwater monitoring wells (MW01 to MW04) were installed. Hand auger HA03 was exploratory only and as such no samples were submitted for analysis from this location.

The Site covers an area of approximately 1.6 hectares and the number of sample locations (24) is in general accordance with the NSW EPA (1995) minimum requirements for site characterisation (25 locations).

The analytical testing program was limited to the COPC (as presented in Section 8) and is summarised in Table 1.

Details of the predetermined field and laboratory data quality objectives (DQOs) and field procedures undertaken during the soil investigation are included in Appendix B. Laboratory reports are included in Appendix C.

10 QUALITY ASSURANCE AND CONTROL

Quality Assurance (QA) and Quality Control (QC) measures were adopted during the completion of the field and laboratory analysis programs to ensure that the results obtained were reliable and representative of site conditions at the locations sampled.

To achieve the objectives of the ESA, HLA adopted the following Data Quality Objectives (DQOs) adopted from NSW DEC (2006):

- Statement of Purpose of the ESA: the intrusive soil investigation and soil and groundwater sampling and analysis was undertaken to evaluate the contamination status of the Site and Site suitability for continued commercial/industrial land use;
- **Identification of Decisions to be Made**: this was achieved by a statement of the objectives of the investigation program;
- Identification of the Decision Inputs: this was achieved by reference to areas of potential environmental concern and contaminants of potential concern (COPC) and reference to appropriate assessment criteria for the COPC;
- **Definition of Boundaries of the Investigation**: this was achieved by stating the Site address, producing appropriate figures, based on survey diagrams that identified the Site. The boundary of the Site at depth considered the fill material, natural soil and shallow groundwater;
- **Development of Decision Rules**: this was achieved by clear definition of the data quality required, including field sampling methodology, sampling and sample preservation and the quality of data required from the commercial laboratories utilised for the sample analyses, so that reliable comparison could be made with the Site assessment criteria;
- Specification of the Acceptable Limits on Decision Errors: this was achieved by reference to Data Quality Indicators (DQIs), as discussed in detail in the Data Quality Validation Appendix; and
- **Optimisation of the Design of the Collection of Data**: this was achieved by development and implementation of an appropriate sampling and analytical program, which was reviewed and refined, where necessary, during the course of the investigation by assessment of field observations and analytical results.

Data Quality Objectives (DQO's) utilised for the investigation comprised:

10.1 Field QC

- Appropriately trained personnel to undertake soil and groundwater investigation activities;
- Use of written Standard Operating Procedures;
- Definition of the field program: up to 22 soil bores and two surface sample locations were to be completed, including the installation of four groundwater monitoring wells. As previously discussed in Section 9, 22 soil bores and two surface grab samples were completed;
- Definition that soil bores were to be completed using the following:
 - Truck-mounted drill rig utilising continuous push-tube sampling techniques to at least 0.5 m into natural soils (wherever possible).
 This technique has the benefits of retrieving undisturbed soil samples within a clear polyethylene (PET) tube, allowing for visual inspection

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of the soil profile, use of samples for analysis for volatile compounds and also, minimising the area of surface disturbance;

- Truck-mounted drill rig equipped with 100mm diameter solid stem augers to complete bores in the vicinity of identified potential contamination sources (eg: USTs, workshop area) and to facilitate installation of 50mm internal diameter groundwater monitoring wells. These bores were to be completed to a maximum of 5 m depth, or prior refusal on bedrock;
- 50mm diameter stainless steel auger, where drill rig access was not possible.
- Soil samples were to be collected at the surface (0-0.2 m), from 0.5 m and 1 m and 1 m intervals thereafter and at changes in lithology to the full depth of the bore at each bore location;
- Samples were to be collected directly from the PET tube or from the hand auger cutting head. A new pair of disposable sampling gloves were worn for each sample collection event to minimise the risk of cross-contamination;
- Additional soil were to be placed in a sealed plastic bag for field screening purposes. The bagged samples were to be allowed to stand for approximately 10 to 15 minutes at ambient temperature before being screened with a calibrated photoionisation detector (PID), for volatile organic compounds (VOCs);
- Detailed lithological logs of the soil boreholes were to be completed in the field. Soil logs were to be completed in accordance with AS1726-1993 and other appropriate Australian and international standards. Soils were classified in accordance with the Unified soil Classification System (USCS). Detailed inspection of soils from each sample for the presence of anthropogenic material (i.e. ash, asbestos-cement sheeting etc) was undertaken;
- All bores, except those converted to groundwater monitoring wells, were to be backfilled with the drilling spoil and reinstated to original surface levels and condition;
- Four groundwater monitoring wells were to be installed. Groundwater monitoring wells were to be constructed of 50mm internal diameter, Class 18 uPVC factory slotted (0.4mm) and blank casing (riser) with flush threaded joiners. Monitoring well installation, development and sampling procedures were to include the following:
 - Reaming of the bores to the target depth via drill rig utilising solid flight augers to approximately 2m beyond encountered groundwater level (where applicable) and measurement and cutting of screen and riser to accommodate the depth of the bore. The screen was to be placed so that approximately 2m extends below the encountered water level and 1m above it. The base of the well was to be sealed by a PVC plug;
 - Suspend the monitoring well within the bore and then pour filter pack (2-3 mm graded sand) around the outside of the well to approximately 0.5m above the level of the screen. Place bentonite pellets above the filter pack to form a sanitary seal, which will extend for a minimum height of 0.5m. The top of the well was to be capped with an expandable locking cap. Finish the well flush with the existing ground surface with a traffic rated steel roadbox cover, which was to be grouted into position;
- Develop well by a combination of surging the accumulated water and removal of up to approximately 10 well volumes of water as applicable, to ensure connectivity with the aquifer. Development was to be undertaken by

either a new disposable Teflon bailer for each monitoring well or submersible pump;

- Measurement of standing water levels within the monitoring wells and evaluation for the presence of phase separated hydrocarbons by an electronic depth-to-water/interface meter. The meter probe head was to be thoroughly cleaned in phosphate-free detergent solution and rinsed with potable water prior to use and between each measurement event;
- Purging of up to three well volumes of water (via new, disposable bailer);
- After recharge of 'fresh' groundwater (determined by either bailing wells dry or by obtaining three consecutive water physio-chemical parameter readings within 10% of each other), collect groundwater samples using a new disposable Teflon bailer (for each well) and decant into laboratory supplied and prepared sample containers. A new pair of disposable sampling gloves were to be worn for each monitoring well location.
- Soil and groundwater samples were to be collected into appropriately (laboratory) prepared sample receptacles and immediately placed on ice within an insulated container (esky);
- Chain of custody documentation was to be utilised;
- Field duplicate samples were to be collected at a rate of 1 per 10 primary samples and inter-laboratory duplicate samples at a rate of 1 per 20 samples;
- Appropriate equipment decontamination procedures were to be utilised to minimise the potential for cross contamination. Rinsate samples were to be collected and analysed to verify the adequacy of decontamination procedures; and
- Field equipment was to be calibrated prior to use and during site activities.

10.2 Laboratory DQO's

- Sample analyses to be undertaken using National Association of Testing Authorities (NATA) registered methods in accordance with ANZECC (1996) and NEPC (1999) guidelines by primary and secondary laboratories;
- Samples to be analysed within technical holding times;
- Laboratory method blank analyses results required to be below the practical quantitation limits (PQLs);
- PQL's to be less than the assessment criteria;
- Laboratory internal duplicate analyses to be undertaken;
- Laboratory matrix spike samples to be analysed, where appropriate; and
- Laboratory control samples or certified reference samples to be analysed.

10.3 Assessment

The assessment of field and laboratory QA/QC data is presented in Appendix B and the Laboratory Reports in Appendix C. Based on the results of the assessment, the field investigation procedures and reported analytical results are considered to have produced valid and representative concentrations of the COPC at the sample locations tested.

11 BASIS FOR ASSESSMENT CRITERIA

11.1 Soils

The current assessment criteria used in NSW to evaluate soil analytical results are based on the NSW DEC (2006) *Guidelines for the NSW Site Auditor Scheme*, NSW EPA (1994) *Guidelines for Assessing Service Station Sites* and the National Environment Protection (*Assessment of Site Contamination*) Measure (NEPC, 1999). These guidelines present a range of Health-Based Soil Investigation Levels (SILs), provisional Phytotoxicity-Based Investigation Levels (PBILs), Ecological Investigation Levels (EILs), sensitive land use thresholds and expected background concentration ranges for urban redevelopment sites in NSW. Application of these guidelines is briefly described below.

SILs

The SILs described in the NSW EPA (1998) and NEPC (1999) guidelines are based on the National Environmental Health Forum (NEHF) levels devised by Imray and Langley (1996). A series of guideline levels are provided for various substances for the protection of human health based on four specific land use and exposure scenarios including:

- SIL₁ Residential with gardens and accessible soil (home-grown produce contributing less than 10% fruit and vegetable intake; no poultry), including children's day care centres, preschools and primary schools, or town houses or villas.
- SIL₂ Residential with minimal access to soil access, includes dwellings with fully and permanently paved yard space such as high-rise apartments and flats.
- SIL₃ Parks, recreational open space, playing fields including secondary schools.
- SIL₄ Commercial or industrial.

PBILs & EILs

The PBILs (NSW EPA, 2006) and EILs (NEPC, 1999) have been devised for the protection of plant health, and are designed to be applied as a single number criteria indicative of environmental effect, are provisional and relate only to sandy loam soils at pH 6-8. Their use has significant limitations since phytotoxicity depends on soil and species parameters that are not fully understood, therefore they are intended to be applied as a screening guide only.

The NSW EPA (2006) decision process for assessing urban redevelopment sites stipulates that the PBILs need to be considered on land used for sensitive purposes, including residential, parks, recreational open space and secondary schools. On this basis, the PBILs and EILs are not considered relevant to this investigation.

NSW EPA (1994) Sensitive Land Use Guidelines

For the assessment of petroleum hydrocarbon contamination, the NSW EPA (2006) guidelines refer to the use of the NSW EPA (1994) *Guidelines for Assessing Service Station Sites*. These guidelines contain threshold concentrations for contaminants in soil and provide for the protection of human and environmental health assuming a sensitive land use.

SILs specifically for the lower volatility aliphatic and aromatic petroleum hydrocarbon components are provided in NEPC (1999) for the various land use scenarios described above.

USEPA (2004) Region 9 Preliminary Remediation Goals

Where the NSW EPA do not specify numerical criteria for the assessment of contaminant concentrations in soil and/or groundwater, for the purpose of this assessment, reference is made to the United States Environment Protection Agency Region 9 Preliminary Remediation Goals (USEPA Region 9 PRGs).

Specifically, USEPA Region 9 PRGs (Version 9, October 2004) have been adopted for the evaluation of VHC concentrations in soil. HLA notes that these criteria have not been endorsed by NSW EPA and are used herein as screening values only.

NSW DEC (2004) Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-liquid Waste

To assess the waste classification of soil materials on the Site, concentrations of COPC are compared to the NSW DEC (2004) *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-liquid Waste* (waste classification guidelines).

Aesthetic Impact

The NSW EPA (1998) guidelines require that the potential for soils to generate odours be addressed on sites used for commercial/industrial purposes.

Adopted Site Soil Assessment Criteria

Given that the Stage II ESA was undertaken to evaluate site suitability for continued commercial/industrial land use and to provide an indication of the waste classification of soil, the following Assessment Criteria have been utilised:

- NSW EPA (1994) for TPH and BTEX;
- NSW DEC (2006) SIL₄ for metals, PAH, OCP and PCB;
- US EPA (2004) Region IX PRGs for VHCs; and
- NSW DEC (2004) waste classification guidelines.

There are no current NSW EPA endorsed numerical criteria for asbestos in soil however, the NSW EPA advised the NSW Site Auditors (1 March 2000) that "*no asbestos in soil at the surface is permitted*". It is also noted that there are no current NSW EPA endorsed numerical criteria for OPP in soil.

Site criteria adopted for soils are included in Tables 2 to 6.

11.2 Groundwater

Groundwater was not encountered on-site.

12 SITE CHARACTERISATION

12.1 Soils

The stratigraphy encountered during the completion of bores across the Site is described in detail on the borehole logs in Appendix D. Bores were completed to depths ranging from 0.3 metres below ground surface (m bgs) to 5.0 m bgs, with an average depth of 1.55 m bgs. The following table provides a summary of typical soil conditions encountered during the completion of the bores:

Average Depth (m bgs)	Description
0.0-0.15	Bitumen Pavement or concrete
0.0-	Fill: mixtures of sand, clay, silt, blue metal gravel and crushed sandstone.
0.45(and/or	
0.15-0.45)	
0.45-1.3	Silty clay with ironstone
1.4 +	Weathered shale grading to shale bedrock with depth.

The maximum depth of the soil investigation was 5.0 m bgs in borehole BH11.

Fill materials greater than the average depth of 0.45 m bgs were encountered within the following boreholes:

- BH3, BH04, BH05, BH06, BH11 and BH12: fill present to 0.8 m bgs present as road base material;
- BH17: fill present to 0.5 m bgs, beneath the building on the 1 Giffnock Avenue Property;
- BH13: fill present to 0.6 m bgs, located within the garden area on the north western boundary of the 1 Giffnock Avenue property;
- HA01 and HA02: fill present in the Helipad; and
- HA04 and HA05: fill present in the garden areas on the 396 Lane Cove Road property.

No asbestos containing materials were identified in the fill materials at the locations investigated. Asbestos containing materials identified on site is described in Sections 7 and 13.

Conditions encountered on the Site were similar to the expected conditions identified from the Site background review, with natural clay soils over shale bedrock. A relatively thin layer of fill material was present over the clay soils.

12.2 Groundwater

No free groundwater was encountered during completion of the soil bores.

Despite not encountering free groundwater, HLA installed and gauged four monitoring wells (MW01 to MW04), the locations of which are shown on Figure 2. Gauging of the groundwater monitoring wells indicated that shallow groundwater was not present at the Site during completion of field activities.

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12.3 Conceptual Site Model

Based on the information obtained to date, the Site comprised a relatively thin veneer of fill materials over the majority of the Site (with the exception of the helipad area), overlying residual clay soils derived from the weathering of the underlying shale bedrock. Groundwater was not identified in the natural soils to the depth of investigation.

Contamination of soil would be likely to be confined to impacted fill materials, leakage from the UST and associated facilities, spills of oils/solvents within the MAN B&W workshop and from discarded possible asbestos containing material.

Contamination of groundwater would likely be confined to perched water within fill materials and in natural soils and be restricted to locations close to sources because of the generally impermeable nature of the clay soils.

Contamination of groundwater deep within the shale bedrock would be expected only if substantial leakage from a major structure, such as the UST, had taken place.

13 RESULTS

13.1 Soil Results

The results of the laboratory analysis of soil samples are compared to the assessment criteria in Tables 2 to 6. Figure 2 shows the sample locations.

13.1.1 On-site VOC Screening

Volatile organic compound (VOC) vapour concentrations within the headspace of field subsamples were measured in the field by a calibrated photoionisation detector (PID). PID calibration records are included in Appendix B. VOC concentrations above 30 ppm, regarded as typical of background concentrations, were identified in the following locations and are shown on the borelogs in Appendix D:

- BH01(42.6), BH02 (36.6), BH04 (44.7), BH05 (63.5), BH08 (44.5), BH09 (32.7), BH14 (30.9) and BH15 (32.9). The reason for the elevated PID responses in these borings is not clear as the bores are not located near the UST and no apparent odours were noted in the soil. Analyses of soil samples with elevated PID readings for TPH, BTEX and/or VOC did not identify concentrations of these compounds elevated above laboratory practical quantitation limits. The elevated PID measurements may be a reflection of water vapour in the soil sub-samples.;
- BH16: from 2.0 m to 3.0 m bgs, with VOC's measured at concentrations from 112 ppm to 26 ppm. Bore located approximately 5 m down gradient of the UST;

13.1.2 Metals & pH

Thirty eight soil samples (including three duplicates and two inter-laboratory duplicates) were submitted for analysis for metals. Laboratory analysis results are summarised on Table 2 and indicated that reported metal concentrations below the Site assessment criteria in all samples analysed.

Seven samples were submitted for analysis for pH. Analytical results indicated that the pH in road base fill and the fill beneath the building at 1 Giffnock Avenue was alkaline, with levels ranging between 8.9 and 9, whilst the pH in natural clays and fill material beneath the building at 396 Lane Cove Road and within the garden area of 1 Giffnock Avenue was acidic, with levels ranging from 4.3 to 5.4.

Nickel was detected in at concentrations within the 'Industrial' waste classification in samples BH01_0.05-0.2, BH02_0.05-0.15, BH06_0.05-0.15, BH11_0.05-0.15 and HA04_0.0-0.1.

Lead was detected at concentrations within the 'Industrial' waste classification in sample HA05_0.0-0.1.

Chromium was detected at concentrations within the 'Solid' waste classification in samples BH01_0.05-0.2, BH02_0.05-0.15, BH02_0.4-0.5, BH04_0.05-0.15, BH04_0.8-1.0, BH05_0.05-

0.15, BH06_0.05-0.15, BH08_0.16-0.25, BH08_0.6-0.8, BH09_0.17-0.3, BH11_0.05-0.15, BH11_0.6-0.8, BH12_0.0-0.3, BH13_0.0-0.1, BH13_0.5-0.6, BH14_0.05-0.25, BH16_2.9-3.0, HA01 0.0-0.1, HA04 0.0-0.1 and HA05 0.0-0.1.

Arsenic was detected at concentrations within the 'Solid' waste classification in samples BH08_0.6-0.8, BH09_0.17-0.3 and BH16_0.1-0.3.

13.1.3 **TPH & BTEX**

Twenty soil samples (including one duplicate and two inter-laboratory duplicates) were submitted for laboratory analysis for TPH and BTEX. Analytical results are presented on Table 3 and summarised below:

- Toluene was detected at concentrations marginally above the assessment criteria of 1.4 mg/kg in samples DUP04 (3 mg/kg) and TRIP02(1.7 mg/kg) which are duplicate and interlaboratory duplicate of BH16_1.9-2.0 respectively;
- Ethylbenzene was detected at a concentration marginally above the assessment criteria of 3.1 mg/kg in sample DUP04 (3.5 mg/kg);
- Total xylenes were detected at concentrations above the assessment criteria of 14 mg/kg in samples DUP04 (22.6 mg/kg) and TRIP02 (20.6 mg/kg);
- TPH (C₆-C₉) fractions were detected at concentrations above laboratory practical quantitation limits (PQLs) but below the assessment criteria in BH16_1.9-2.0, DUP04 and TRIP02; and
- TPH (C_6 - C_9) and BTEX were not detected at concentrations above the laboratory PQLs in all other samples analysed.

TPH (C₁₀-C₃₆) fractions were detected at concentrations above laboratory PQLs but below the assessment criteria in samples BH06 0.05-0.15, BH16 1.9-2.0 and DUP04. TPH (C10-C36) was not detected at concentrations above laboratory PQLs in all other samples analysed. TPH and BTEX were not detected in sample BH16_2.9-3.0 obtained from deeper within the boring.

13.1.4 PAH

Seventeen soil samples (including two duplicates and two inter-laboratory duplicates) were submitted for laboratory analysis for PAH (refer Table 3).

Naphthalene was detected at a concentration above laboratory PQLs in samples BH16_1.9-2.0 and its duplicate sample DUP04. No assessment criteria are defined for Naphthalene. Total PAH concentrations were below the assessment criteria in these samples.

Phenanthrene was detected at a concentration at the laboratory PQL in bitumen sample BIT02 obtained from the car park material at the Site at 396 Lane Cove Road. Total PAH concentrations were below the assessment criteria in this sample.

A bitumen sample was obtained from both properties. PAHs were not detected at concentrations above the laboratory PQLs with the exception of phenanthrene which was detected at the laboratory PQL in sample BIT02.

PAH compounds were not detected at concentrations above laboratory PQLs in all other samples analysed.

PAH concentrations were within the 'Inert' waste classification.

13.1.5 VHC

Two soil samples were submitted for laboratory analysis for VHC (refer Table 3). VHC were not detected at concentrations above the laboratory PQLs.

13.1.6 OCP, OPP, PCB

Ten soil samples (including one duplicate and inter-laboratory duplicate) were analysed for OCP compounds (refer Table 4). OCP were not detected at concentrations above laboratory PQLs in all samples analysed.

Nine soil samples (including one duplicate and inter-laboratory duplicate) were analysed for OPP compounds (refer Table 4). Whilst there are no current NSW EPA endorsed assessment criteria for OPP compounds, it is noted that OPP compounds were not detected at concentrations above laboratory PQLs in the samples analysed.

Eleven soil samples (including one duplicate and inter-laboratory duplicate) were analysed for PCB compounds (refer Table 4). PCB was not detected at concentrations above laboratory PQLs in the samples analysed.

13.1.7 Asbestos

Three soil samples were submitted for asbestos analysis (refer Table 5). There are no current NSW EPA endorsed soil assessment criteria for asbestos. Analysis results indicated the following:

- Asbestos fibres were detected in the cement sheeting sample (MS01) and the surface soil sample (SS01) obtained from the base of the earth embankment on the south west boundary of the 396 Lane Cove Road property; and
- Asbestos fibres were not detected in the soil sample obtained from the Helipad (HA02_0.5-0.6).

13.1.8 Waste Classification

Toxicity Characteristic Leaching Procedure (TCLP) analyses were undertake on samples with the highest detected concentrations of selected metals (arsenic, cadmium, chromium, lead and nickel). Results of TCLP analyses indicated that the soil materials on the Site are classifiable as 'Inert' waste in accordance with NSW DEC (2004) Waste Classification Guidelines.

13.2 Groundwater Results

Groundwater was not present at the Site and therefore not sampled or analysed.

14 DISCUSSION

Based on the results of the Stage II ESA obtained to date, the contamination issues and/or potential environmental liabilities to AI 122 identified at the Site are discussed below.

Underground Storage Tank

Based on site observations, anecdotal information and the results of the intrusive investigation it is considered likely that a UST exists beneath the air conditioning plant in the north east portion of the 396 Lane Cove Road property. The exact location, size and contents of the UST are not known. Although concentrations of COPC were generally below the assessment criteria, the presence of petroleum hydrocarbon impacted soil in borehole BH16 at a depth of 2.0 m bgs indicates that the integrity of the UST may have been compromised. As such, the existence of the UST presents a potential future environmental liability to AI 122.

Asbestos in Soil

Analytical results confirm that the fragments of cement sheeting on the 396 Lane Cove Road property contain asbestos. The fragments appear in reasonable condition and cover an area of approximately 2m x 2m.

Asbestos fibres were identified in soil accumulated at the base of the embankment adjacent to the south western boundary of the 396 Lane Cove Road block. The extent of this impact appears to be limited and current (and likely future) use of this portion of the Site is of limited and transient nature. As such, this impact is unlikely to preclude site use for future commercial/industrial land use.

Waste Classification

Toxicity Characteristic Leaching Procedure (TCLP) analyses were undertaken on samples with the highest detected concentrations of selected metals (arsenic, cadmium, chromium, lead and nickel). Results of TCLP analyses indicated that the soil material on the Site is classifiable as 'Inert' waste in accordance with the NSW DEC (2004) *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes*.

This Inert Waste classification is consistent with HLA's interpretation of Table 1 of the NSW DEC (2004) Guidelines, which state that inert waste includes Virgin Excavated Natural Material (VENM), such as clay, gravel, sand, soil and rock, that is not mixed with any other waste and that has been excavated from areas that are not contaminated and do not contain sulphidic ores or soils.

It is reasonable to expect UST backfill material and adjacent natural soils to be impacted with petroleum hydrocarbons at concentrations above 'Inert' waste criteria.

15 CONCLUSION & RECOMMENDATIONS

The results of this investigation indicate that:

- The Site is suitable for continued commercial/industrial land use; and
- For the purpose of off-site disposal, soils would be considered VENM which according to the NSW DEC (2004) Guidelines meets the classification of Inert Waste, with the exception of soils in the vicinity of the UST and the expected small area of asbestos impact.

To reduce potential environmental liability to AI 122, HLA recommends that:

- The UST be decommissioned by removal, if possible, which would allow for the excavation of impacted soils (if any), and appropriate sampling of the UST pit excavation to validate removal of contaminated soil. Excavated contaminated soils could be remediated through on-site landfarming techniques. The remediated soil could then be returned to the excavation. Alternatively, the excavated soil could be disposed off-site to an NSW EPA licensed facility. Additional sampling and analysis would be required to evaluate the waste classification of materials associated with the UST; and
- ACM and associated impacted soils located on the south west boundary of the 396 Lane Cove Road property be removed from the Site by appropriately licensed asbestos removal contractors.

The approximate cost for the removal of the UST is estimated to be in the order of \$25000 to \$35000. This assumes the following:

- UST is between 5000 L to 10000 L capacity;
- The air conditioning plant has been removed enabling unrestricted access to the UST; and
- Removal and off-site disposal to a landfill facility of a nominal volume of 50 to 75 m³ hydrocarbon contaminated soils as solid waste.

Removal and off-site disposal to a landfill facility of a nominal volume of 50 to 75 m³ hydrocarbon contaminated soils as solid waste.

The cost for the removal and disposal of the ACM and impacted soil is estimated to be approximately \$5000.

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Tables

									Analyses	3				
Comple Landia					×	336								tals
Sample Location & Depth (mbgs)	Sample Type	PID (ppm)	Rationale	Metals	/ТРН/ВТЕХ	TPH C10-C36	РАН	VHC	Hď	200	ОРР	PCB	Asbestos	TCLP - Metals (acid pH)
ON-SITE	(Soils)				-		-			Ŭ	Ŭ			
BH01 0.05-0.2	Fill	28.4	SC	1										
BH02_0.05-0.15	Fill	ND	SC	1										
BH02_0.4-0.5	Silty Clay	36.6	SC	1										
BH03_0.15-0.25	Fill	IS	SC	1										
BH04_0.05-0.15	Fill	42.8	SC	1	1	1	1		1	1	1	1		
BH04_0.8-1.0	Silty Clay	44.7	SC	1							· ·			
BH05_0.05-0.15	Fill	43.2	SC	1										
BH06_0.05-0.15	Fill	3.8	UST	1	1	1	1		1					
BH06_1.0-1.1	Silty Clay	4.1	UST	1	1	1	1		1			1		
BH07_0.15-0.3	Fill	28	MAN B&W	1	1	1								
BH08_0.16-0.25	Fill	IS	MAN B&W	1	1	1		1	1					
BH08_0.6-0.8	Silty Clay	44.5	MAN B&W	1	1	1		<u>'</u>						1
BH09_0.17-0.3	Fill	30	MAN B&W	1	1	1		1	1	1		1		1
BH10_0.16-0.3	Fill	10.4	DLINK - SC	1	1		1	1	1		1	1	1	1
BH11_0.05-0.15	Fill	IS	SC	1			1							
BH11_0.6-0.8	Silty Clay	20.9	SC	1										
BH12_0.0-0.3	Silt	17.8	sc	1						1	1	1		
BH13_0.0-0.1	Fill	4.5	sc	1	1	1	1		1	1	1	1		
BH13_0.5-0.6	Fill	1.9	sc	1							-			
BH14_0.05-0.25	Fill	IS	sc	1	1	1	1							
BH15_0.15-0.35	Fill	11.9	MAN B&W	1	1	1	-							
BH15_0.6-0.8	Silty Clay	32.9	MAN B&W	1										
BH16_0.1-0.3	Fill	15.1	UST	1										
BH16_0.6-0.8	Silty Clay	12.6	UST		1	1								
BH16_1.9-2.0	WS	115	PID	1	1	1	1							
BH16_2.9-3.0	WS	26	VE	1	1	1	1							
BH17_0.17-0.3	Fill	15.3	DLINK - SC	1	1	1	1		1					
BH17_0.4-0.6	Silty Clay	27.2	DLINK - SC	1										
HA01_0.0-0.1	Fill	0	Helipad	1										
HA01_0.5-0.6	Fill	0	Helipad	1	1	1	1			1	1	1		
HA02_0.5-0.6	Fill	0	Helipad	1	1	1	1			1	1	1	1	
HA04_0.0-0.1	Fill	0	Garden - UST	1						1	1	1		
HA05_0.0-0.1	Fill	3.8	Garden - SC	1						1	1	1		
SS01	Fill	-	Targeted AS	'									1	
QC Soil Duplicates			raigeted no											
Duplicates	•													
DUP02		Duplicate o	f BH19 0.18-0.3	1										
DUP03			of BH21_0.4-0.5	1	<u> </u>	<u> </u>	1		<u> </u>	1	1	1	1	+
DUP04			of BH17_1.4-1.5	1	1	1	1	<u> </u>	<u> </u>	-	<u> </u>	<u> </u>	<u> </u>	-
Inter-laboratory Dup		_ 0p0010 (<u> </u>									
TRIP02		Duplicate o	of BH24_0.9-1.2	-	1	1	1	<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>	-
TRIP02			of BH25_0.9-1.1	+	1	1	1			1	1			
11/16/03	Sub Total - Soil			3	3	3	4	0	0	2	2	1	0	0
		Soil Samp		35	19	19	4 15	2	7	10	9	10	2	0
QC Soil Sampling I					19	13	10	2	'	10	3	10	2	0
QW01		-	s ger cutting head (29-May-06)	1	1	1	1							
	Concored IIU		1 '	1 '	· ·	1	1	1	1	1	1	1		

Notes: SC = Site coverage VE = Assess Vertical Extent UST = Underground Storage Tanks ND = Not Detected

MAN B&W = within MAN B&W workshop WS = Weathered Shale

PID = elevated photoionisation detector result

IS = Insufficient Sample

Sample Location Sample Depth (mbgs)	NSW EPA (1998)	NSW EPA (1 Classificatio		BH01 0.05-0.2	BH02 0.05-0.15	BH02 0.4-0.5	BH03 0.15-0.25	BH04 0.05-0.15	BH04 0.8-1.0	BH05 0.05-0.15	BH06 0.05-0.15	BH06 1.0-1.1	BH07 0.15-0.3	BH08 0.16-0.25	BH08 0.6-0.8	BH09 0.17-0.3	BH10 0.16-0.3	BH11 0.05-0.15	BH11 0.6-0.8	BH12 0.0-0.3	DUP02 -	RPD BH12_0.0-	BH13 0.0-0.1	DUP03 -	TRIP03 -	RPD BH13_0.0-	RPD BH13_0.0-
Sample Type	Guidelines	Classificatio	in Guidelines	Fill	Fill	Silty Clay	Fill	Fill	Silty Clay	Fill	Fill	Silty Clay	Fill	Fill	Silty Clay	Fill	Fill	Fill	Silty Clay	Silt	Duplicate	0.3 and	Fill	Duplicate	Triplicate	0.1 &	0.1 &
Date Sampled	(SIL ₄)	Inert	Solid	29/05/06	29/05/06	29/05/06	29/05/06	29/05/06	29/05/06	29/05/06	29/05/06	29/05/06	29/05/06	29/05/06	29/05/06	29/05/06	29/05/06	30/05/06	30/05/06	30/05/06	30/05/06	DUP02	30/05/06	30/05/06	30/05/06	DUP03	TRIP03
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg	%	%
pH	-	-	-	-	-	-	-	9.0	-	-	9.0	4.3	-	4.9	-	4.9	-	-	-	-	-	nc	5.4	-	-		
Arsenic	500	10	100	1	<1	8	1	4	11	3	<1	5	3	7	13	12	1	<1	8	4	4	0	3	3	6	0	67
Cadmium	100	2	20	<0.1	0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	0	0.1	0.1	<1	0	nc
Chromium	500*	10*	100*	17	15	15	5	11	16	11	12	5	7	15	17	22	5	14	22	17	16	6	11	10	14	10	24
Copper	5000	-	-	68	85	4	2	30	12	43	85	8	2	2	3	11	3	94	4	6	6	0	9	8	11	12	20
Nickel	3000	4	40	100	120	<1	<1	25	4	37	100	2	<1	<1	<1	2	3	130	1	1	2	67	4	3	5	29	22
Lead	1500	10	100	4	4	14	<2	24	17	18	3	7	13	13	11	25	9	3	19	24	25	4	37	35	42	6	13
Zinc	35000	-	-	58	61	<5	<5	43	11	55	54	<5	<5	5	<5	38	12	61	<5	27	32	17	33	29	34	13	3
Mercury	75	0.4	4	< 0.05	< 0.05	0.06	<0.05	0.11	<0.05	0.07	<0.05	<0.05	<0.05	0.06	< 0.05	0.05	< 0.05	0.05	0.05	0.11	0.1	10	0.1	0.1	<0.1	0	nc

mg/kg = milligrams per kilogram.

(mbgs) = metres below ground surface

µg/l = micrograms per litre

< # = analyte not detected above laboratory RPD = Relative Percent Difference

practical quantitation limit (PQL).

* = CrVI Guideline (ie: no level specified for total Cr)

NSW EPA (1999) Waste Classification without Leachate (TCLP) tests

BOLD = concentrations > Solid Waste criteria

Shaded = concentrations > Industrial Waste criteria

BOX = concentration > SIL₄ criteria

- = Not analysed and/or no assessment criteria

Sample Location				BH13	BH14	BH15	BH15	BH16	BH16	DUP04	TRIP02	RPD	RPD	BH16	BH17	BH17	HA01	HA01	HA02	HA02	HA04	HA05	QW01
Sample Depth (mbgs)	NSW EPA (1998)	NSW EPA (1999) Waste	0.5-0.6	0.05-0.25	0.15-0.35	0.6-0.8	0.1-0.3	1.9-2.0	-	-			2.9-3.0	0.17-0.3	0.4-0.6	0.0-0.1	0.5-0.6	0.0-0.1	0.5-0.6	0.0-0.1	0.0-0.1	-
Sample Type	Guidelines	Classificatio	n Guidelines	Fill	Fill	Fill	Silty Clay	Fill	Weathered Shale	Duplicate	Triplicate	BH16_1.9- 2.0 & DUP04	BH16_1.9- 2.0 & TRIP02	Weathered Shale	Fill	Silty Clay	Fill	Fill	Fill	Fill	Fill	Fill	Rinsate
Date Sampled Units	(SIL ₄) mg/kg	Inert mg/kg	Solid mg/kg	30/05/06 mg/kg	30/05/06 mg/kg	30/05/06 mg/kg	30/05/06 mg/kg	30/05/06 mg/kg	30/05/06 mg/kg	30/05/06 mg/kg	30/05/06 mg/kg	%	%	30/05/06 mg/kg	30/05/06 mg/kg	30/05/06 mg/kg	29/05/06 mg/kg	29/05/06 mg/kg	29/05/06 mg/kg	29/05/06 mg/kg	29/05/06 mg/kg	29/05/06 mg/kg	29/05/06 ug/L
pН	-	-	-	-	-	-	-	-	-					-	8.9	-	-	-	-	-	-	-	-
Arsenic	500	10	100	6	5	2	2	15	7	6	9	15	25	9	1	4	4	2	2	3	3	6	<1
Cadmium	100	2	20	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	nc	nc	<0.1	<0.1	<0.1	0.2	<0.1	0.2	0.1	16	0.4	<0.1
Chromium	500*	10*	100*	23	22	9	8	10	8	8	10	0	22	12	6	10	15	8	9	9	24	23	<1
Copper	5000	-	-	19	18	2	<2	20	23	23	29	0	23	46	<2	5	13	5	11	9	76	30	<1
Nickel	3000	4	40	3	16	2	<1	19	<1	<1	<2	nc	nc	17	2	2	2	1	5	2	46	10	<1
Lead	1500	10	100	45	16	8	14	63	12	15	18	22	40	14	9	17	36	17	27	14	97	150	<1
Zinc	35000	-	-	23	14	15	<5	13	6	6	6	0	0	83	17	16	40	26	40	57	850	120	<5
Mercury	75	0.4	4	0.13	0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	<0.1	nc	nc	0.11	<0.05	< 0.05	0.11	0.05	0.09	0.05	0.19	0.25	<0.1

mg/kg = milligrams per kilogram.

(mbgs) = metres below ground surface

μg/l = micrograms per litre

< # = analyte not detected above laboratory

RPD = Relative Percent Difference

practical quantitation limit (PQL).

* = CrVI Guideline (ie: no level specified for total Cr)

NSW EPA (1999) Waste Classification without Leachate (TCLP) tests

BOLD = concentrations > Solid Waste criteria

Shaded = concentrations > Industrial Waste criteria

BOX = concentration > SIL₄ criteria

- = Not analysed and/or no assessment criteria

Table 3 - Soil Sample Analytical Results (TPH, BTEX, PAH, VHC)

	Sample Location Sample Depth (mbgs)		NSW EPA (1	(000) W/	BH04 0.05-0.15	BH06 0.05-0.15	BH06 1.0-1.1	BH07 0.15-0.3	BH08 0.16-0.25	BH08 0.6-0.8	BH09 0.17-0.3	BH11 0.05-0.15	BH13 0.0-0.1	DUP03	TRIP03	RPD	RPD	BH14 0.05-0.25	BH15 0.15-0.35	BH16 0.6-0.8	BH16 1.9-2.0	DUP04 -	TRIP02	RPD	RPD	BH16 2.9-3.0	BH17 0.17-0.3	HA01 0.5-0.6	HA02 0.5-0.6	BIT01 -	BIT02	QW01
	Sample Type		Classificatio		Fill	Fill	Silty Clay	Fill	Fill	Silty Clay	Fill	Fill	Fill	Duplicate	Triplicate	BH13_0.0- 0.1 &	0.1 &	Fill	Fill	Silty Clay	Weathered Shale	Duplicate	Triplicate	BH16_1.9- 2.0 &	2.0 &	Weathered Shale	Fill	Fill	Fill	Bitumen	Bitumen	Rinsate
	PID (ppm)		la cat	0.114	42.8	3.8	4.1	28	IS	44.5	30	IS	4.5	-	- 30/05/06	DUP03	TRIP03	IS	11.9	12.6	115	-	- 30/05/06	DUP04	TRIP02	26	15.3	NA	NA	NA	NA	-
	Date Sampled Units	mg/kg	Inert mg/kg	Solid mg/kg	29/05/06 mg/kg	30/05/06 mg/kg	30/05/06 mg/kg	30/05/06 mg/kg	30/05/06 mg/kg	%	%	30/05/06 mg/kg	30/05/06 mg/kg	30/05/06 mg/kg	30/05/06 mg/kg	30/05/06 mg/kg	30/05/06 mg/kg	%	%	30/05/06 mg/kg	30/05/06 mg/kg	29/05/06 mg/kg	29/05/06 mg/kg	30/05/06 mg/kg	30/05/06 mg/kg	29/05/06 ug/L						
	C ₆ - C ₉ Fraction	65	650	650	<10	<10	<10	<10	<10	<10	<10		<10		<2	nc	nc	<10	<10	<10	10	40	57	120	140	<10	<10	<10	<10	-		<50
Ηđ	C ₁₀ - C ₁₄ Fraction C ₁₅ - C ₂₈ Fraction	1000	5000	10000	<50 <100	2	<50 <100		<50 <100	nc nc	nc nc	<50 <100	<50 <100	<50 <100	50 <100	90 <100	<50 <100	57 nc	nc nc	<50 <100	<50 <100	<50 <100	<50 <100		-	<50 <200						
	C ₂₉ - C ₃₆ Fraction	J	J	J	<100	160	<100	<100	<100	<100	<100	-	<100	-	<100	nc	nc	<100	<100	<100	<100	<100	<100	nc	nc	<100	<100	<100	<100	-	-	<50
	Benzene Toluene	1 1.4 (130)	1 28.8	10 288	<0.2 <0.5		<0.2 <0.5		<0.2 <0.2	nc nc	nc nc	<0.2 <0.5	<0.2 <0.5	<0.2 <0.5	<0.2	0.3	<0.2	nc 100	nc 52	<0.2 <0.5	<0.2 <0.5	<0.2 <0.5	<0.2 <0.5			<1 <1						
Ш	Ethylbenzene	3.1 (50)	60	600	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5		<0.2	nc	nc	<0.5	<0.5	<0.5	1.4	3.5	2.8	86	67	<0.5	<0.5	<0.5	<0.5	-	-	<1
BT	meta & para Xylene ortho Xylene	-	-	-	<1 <0.5	-	<1 <0.5		<0.2 <0.2	nc nc	nc nc	<1 <0.5	<1 <0.5	<1 <0.5	7 2.8	16 6.6	15.1 5.5	78 81	73 65	<1 <0.5	<1 <0.5	<1 <0.5	<1 <0.5			<2 <1						
	Xylenes	14 (25)	100	1000	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	9.8	22.6	20.6	79	71	-	-	-	-	-	-	
	Naphthalene	-		-	<0.5	<0.5	<0.5	-	-	-	-	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	nc nc	nc nc	<0.5 <0.5	-		1.1	1.9	<0.5 <0.5	53 nc	nc nc	<0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1
	Acenaphthylene Acenaphthene		-	-	<0.5 <0.5	<0.5 <0.5	<0.5	-	-	-		<0.5	<0.5	<0.5 <0.5	<0.5	nc	nc nc	<0.5	-		<0.5 <0.5	<0.5 <0.5	<0.5	nc	nc	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5	<1 <1
	Fluorene Phenanthrene	-	-	-	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	-	-	-	-	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	nc nc	nc nc	<0.5 <0.5	-	-	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	nc nc	nc	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 0.5	<1 <1
	Anthracene				<0.5	<0.5	<0.5		-			<0.5	<0.5	<0.5	<0.5	nc	nc	<0.5			<0.5	<0.5	<0.5	nc	nc nc	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1
-	Fluoranthene	-	-	-	<0.5	<0.5	<0.5	-	-	-	-	<0.5	<0.5	<0.5	<0.5	nc	nc	<0.5	-		<0.5	<0.5	<0.5	nc	nc	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1 <1
PAF	Pyrene Benz(a)anthracene	-		-	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5		-			<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	nc nc	nc nc	<0.5 <0.5			<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	nc nc	nc nc	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1
	Chrysene Benzo(b)&(k)fluoranthene	-	-	-	<0.5 <1	<0.5 <1	<0.5 <1	-	-	-	-	<0.5 <1	<0.5 <1	<0.5 <1	<0.5 <1	nc nc	nc nc	<0.5 <1	-		<0.5 <1	<0.5 <1	<0.5 <0.5	nc nc	nc nc	<0.5 <1	<0.5 <1	<0.5 <1	<0.5 <1	<0.5 <1	<0.5 <1	<1 <2
	Benzo(b)&(k)nuoranthene Benzo(a) pyrene	5	- 0.08	0.8	<0.5	<0.5	<0.5		-			<0.5	<0.5	<0.5	<0.5	nc	nc	<0.5			<0.5	<0.5	<0.5 <0.5	nc	nc	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2 <1
	Indeno(1,2,3-c,d)pyrene	-	-	-	<0.5 <0.5	<0.5 <0.5	<0.5	-	-	-	-	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	nc	nc	<0.5	-		<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	nc	nc	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1
	Dibenz(a,h)anthracene Benzo(g,h,i)perylene		-		<0.5	<0.5	<0.5 <0.5	-	-	-		<0.5	<0.5	<0.5 <0.5	<0.5	nc nc	nc nc	<0.5 <0.5	-		<0.5	<0.5	<0.5	nc nc	nc nc	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5 <0.5	<1 <1
	Sum of reported PAHs	100	200	200			-	-	-	-	-	-		-	-	nc	nc	-	-		1.1	1.9	-	53	nc	-	-	-	-	-	0.5	
	Dichlorodifluoromethane Chloromethane				:	:	:		<5 <5		<5 <5		:	:		nc nc	nc nc			:		:		nc nc	nc nc	1				:	:	
	Vinyl chloride	0.75	0.4	4	-		-	-	<5	-	<5	-			-	nc	nc	-	-		-			nc	nc	-	-	-	-		-	
	Bromomethane Chloroethane	13 6.5	-	-			-	-	<5 <5	-	<5 <5	-			-	nc nc	nc nc	-	-		-			nc nc	nc nc		-	-	-		-	
	Trichlorofluoromethane 1,1-dichloroethene	2000 413	-	-			-	-	<5 <0.5	-	<5 <0.5	-		-	-	nc nc	nc nc	-	-		-	-	-	nc nc	nc nc		-	-	-		-	-
	trans-1,2-dichloroethene		-				-	-	<0.5	-	<0.5	-		-	-	nc	nc		-		-		-	nc	nc		-	-	-		-	
	1,1-dichloroethane cis-1,2-dichloroethene	1738	-	-	:				<0.5 <0.5	-	<0.5 <0.5	-	:			nc nc	nc nc		-		-		-	nc nc	nc nc	-	-	-	-		-	
	2,2-dichloropropane Chloroform	0.47	40	120				-	<0.5	-	<0.5 <0.5	-	-		-	nc	nc	-	-		-	-	-	nc	nc	-	-	-	-		-	
	1,1,1-trichloroethane	1200	12 60	600				-	<0.5	-	<0.5				-	nc nc	nc nc		-			-	-	nc nc	nc nc	-	-	-	-			
	1,2-dichloroethane 1,1-dichloropropene	0.6	1	10	:	:	:		<0.5 <0.5		<0.5 <0.5	:	:	:		nc nc	nc nc			:			:	nc nc	nc nc	1			-	:	:	:
	Carbon tetrachloride	0.55	1	10			-	-	<0.5	-	<0.5	-		-	-	nc	nc	-	-		-	-	-	nc	nc	-	-	-	-	-	-	
0	Trichloroethene (TCE) 1,2-dichloropropane	0.11 0.74	1	10			-	-	<0.5 <0.5	-	<0.5 <0.5	-		-	-	nc nc	nc nc	-	-		-	-	-	nc nc	nc nc	-	-	-	-	-	-	
HC	Dibromomethane Bromodichloromethane	1.8			:	:	:		<0.5 <0.5		<0.5 <0.5		:	:		nc nc	nc nc			:		:		nc nc	nc nc	1					:	:
	cis-1,3-dichloropropene							-	<0.5	-	< 0.5	-			-	nc	nc	-	-		-	-	-	nc	nc	-	-	-	-			
	trans-1,3-dichloropropene 1,1,2-trichloroethane	1.6	2.4	24	:		:		<0.5 <0.5		<0.5 <0.5					nc nc	nc nc	-			-			nc nc	nc nc	1			-		-	
	1,3-dichloropropane	360	-	-	-			-	<0.5	-	<0.5	-	-		-	nc	nc	-	-		-	-	-	nc	nc	-	-	-	-	-	-	
	Chlorodibromomethane Tetrachloroethene (PCE)	1.3	1.4	14	1				<0.5 <0.5	-	<0.5 <0.5	-	:		-	nc nc	nc nc	-	-		-		-	nc nc	nc nc	-	-	-	-			
	1,2-dibromoethane Chlorobenzene	0.073 530	- 200	- 2000	:	:	:		<0.5 <0.5		<0.5 <0.5		:	:	:	nc nc	nc nc			:			:	nc nc	nc nc	1			-	:	:	:
	1,1,1,2-tetrachloroethane	7.3	20	200					<0.5		<0.5					nc	nc		-		-			nc	nc		-		-			
	Bromoform 1,1,2,2-tetrachloroethane	218 0.93	- 2.6	- 26	1		-		<0.5 <0.5	-	<0.5 <0.5	-			-	nc nc	nc nc	-	-		-	-	-	nc nc	nc nc	1	-	-	1	-	-	
	1,2,3-trichloropropane 1,3-dichlorobenzene	0.076 600		-	-		-	-	<0.5 <0.5	-	<0.5 <0.5	-	•	-	-	nc	nc	-	-		-	-	-	nc	nc	-	-	-		-	-	-
	1,4-dichlorobenzene	7.9	- 15	- 150	1		-	-	<0.5	-	<0.5	-			-	nc	nc	-	-		-	-	-	nc	nc	-	-	-		-	-	
	1,2-dichlorobenzene 1,2-dibromo-3-chloropropane	600 2	8.6	86	1		-	-	<0.5 <0.5	-	<0.5 <0.5	-			-	nc nc	nc nc	-	-		-	-	-	nc nc	nc nc	-	-	-		-	-	
	Hexachlorobutadiene	22	-	-	-		-	-	<0.5	-	<0.5	-	-			nc	nc	-	-		-	-	-	nc	nc	-	-	-		-	-	

Notes:

Notes: mg/kg = milligrams per kilogram. (mbgs) = metres below ground surface µg/l = micrograms per litre RPD = Relative Percent Difference < II = analyte not detected above laboratory PQL

Assessment Criteria: TPH, BTEX = NSW EPA (1994) Guidelines for Assessing Service Station Sites

TPH, BTEX - NSW EPA (1994) Guidelines for Assessing Service Station Sites (50) = Human Heat and ecologically based protection few PAH - NSW EPA (2006) Guidelines for the NSW Site Auditor Scheme, SiL , VHC - UI SEPA (2006) Guidelines for the NSW Site Auditor Scheme, SiL , VHC - UI SEPA (2006) Agenite Angel Remodiation Goals, Cotaber 2004 Box - result > Assessment Criteria Similary = result > - Natestand and ecologically based protection level for tolu Bold - result > - Solid Wates Classification Criteria

ogically based protection level (for toluene, ethylbenzene and xylenes)

- = Not analysed and/or no assessment criteria
 Total PAHs = sum of individual compounds

Data Entry: BP Data Review: AL HLA-Envirosciences Pty Ltd

Table 4 - Soil Sample Analytical Results (OCP, OPP, PCB)

	Sample Location	NSW EPA	NSW EPA	BH04	BH06	BH09	BH12	BH13	DUP03	TRIP03	RPD	RPD	HA01	HA02	HA04	HA05
	Sample Depth (mbgs)	(2006)	(1999)	0.05-0.15	1.0-1.1	0.17-0.3	0.0-0.3	0.0-0.1	-	-	BH13_0.0-0.1	BH12 0 0 0 1	0.5-0.6	0.5-0.6	0.0-0.1	0.0-0.1
	Material Type	Guidelines	Guidelines	Fill	Silty Clay	Fill	Fill	Fill	Duplicate	Triplicate	& DUP03	& TRIP03	Fill	Fill	Fill	Fill
	Date Sampled	(SIL ₄)	Inert	29/05/06	29/05/06	29/05/06	30/05/06	30/05/06	30/05/06	30/05/06			29/05/06	29/05/06	29/05/06	29/05/06
	Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	alpha-BHC	-	<2	<0.05	-	<0.05	<0.05	<0.5	<0.5	<0.05	nc	nc	<0.05	<0.05	<0.05	<0.05
	Hexachlorobenzene (HCB)	-	<2	<0.05	-	<0.05	<0.05	<0.5	<0.5	<0.05	nc	nc	<0.05	<0.05	<0.05	<0.05
	beta-BHC	-	<2	<0.05	-	<0.05	<0.05	<0.5	<0.5	<0.05	nc	nc	<0.05	<0.05	<0.05	<0.05
	gamma-BHC	-	<2	< 0.05	-	< 0.05	< 0.05	<0.5	<0.5	< 0.05	nc	nc	< 0.05	< 0.05	< 0.05	< 0.05
	delta-BHC	-	<2	< 0.05	-	< 0.05	< 0.05	<0.5	<0.5	< 0.05	nc	nc	< 0.05	< 0.05	< 0.05	< 0.05
	Heptachlor	50	<2	< 0.05	-	< 0.05	< 0.05	<0.5	<0.5	< 0.05	nc	nc	< 0.05	<0.05	< 0.05	< 0.05
	Aldrin	50	<2	< 0.05	-	<0.05	<0.05	<0.5	<0.5	<0.05	nc	nc	< 0.05	<0.05	< 0.05	< 0.05
	Heptachlor epoxide	-	<2	< 0.05	-	< 0.05	< 0.05	<0.5	<0.5	< 0.05	nc	nc	< 0.05	< 0.05	< 0.05	< 0.05
OCP	trans-Chlordane Endosulfan I	250***	<2	<0.05 <0.05	-	<0.05	<0.05 <0.05	<0.5 <0.5	<0.5 <0.5	< 0.05	nc	nc	< 0.05	<0.05	<0.05	<0.05 <0.05
ŏ	cis-Chlordane	- 250***	<2	<0.05	-	<0.05 <0.05	<0.05	<0.5	<0.5 <0.5	<0.05 <0.05	nc nc	nc nc	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	< 0.05
					-											
	Dieldrin 4.4'-DDE	50 [°] 1000**	<2	<0.05 <0.05	-	<0.05 <0.05	<0.05 <0.05	<0.5 <0.5	<0.5 <0.5	<0.05 <0.05	nc	nc	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05	<0.05 <0.05
	4.4 -DDE Endrin	1000	<2 <2	<0.05	-	<0.05	<0.05	<0.5	<0.5 <0.5	<0.05	nc nc	nc nc	<0.05	<0.05	<0.05	<0.05
	Endosulfan II	-	<2	<0.05	-	<0.05	<0.05	<0.5	<0.5	<0.05	nc	nc	<0.05	<0.05	<0.05	< 0.05
	4.4'-DDD	1000**	<2	<0.05	-	<0.05	<0.05	<0.5	<0.5	<0.05	nc	nc	<0.05	<0.05	<0.05	< 0.05
	Endosulfan sulfate	1000	<2	<0.05	-	<0.05	<0.05	<0.5	<0.5	<0.05	nc	nc	<0.05	<0.05	<0.05	< 0.05
	4.4'-DDT	1000**	<2	<0.03		<0.03	<0.03	<2	<2	<0.03	nc	nc	<0.03	<0.03	<0.03	<0.2
	Methoxychlor	-	-	<0.2	-	<0.2	<0.2	<2	<2	<0.2	nc	nc	<0.2	<0.2	<0.2	<0.2
	Dichlorvos			<0.5	-		<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5
		-	-	<0.5	-	-	<0.5 <0.5	<0.5		<0.5 <0.5	nc	nc	<0.5			
	Mevinphos (Phosdrin) Demeton (total)	-	-	<0.5	-	-	<0.5 <1	<0.5	<0.5 <1	<0.5 <0.5	nc nc	nc nc	<0.5	<0.5 <1	<0.5 <1	<0.5 <1
	Ethoprop	-	-	<0.5	-	-	<0.5	<0.5	<0.5	<0.5		-	<0.5	<0.5	<0.5	<0.5
	Monocrotophos	-	-	<0.5	-	-	<0.5 <0.5	<0.5	<0.5 <0.5	<0.5	nc nc	nc nc	<0.5	<0.5 <0.5	<0.5	<0.5 <0.5
	Phorate		-	<0.5	-		< 0.5	< 0.5	<0.5	<0.2	nc	nc	<0.5	<0.5	<0.5	<0.5
	Dimethoate			<0.5			<0.5	<0.5	<0.5	<0.5	nc	nc	<0.5	<0.5	<0.5	<0.5
	Diazinon			<0.5			<0.5	<0.5	<0.5	<0.5	nc	nc	<0.5	<0.5	<0.5	<0.5
	Disulfoton		-	<0.5	-	-	<0.5	<0.5	<0.5	<0.5	nc	nc	<0.5	<0.5	<0.5	<0.5
۵.	Methyl parathion	-	-	<0.5	-	-	<0.5	<0.5	<0.5	<0.5	nc	nc	<0.5	<0.5	<0.5	<0.5
ОРР	Ronnel	-	-	<0.5	-	-	<0.5	<0.5	<0.5	<0.5	nc	nc	<0.5	<0.5	<0.5	<0.5
-	Fenitrothion	-	-	<0.5	-	-	<0.5	<0.5	<0.5	< 0.5	nc	nc	<0.5	<0.5	<0.5	<0.5
	Malathion	-	-	<0.5	-	-	<0.5	< 0.5	<0.5	< 0.5	nc	nc	<0.5	<0.5	<0.5	< 0.5
	Fenthion	-	-	< 0.5	-	-	<0.5	< 0.5	<0.5	<0.5	nc	nc	<0.5	<0.5	<0.5	< 0.5
	Chlorpyrifos	75	0.4	< 0.5	-	-	<0.5	< 0.5	<0.5	<0.5	nc	nc	<0.5	<0.5	<0.5	<0.5
	Parathion	-	-	< 0.5	-	-	<0.5	< 0.5	<0.5	<0.2	nc	nc	<0.5	<0.5	<0.5	<0.5
	Stirofos	-	-	<0.5	-	-	<0.5	<0.5	<0.5	<0.5	nc	nc	<0.5	<0.5	<0.5	<0.5
	Prothiofos	-	-	<0.5	-	-	<0.5	<0.5	<0.5	<0.5	nc	nc	<0.5	<0.5	<0.5	<0.5
	Azinophos methyl	-	-	<0.5	-	-	<0.5	<0.5	<0.5	<0.5	nc	nc	<0.5	<0.5	<0.5	<0.5
	Coumaphos	-	-	<0.5	-	-	<0.5	<0.5	<0.5	<0.5	nc	nc	<0.5	<0.5	<0.5	<0.5
j	Arochlor 1016			<0.5	<0.5	<0.5	<0.5	<5	<5		nc	nc	<0.5	<0.5	<0.5	<0.5
	Arochlor 1232			<0.5	<0.5	<0.5	<0.5	<5	<5	-	nc	nc	<0.5	<0.5	<0.5	<0.5
PCB	Arochlor 1242			<0.5	<0.5	<0.5	<0.5	<5	<5	-	nc	nc	<0.5	<0.5	<0.5	<0.5
Ы	Arochlor 1248		1	<0.5	<0.5	<0.5	<0.5	<5	<5	-	nc	nc	<0.5	<0.5	<0.5	<0.5
	Arochlor 1254		1	<0.5	<0.5	<0.5	<0.5	<5	<5	-	nc	nc	<0.5	<0.5	<0.5	<0.5
	Arochlor 1260			<0.5	<0.5	<0.5	<0.5	<5	<5	-	nc	nc	<0.5	<0.5	<0.5	<0.5
	Total PCBs	50	2	-	-	-	-	-	-	<0.1	nc	nc	-	-	-	-

Notes:

mg/kg = milligrams per kilogram.

(mbgs) = metres below ground surface

< # = analyte not detected above laboratory PQL

RPD = Relative Percent Difference

nc = not calculated (results<PQL)

* = combined criteria for aldrin+dieldrin

** = combined criteria for DDT+DDD+DDE

*** = combined criteria for cis+trans chlordane - = no criteria and/or sample not analysed

Data Entry: BP Data Review: AL HLA-Envirosciences Pty Ltd

Sample ID Depth (mbgs) Material Type Date Sampled	Adopted Site Criteria	MS01* Surface AC Sheeting 30/05/06	SS01 0.0-0.05 Soil 30/05/06	HA02 0.5-0.6 Soil 29/05/06
Asbestos	No detected asbestos in surface soil	Chysotile asbestos detected	Chrysotile and amosite asbestos detected	No asbestos detected

(mbgs) = metres below ground surface

No current EPA endorsed criteria, although the NSW EPA advised the NSW Site Auditors

(1 March 2000) that "no asbestos in soil at the surface is permitted"

* = present as a fragment

Sample ID Depth (mbgs)		I	NSW EI	PA (199	9) Was	te Class	ification	٦		HA 0.0	-0.1	HA 0.0	.05 -0.1		+11 -0.15		116 -0.3
Material Type		Inert			Solid		h	ndustri	al	TCLP	Fill	TCLP	Fill	TCLP	Fill	TCLP	Fill
Date Sampled	CT1	TCLP1	SCC1	CT2	TCLP2	SCC2	CT3	TCLP3	SCC3	29/0	5/06	29/0	5/06	30/0	05/06	30/0	5/06
Units	mg/kg	(mg/L)	mg/kg	mg/kg	(mg/L)	mg/kg	mg/kg	(mg/L)	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
As	10	1	500	100	5	500	400	20	2000	-	-	-	-	-	-	< 0.01	15
Cd	2	0.1	100	20	1	100	80	4	400	0.010	16	-	-	-	-	-	-
0 0 0	10	0.5	1900	100	5	1900	400	20	7600	< 0.005	24	-	-	-	-	-	-
Cr (VI)							400		4000			_	_	0.150	130	_	_
Cr (VI) Ni	4	0.2	1050	40	2	1050	160	8	4200	-	-	-	-	0.150	130	-	

mg/kg = milligrams per kilogram.

mg/L = milligrams per litre

 μ g/l = micrograms per litre

(mbgs) = metres below ground surface

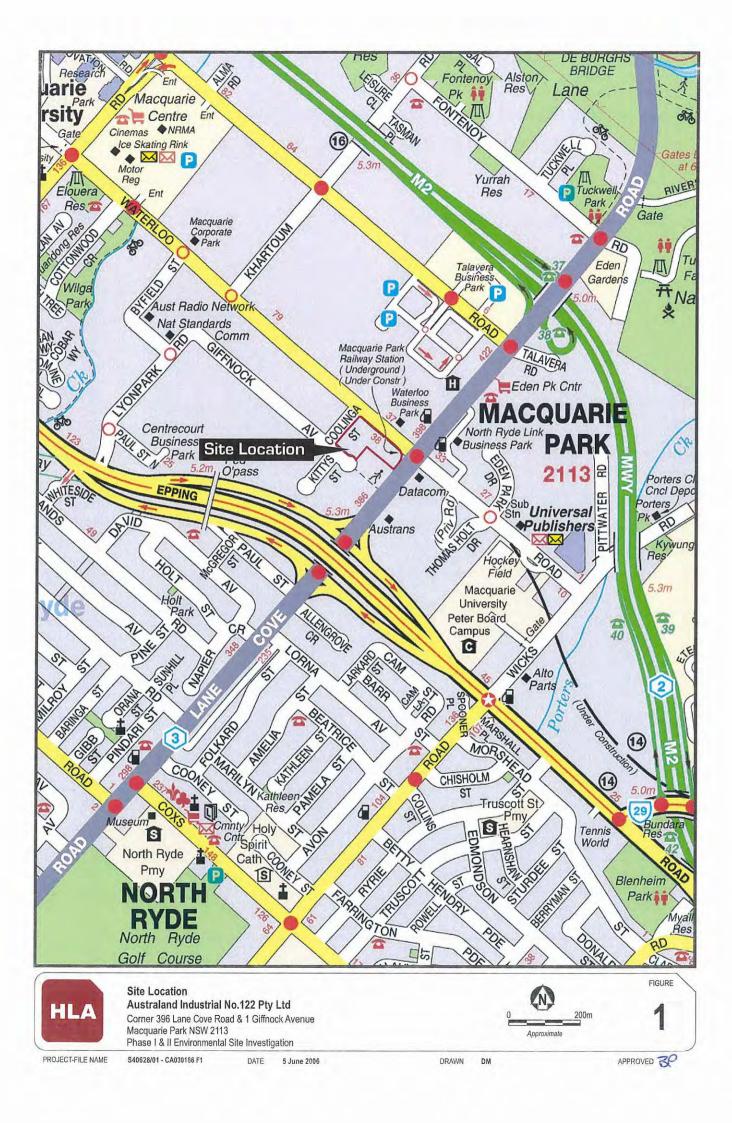
< = not detected above PQL

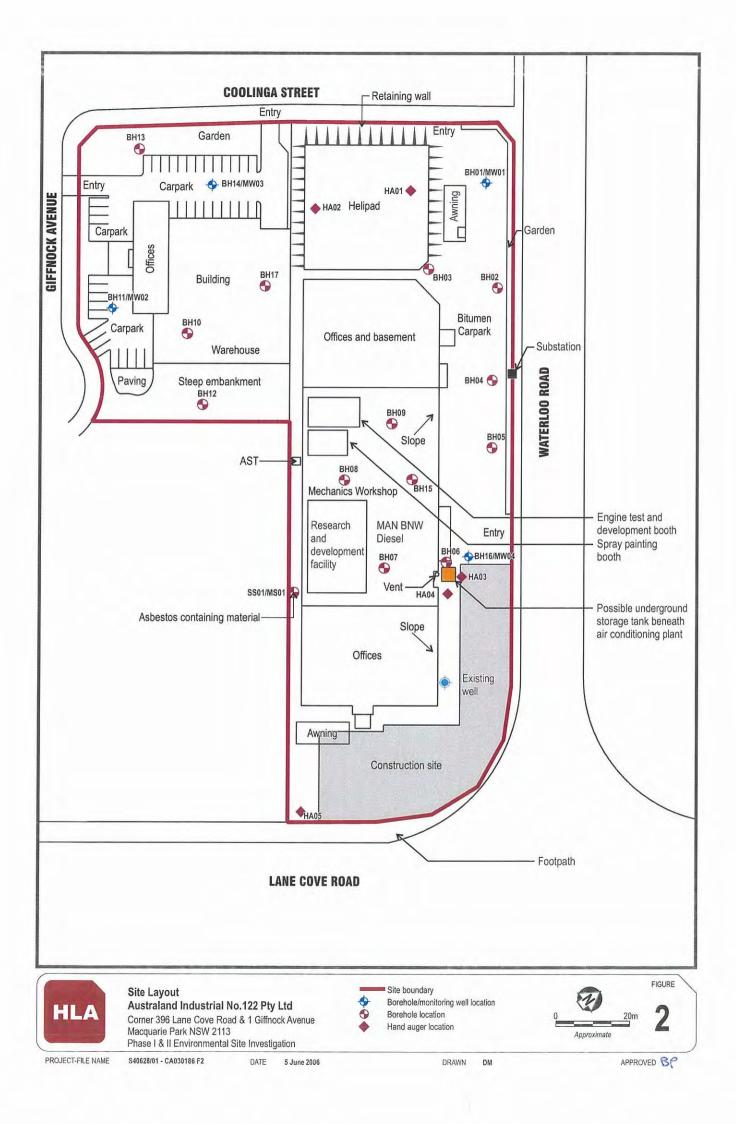
* = Cr (Total) value

- = not analysed and/or no criteria

Bold and Box denotes result = Hazardous Waste

Figures









PROJECT-FILE NAME

1930 Aerial Photograph Australand Industrial No.122 Pty Ltd Corner 396 Lane Cove Road & 1 Giffnock Avenue Macquarie Park NSW 2113 Phase I & II Environmental Site Investigation

DATE

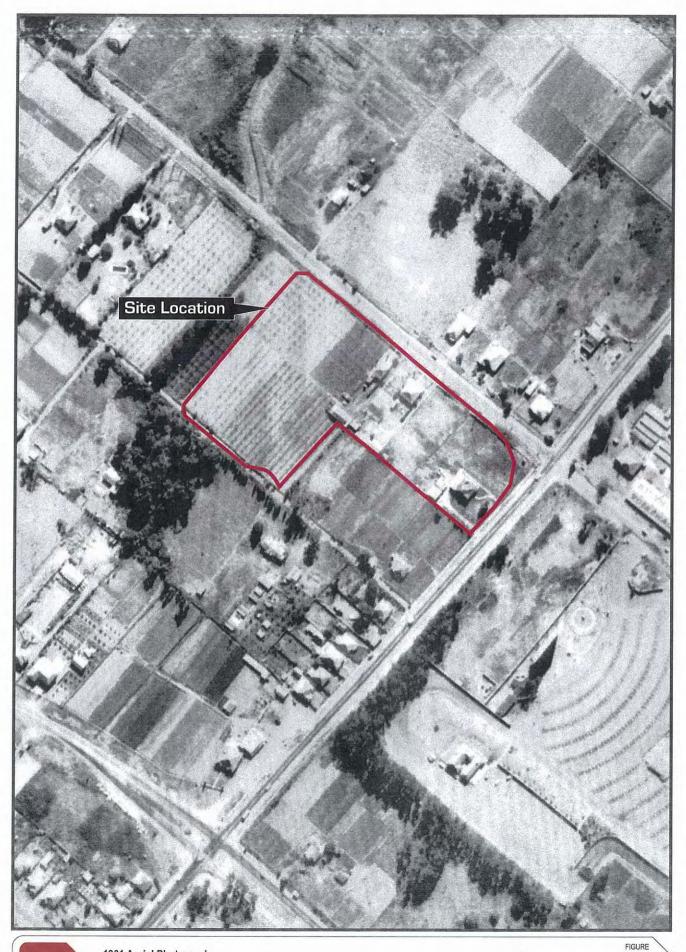
5 June 2006

S40628/01 - CA030186 F3

DRAWN DM

Not to Scale

APPROVED BP





1961 Aerial Photograph Australand Industrial No.122 Pty Ltd Corner 396 Lane Cove Road & 1 Giffnock Avenue Macquarie Park NSW 2113 Phase I & II Environmental Site Investigation

Not to Scale

PROJECT-FILE NAME

S40628/01 - CA030186 F4 DATE 5 June 2006

DRAWN DM

APPROVED BP





1986 Aerial Photograph Australand Industrial No.122 Pty Ltd Corner 396 Lane Cove Road & 1 Giffnock Avenue Macquarie Park NSW 2113 Phase I & II Environmental Site Investigation

Not to Scale

PROJECT-FILE NAME

S40628/01 - CA030186 F5 DATE 5 June 2006

DRAWN DM

APPROVED BP





2005 Aerial Photograph Australand Industrial No.122 Pty Ltd Corner 396 Lane Cove Road & 1 Giffnock Avenue Macquarie Park NSW 2113 Phase I & II Environmental Site Investigation

DRAWN DM Not to Scale

APPROVED BP

6

PROJECT-FILE NAME

S40628/01 - CA030186 F6 DATE 5 June 2006



Plates





PLATE 1 Site building at 396 Lane Cove Road property.



PLATE 2 MAN B&W Diesel workshop



PLATE 3

Vent pipe above air conditioning compound in north east corner of 396 Lane Cove Road property.



PLATE 4 Helipad embankment in south western corner of 396 Lane Cove Road property.



PLATE 5 Bitumen covered car park area on 396 Lane Cove Road property.



PLATE 6 Above Ground Storage Tank on south eastern boundary of 396 Lane Cove Road property.



PLATE 7 Asbestos containing material on south western boundary of 396 Lane Cove Road property.



PLATE 8 Office/warehouse building at 1 Giffnock Avenue property



PLATE 9 Bitumen covered car park area at 1 Giffnock Avenue property.

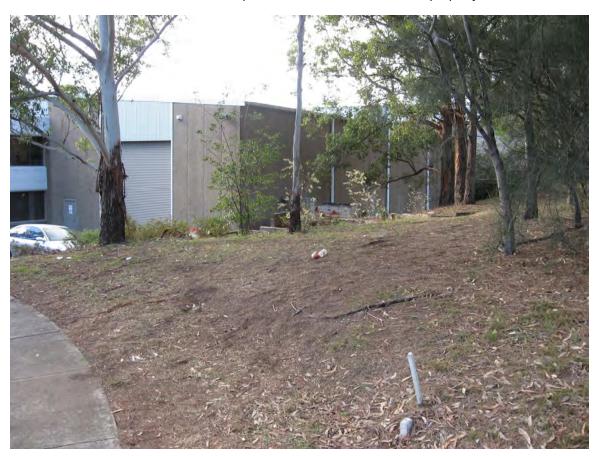


PLATE 10 Garden area 1 Giffnock Avenue property



PLATE 11 Embankment on south eastern boundary of 1 Giffnock Avenue property

Appendix A

Ben Pearce

From:Alex SyriatowiczSent:Monday, 22 May 2006 3:38 PMTo:Anthony Davis; Ben Pearce; Alex LathamSubject:FW: bore search - North Ryde

From: SSC Bore Data SSC Bore Data [mailto:SSCboredata@dipnr.nsw.gov.au] Sent: Monday, 22 May 2006 3:11 PM To: Alex Syriatowicz Subject: bore search - North Ryde

Hi Alex, I have completed your 0.5km bore search at North Ryde. There were no bores within this radius.

Minimum charge applies

Regards Sofie Tanner

This message is intended for the addressee named and may contain confidential/privileged information. If you are not the intended recipient, please delete it and notify the sender.

Views expressed in this message are those of the individual sender, and are not necessarily the views of the Department.

You should scan any attached files for viruses.

Locked Bag 2069, North Ryde NSW 1670 DX 8403 Ryde Facsimile 9952 8070 Telephone 9952 8222

PLANNING CERTIFICATE UNDER SECTION 149 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

Cert No:19202Date:22/05/2006Receipt No:943413Reference:J28123

44

City of Ryde

Applicant: HLA - Envirosciences Pty Ltd PO Box 726 PYMBLE NSW 2073

2 \$ MAY 2006

Property: 2 Coolinga Street, MACQUARIE PARK Description: LOT: 21 DP: 602327

Ppty Ref: 35790

a.

INFORMATION PROVIDED PURSUANT TO SECTION 149(2) OF THE ACT.

1. NAMES OF RELEVANT LOCAL ENVIRONMENTAL PLANS, DRAFT LOCAL ENVIRONMENTAL PLANS, DEVELOPMENT CONTSOL PLANS, STATE ENVIRONMENTAL PLANNING POLICIES AND REGIONAL ENVIRONMENTAL PLANS APPLYING TO THE LAND

a) LOCAL ENVIRONMENTAL PLAN AND DEEMED ENVIRONMENTAL PLANNING INSTRUMENTS

Ryde Planning Scheme - 1 June 1979 as amended

b) DRAFT LOCAL ENVIRONMENTAL PLANS as exhibited under Section 66(1) (b) of the Act

Nil.

c) DEVELOPMENT CONTROL PLANS

Development Control Plan No. 14 - Child Care Centres.

Development Control Plan No. 27 - Waste Minimisation and Management.

Development Control Plan No. 28B - Advertising Signs.

Development Control Plan No. 31 - Review of Determination

Development Control Plan No. 36 - Fencing.

Development Control Plan No 15B- Notification of Development Applications.

Development Control Plan No. 41 (Amendment No.1) - Stormwater Management

Development Control Plan No. 42 - Construction Activities

Development Control Plan No. 29A - Car Parking

Development Control Plan No. 48 - Installation of Satellite Dishes and MDS- Microwave Antennae

Development Control Plan No. 37 - Access For People With Disabilities

Development Control Plan No. 45A - Energy Smart - Water Wise

Development Control Plan No.34 - Exempt and Complying Development.

d) STATE AND REGIONAL ENVIRONMENTAL PLANNING POLICIES AND: INSTRUMENTS (includes Draft Policies)

The Minister for Infrastructure and Planning, Natural Resources has notified Council that the following State Environmental Planning Policies and Regional Environmental Plans apply to the land and should be specified in this certificate:

State Environmental Planning Policies

State Environmental Planning Policy No. 1 - Development Standards.

State Environmental Planning Policy No. 4 - Development Without Consent and Miscellaneous Exempt and Complying Development.

State Environmental Planning Policy No. 6 - Number of Storeys in a Building

State Environmental Planning Policy No. 8 - Surplus Public Land.

State Environmental Planning Policy No. 9 - Group Homes.

State Environmental Planning Policy No. 10 - Retention of Low Cost Rental Accommodation (as amended).

State Environmental Planning Policy No. 11 - Traffic Generating Developments.

State Environmental Planning Policy No. 19 - Bushland in Urban Areas

State Environmental Planning Policy No. 21 - Caravan Parks.

State Environmental Planning Policy No. 32 - Urban Consolidation.

State Environmental Planning Policy No. 33 - Hazardous and Offensive Development

State Environmental Planning Policy No. 37 - Continued Mines and Extractive Industries

State Environmental Planning Policy No. 38 - Olympic Games and Related Projects - (as amended)

State Environmental Planning Policy No. 45 - Permissibility of Mining

State Environmental Planning Policy No. 48 - Major Putrescible Land Fill Sites

State Environmental Planning Policy No. 50 - Canal Estate Development.

State Environmental Planning Policy No. 55 - Remediation of Land.

State Environmental Planning Policy No. 58 - Protecting Sydney's Water Supply (Amendment No.3)

State Environmental Planning Policy No. 63 - Major Transport Projects

State Environmental Planning Policy No. 64 - Advertising and Signage.

State Environmental Planning Policy No. 65 - Design Quality of Residential Flat Development.

Draft State Environmental Planning Policy No. 66 - Integration of Land Use and Transport 2001

Draft State Environmental Planning Policy (Application of Development Standards)2004

State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 (as amended)

State Environmental Planning Policy (ARTC Rail Infrastructure) Amendment 2005.

State Environmental Planning Policy (Repeal of Concurrence and Referral Provisions)2004

State Environmental Planning Policy (Sydney Metropolitan Water Supply) 2004 (as amended)

State Environmental Planning Policy (Major Projects) 2005 (as amended)

Regional Environmental Plans

Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005.

2. ZONING AND LAND USE UNDER RELEVANT LOCAL ENVIRONMENTAL PLANS

For each local environmental plan and deemed environmental planning instrument applying to the land that includes the land in any zone (however described):-

(a) ZONING

Business Special - Employment

(b) ZONING TABLE

The purposes for which development may or may not be carried out in accordance with the above Zone are as follows:-

Business Special - Employment

PURPOSES PERMISSIBLE WITHOUT CONSENT

Nil

PURPOSES PERMISSIBLE WITH CONSENT

Any purpose which involves (as an integral aspect of the purpose) the carrying out of scientific research and development on land within this zone or within Zone No.5 (c); child care centre; community services; commercial premises; film and television schools; hospitals; hotels; industries referred to in Schedule 6 of the Ordinance; laboratories; light industry; open space; public buildings; purposes set out in Schedule 12 of the Ordinance; research establishments; recreation areas; refreshment room; roads; serviced apartments; shops (not exceeding 250sqm); taverns; telecommunication facilities; universities; utility installations (other than gas holders or generating works); warehouses PURPOSES PROHIBITED Any other purpose.

(c) DEVELOPMENT STANDARDS FOR THE ERECTION OF A DWELLING HOUSE

The Ryde Planning Scheme Ordinance provides that a dwelling house shall not be erected on an allotment of land within any residential zone unless the allotment has a minimum area of 740sq.m (exclusive of access corridor) and a minimum 3m wide road frontage and access corridor width for hatchet-shaped allotments. A minimum area of 580sq.m, a minimum road frontage of 10m and a minimum width of 15m at a distance of 7.5m from the road alignment is required for other allotments.

(d) CRITICAL HABITAT

NO. The land does not include or comprise critical habitat under the Ryde Planning Scheme.

(e) CONSERVATION AREA (however described)

adoption by that authority being referred to in planning certificates issued by council, that restricts the development because of the likelihood of:

NO (i) landslip

NO (ii) bush fire

(iii)	flooding	NO
(IIII)	nooung	110

NO (iv) tidal inundation

NO (v) subsidence

- NO (vi) acid sulphate soil
- (vii) other risk NO

Note: The fact that land has not been identified as being affected by a policy to restrict development because of the risks referred to does not mean that the risk is non-existent.

7. LAND RESERVED FOR ACQUISITION

Whether or not any environmental planning instrument, deemed planning instrument or draft environmental planning instrument applying to the land provides for the acquisition of the land by a public authority, as referred to in section 27 of the Act

No environmental planning instrument, deemed environmental planning instrument or draft environmental planning instrument applying to the land provides for the acquisition of the land by a public authority as referred to in Section 27 of the Act.

8. CONTRIBUTIONS PLAN

The name of each contributions plan applying to the land:

Section 94 Contribution Plan No. 1 (2003 Amendment)

9. BUSH FIRE PRONE LAND

The land described in this certificate is not bush fire prone land as defined under the Environmental Planning and Assessment Act 1979.

ADDITIONAL INFORMATION PROVIDED UNDER SECTION 149(5) OF THE ACT

Environmental planning instruments or development control plans may place restrictions on matters such as:

- i) the purpose for which buildings, works or land may be erected, carried out or used;
- ii) the extent of development permitted;
- iii) minimum site requirements; and/or
- iv) the means of vehicular access to the land.

The instruments and the plans should be examined in relation to the specific restrictions which may apply to any development which may be proposed.

The land is subject to a Tree Preservation Order and Tree Management Policy, details of which are available at Council's Customer Service Centre.

There are exemptions from Council's Tree Preservation Order and Tree Management Policy relating to various species of trees; noxious trees; dying, dead or dangerous trees; and trees within three (3) metres of certain buildings.

Council has established a Significant Tree Register. Inclusion of a tree in the Register means that exemptions from the Tree Preservation Order will not apply to that tree.

Registers of Consents may be examined at Council's Customer Service Centre for particulars relating to development consents which may have been issued for the use or development of the land.

Enquiries regarding areas Reserved for County Road and County Open Space should be directed to the Roads and Traffic Authority and Department of Urban Affairs and Planning respectively.

The information provided concerning the Coastal Protection Act, 1979 is only to the extent that the Council has been notified by the Department of Public Works and Services.

FURTHER ADDITIONAL INFORMATION UNDER SECTION 149(5) OF THE ACT

The following Draft Development Control Plans apply to the land:-

City of Ryde Draft Development Control Plan 2006 Draft Development Control Plan No. 25 - Engineering Standards

Draft Development Control Plan No.55 - Macquarie Park Corridor, North Ryde.

Master Plan - Macquarie Park Corridor, North Ryde adopted 17 February 2004 applies to the land.

Subject to Sydney Water Requirements

The land is subject to a requirement arrangements satisfactory to Sydney Water are to be made for the pro vision of water and sewerage services to the land.

Sue Weatherley Group Manager – Environment and Planning



Cert No: 19201



Locked Bag 2069, North Ryde NSW 1670 DX 8403 Ryde Facsimile 9952 8070 Telephone 9952 8222

PLANNING CERTIFICATE UNDER SECTION 149 ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

 PLANNING
 Date:
 22/05/2006

 1979
 Receipt No:
 943414

 Reference:
 J28124

 Ptv Ltd
 Ptv Ltd

Applicant: HLA - Envirosciences Pty Ltd PO Box 726 PYMBLE NSW 2073

Property: 36-42 Waterloo Road, MACQUARIE PARK Description: LOT: 1 DP: 1069715

2 4 MAY 2006

Ppty Ref: 48771

INFORMATION PROVIDED PURSUANT TO SECTION 149(2) OF THE ACT.

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(d) CRITICAL HABITAT

NO. The land does not include or comprise critical habitat under the Ryde Planning Scheme.

(e) CONSERVATION AREA (however described)

NO. The land has not been identified as being within a heritage conservation area under \mathbf{t} he Ryde Planning Scheme.

(f) ITEMS OF ENVIRONMENTAL HERITAGE (however described)

NO. An item of environmental heritage under the Ryde Planning Scheme is not situated on the land.

OTHER PRESCRIBED INFORMATION

3. COASTAL PROTECTION

Whether or not the land is affected by the operation of section 38 or 39 of the Coastal Protection Act 1979, but only to the extent that the council has been so notified by the Department of Public Works

The land is not affected by the operation of section 38 or 39 of the Coastal Protection Act 1979.

4. MINE SUBSIDENCE

Whether or not the land is proclaimed to be a mine subsidence district within the meaning of section 15 of the Mine Subsidence Compensation Act 1961.

The land has not been proclaimed to be a mine subsidence district within the meaning of Section 15 of the Mine Subsidence Compensation Act, 1961.

5. ROAD WIDENING AND ROAD REALIGNMENT Whether or not the land is affected by any road widening

The land is not affected by any road widening or road realignment under:

(a) Division 2 of Part 3 of the Roads Act 1993,

(b) any environmental planning instrument

(c) any resolution of Council.

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6. COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

Whether or not the land is affected by a policy adopted by the council, or adopted by any other public authority and notified to the council for the express purpose of its

adoption by that authority being referred to in planning certificates issued by council, that restricts the development because of the likelihood of:

(i) landslip	NO
(ii) bush fire	NO
(iii) flooding	NO
(i∨) tidal inundation	NO
(v) subsidence	NO
(vi) acid sulphate soil	NO
(vii) other risk	NO

Note: The fact that land has not been identified as being affected by a policy to restrict development because of the risks referred to does not mean that the risk is non-existent.

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(a) Division 2 of Part 3 of the Roads Act 1993,

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(c) any resolution of Council.

6. COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

Whether or not the land is affected by a policy adopted by the council, or adopted by any other public authority and notified to the council for the express purpose of its



Our Ref: D06/037465 Your Ref: S4062801

13 JUN 2006

8 June 2006

Attention: Mr Alex Latham HLA Envirosciences PO Box 726 PYMBLE NSW 2073

Dear Mr Latham

RE SITE: 396 Lane Cove Rd, Macquarie Park

I refer to your search request of 02 June 2006 requesting information on licences to Keep Dangerous Goods for the above site.

A search of the Stored Chemical Information Database (SCID) and the microfiche records held by WorkCover has not located any records pertaining to the above-mentioned premises.

If you have any further queries, please contact Dangerous Goods Licensing staff on (02) 4321 5500.

Wilm

Gabriela Wilsmore A/Team Leader Dangerous Goods

WorkCover. Watching out for you.

WorkCover NSW ABN 77 682 742 966 92-100 Donnison Street Gosford NSW 2250 Locked Bag 2906 Lisarow NSW 2252 Telephone 02 4321 5000 Facsimile 02 4325 4145 WorkCover Assistance Service 13 10 50 DX 731 Sydney Website www.workcover.nsw.gov.au



Our Ref:D06/037466Email:gabriela.wilsmore@workcover.nsw.gov.auYour Ref:S4062801

8 June 2006

Attention: Mr Alex Latham HLA Envirosciences PO Box 726 PYMBLE NSW 2073

Dear Mr Latham

RE SITE: 1 Giffnock Ave, Macquarie Park

I refer to your search request of 02 June 2006 requesting information on a Licence to Keep Dangerous Goods on the above site.

Enclosed are copies of the documents, which WorkCover holds on Dangerous Goods Licence **35/034370** relating to the storage of dangerous goods at the above-mentioned premises as listed on the Stored Chemical Information Database (SCID).

If you have any further queries, please contact WorkCover's Dangerous Goods Licensing staff on (02) 4321 5500.

.. Uilm

Gåbriela Wilsmore Acting Team Leader Dangerous Goods

WorkCover. Watching out for you.

WorkCover NSW ABN 77 682 742 966 92-100 Donnison Street Gosford NSW 2250 Locked Bag 2906 Lisarow NSW 2252 Telephone 02 4321 5000 Facsimile 02 4325 4145 WorkCover Assistance Service **13 10 50** DX 731 Sydney Website www.workcover.nsw.gov.au



CONTRACT PHARMACEUTICAL SERVICES OF AUSTRALIA PTY. LTD.

Contract Manufacturers and Technical Consultants to the Pharmaceutical and Allied Industries

18th December 2001

WorkCover Authority **OHS Licencing Unit** Dangerous Goods Licencing GPO Box 5364 SYDNEY NSW 2001

RECEIVED SERVICE CENTRE 2 0 DEC 2001 WORKCOVER EW SOUTH WALES

Dear Sir,

. .

Re: Renewal of Licence for the Keeping of Dangerous Goods Premises At 1 Giffnock Avenue, North Ryde 2113 Licence No. 35/034370

The operations relating to the above premises will discontinue on the 18th January 2002. All hazardous materials will be held in adequate storage until the 31st January when the goods will be disposed of in accordance to current regulations. A letter confirming the closure and disposition will then be sent to WorkCover.

Attached, please find a spreadsheet outlining the current holding of hazardous materials in the various depots. You will note that the total amount in each category is below the licencable quantity.

Therefore, based on the above, renewal of the licence will not be required.

If you have any questions, please do not hesitate to contact the undersigned.

Kind Regards,

Lou Cattelan Technical Services Manager

Copy: Sol Cohen

		7 Flamma Cabinet	6 Flamma Cabinet			5 Flamma Cabinet				2 Roof	No.
		ble Liquids	ble Liquids			Flammable Liquids Cabinet		Flammable Liquids Cabinet	Roofed Stee	Roofed Store	Depot Type
	UN1155 Diethyl Ether UN1294 Toluene UN1120 2-Butanol	UN1230 Methanol UN2319 Terpene Hydrocarbons, NOS	UN1155 Diethyl Ether	UN12U8 Hexanes UN1648 Acetonitrile UN1230 Methanol	UN1155 Diethyl Ether UN1170 Ethanol	UN1131 Carbon Disulfide	UN1197 Extracts, Flavouring Liquid	UN2319 Terpene Hydrocarbons, NOS UN1170 Ethanol	UN1789 Hydrochloric Acid	UN1824 Sodium Hydroxide Solution	Goods Stored
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				· . ,			1000 Litres			500 lines	at 12/12/01

DANGEROUS GOODS HELD AT No.1 GIFFNOCK AS AT 12TH DECEMBER

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ChemCARE Consulting Pty Ltd 77A Copeland Road BEECROFT 2119 AUSTRALIA Phone:02 9484 0506 Fax:02 9980 6555 Mobile:0419 333 900 e-mail: rolandc@chemcare.com.au Chief Inspector of Dangerous Goods WorkCover Authority NSW GPO Box 5364 Sydney 2001 A DEC 1999 35/ New Contract Pharmaceutical Services of Australia 1 Gifford Road North Ryde

Dear Ms Rowlands

Please find herewith, the application for a site Dangerous Goods Storage Licence for the subject site. The site is not presently licensed.

As the application involves to storage of Class 3 DG only in indoor cabinets of approved type or in minor storage area and Class 8 DG in two minor storage areas, no stamped depot drawings have been attached.

The Class 3 indoor cabinet of 850 L capacity, bears the WorkCover approval Number N99001Q.

The two Class 8 depots are floor level locations in which 20 L kegs are kept in a plastic tray made from cut-down plastic IBCs. The bunding material is compatible with the liquids kept and each bund is of complying capacity.

Each depot is correctly placarded and a fire extinguisher of correct type is deployed so as to service all depots.

Please phone if you have need of further information and advise outcome of request as soon as possible.

Best regards,

Roland Churches. Director 15 December, 1999

Attached: Application for licence

Site sketch

Signed application forms A and D

CLAIRE,

I WILL RING TUESDAY NEXT WEEK TO

OBTAIN LICENCE NO. FOR CLIENT. THE LATTER NEEDS THE NUMBER TO ADVISE ROSEMUND SCHUMMN

AT LINDFIELD.

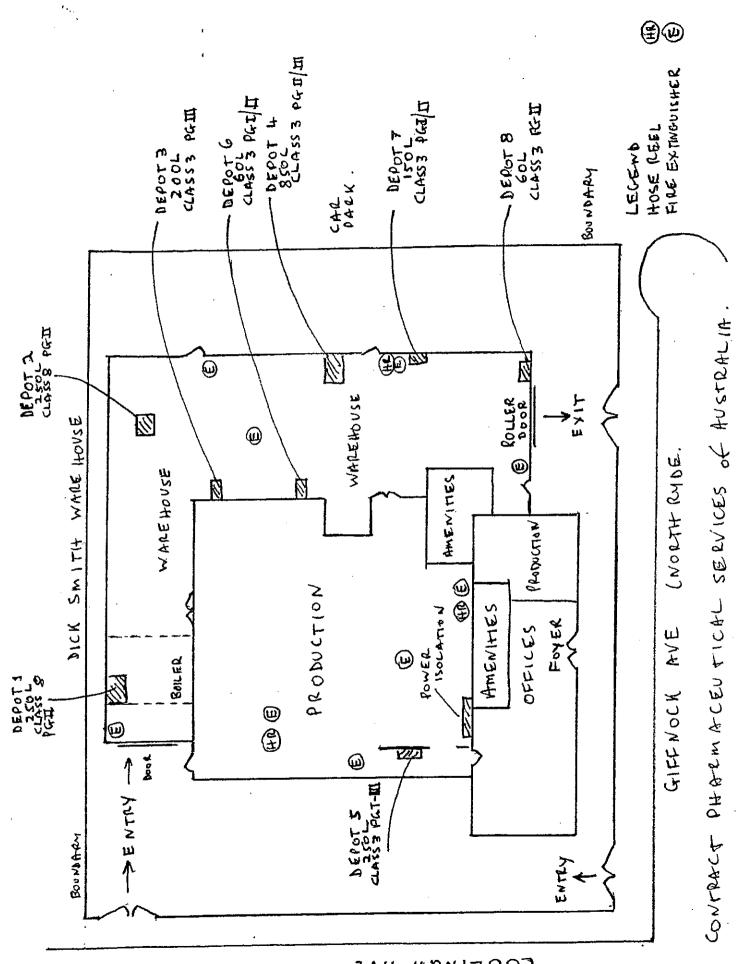
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Abplication for Licence to Keep Dangerous Goods



amenolment. renewal of Application for **FB** | Ta di li na gra i e si å 17 å ,€ⁿetted^a e Bail 谢谢 - 谢静 中花小小小小小小 الالمتنكلم er#sat 621 53 ale gille fai di' Cargo (Million da Cala engligter op Aland-Altra Antiantes #GmAdøynCfradel art fra 119 Olaitaina Man-dallinin an dilata' ೆಗಾಡಿ <u>a c</u>hrachtt t ka şi. , Timpipini Fan, d Minister minist your excellence, marland CCANFEDEN/BAL, Icr

Dangerous Goods Licensing, Level 3, Locked Bag 10, Clarence Street, SYDNEY NSW 2000



JVA ADVILOD)

What is a depot? See page 5 of the Guidance Notes. PART C - Dangerous Goods Storage Complete one section per depot. If you have more depots than the space provided, photocopy sufficient sheets first. Maximum Đê ROOFED 8 250L STORF Proper Shipping Nam uanti SODIUM HYDROXIDE607 1824 8 Sodiin bytraide 60 2 T 200 #2 ROOFED 8 STORE () 250 L Productor bydrochloric Aid T E HYDRECHORIC ACID 1789 200 L STOPPLE MINDR 3 STORE 3 KACTED 100 L n<mark>oriosisoria</mark> Smishirosinipios Typical & Unit e manuive da kg **Limb**er Spinoping, Neimer CENSS (LAR. (II) nuantity. ²₽ TERPENE HYDROCHEBON 2319 Ĩ TEATROE OIL 150 L Section Store N99002 9MO: 850 L 3 CABINEL INTERNAL lypical s oduchoj 1170 600 Ethanol ETHANOL 3 T Fea Tree Oil 60 1197 EXTRACTS ARONATIC LIQUIS 111

What is a depot? See page 5 of the Guidance Notes. **PART C – Dangerous Goods Storage** Complete one section per depot.

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If you have more depots than the space provided, photocopy sufficient sheets first.

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What is a depot? See page 5 of the Guidance Notes. **PART C - Dangerous Goods Storage** Complete one section per depot.

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If you have more depots than the space provided, photocopy sufficient sheets first.

Depot Nomber	ମିଏମହ ହାର୍ଥ୍ୟର ଜଣ୍ଡ	ু ভ ায়ালণ		Decer Class	n Store	National diversion of the second s Second second	
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PART C -	pot? See page,5 of the Gui - Dangerous Good	s Storage				
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ADVANCE LEGAL SEARCH PTY LIMITED

(ACN 077 067 068) ABN 49 077 067 068

PO Box 149 Yagoona NSW 2199
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 +612
 9754
 1364

 Email:
 alsearch@optusnet.com.au

29 May 2006

HLA-ENVIROSCIENCES PTY LIMITED P O Box 726 PYMBLE NSW 2073

Attention: Alex Syriatowicz

RE: 396 Lane Cove Road, Macquarie Park, & 1 Griffnock Avenue, North Ryde Purchase Order: 141141 Reference No: S4062801

- Note 1: Folio Identifier 1/1069715
- Note 2: Folio Identifier 21/602327

Note 1:

Current Search

Folio Identifier 1/1069715 (title attached) DP 1069715 (plan attached) Dated 22 May 2006 Registered Proprietor: **MIFF PTY LIMITED**

Title Tree Lot 1 DP 1069715

Folio Identifier 1/1069715

Folio Identifier 9/1044956

Folio Identifier 12/1044956

Folio Identifier 20/602327

Certificate of Title Volume 13892 Folio 111

(a)	(b)	(c)	(d)
CT 12711-169	CT 12786-17	CT 13433-247	CT 13448-199
CT 3125-165	CT 3106-242	CT 12726-163	CT 12639-110
CT 2676-35	CT 2676-35	CT 2868-151	CT 2522-148
CT 2529-146	CT 2529-146	CT 2529-146	CT 846-141
CT 846-141	CT 846-14 1	CT 846-141	****
****	****	***	

-3-

Summary of proprietors Lot 1 DP 1069715

Year

Proprietor

	(Lot 1 DP 1069715)
2004 - todate	Miff Pty Limited
(2004 – todate)	(Various Lease See Folio Identifier 1/1069715)

(Lot 9 DP 1044956)	(Lot 12 DP 1044956)
2002 – 2004	2002 - 2004
Miff Pty Limited	Miff Pty Limited
Will I ty Diffice	(2002 - 2004)
· · ·	(Various Leases See Historical Folio
	12/1044956 & Folio Identifier 1/1069715)

- + a	(Lot 20 DP 602327)
1988-2002	Miff Pty Limited
(1988 – 2002)	(Various Leases See Historical Folio 20/602327)
(1100	(Lot 20 DP 602327- CT Vol 13892 Fol 111)
1981 - 1988	Miff Pty Limited
(1981 – 1993)	(Lease to Dick Smith (Wholesale) Pty Limited)
(1981 – todate)	(Lease to The Sydney County Council of substation No.5395)
1980 - 1981	Dick Smith (Wholesale) Pty Limited
1979 - 1980	Local Government Superannuation Board

See Notes (a), (b), (c) & (d)

Note (a)

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	(Lot 1 DP 575223 - CT Vol 12711 Fol 169)
1979 - 1979	Local Government Superannuation Board
1975 - 1979	Eutectic (Australia) Pty Limited
1975 - 1975	Maria Josephine Teresa Papallo, widow
	Ben Papallo, motor mechanic
	John Papallo, manager
	Jack Papallo, boot maker
	Joseph Papallo, storeman
	(Part Lot 14 DP 7179 being Part Portion 139 Parish Hunters Hill -
	Area 1 Rood 32 ½ Perches - CT Vol 3125 Fol 165)
1972 - 1975	Maria Josephine Teresa Papallo, widow
	Ben Papallo, motor mechanic
	John Papallo, manager
	Jack Papallo, boot maker
	Joseph Papallo, storeman
1967 - 1972	Frank Papallo, boot maker
	Ben Papallo, motor mechanic
	John Papallo, manager
	Jack Papallo, boot maker
	Joseph Papallo, storeman
1955 - 1967	Mary Philomena Papallo
1947 – 1955	George Papallo, retired
	Mary Philomena Papallo
1943 - 1947	Joseph Phillip Harrington, electrician
1920 - 1943	Bridget Mary Harrington, wife of electrician
	(Part Lot 14 DP 7179 being part Portion 139 Parish Hunters Hill -
	Area 3 Roods 33 Perches - CT Vol 2676 Fol 35)
1916 - 1920	Herbert Wheatley Holmes, machinist
	(Lot 14 DP 7179 being Part Portion 139 Parish Hunters Hill - Area
	1 Acres 3 Roods 39 Perches - CT Vol 2529 Fol 146)
1914 - 1916	Philippa Jane Werner, married woman
	(Part Portion 139 parish Hunters Hill - Area 16 Acres 1 Rood 36
	Perches - CT Vol 846 Fol 141)
1887 - 1914	John George Schweikert, orchardist

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Note (b)

· · · · · · · · · · · · · · · · · · ·	(Lot 1 DP 576296 - CT Vol 12786 Fol 17)
1979 - 1979	Local Government Superannuation Board
1975 – 1979	Eutectic (Australia) Pty Limited
1975 – 1975	James Gall, builders foreman
	Gordon Gall, supervisor
1975 – 1975	William Gall, builders foreman
	Gordon Gall, supervisor
	James Gall, builders foreman
	(Part Lot 14 DP 7179 being Part Portion 139 Parish Hunters Hill -
	Area 2 Rood 0 ½ Perches - CT Vol 3106 Fol 242)
1966 - 1975	William Gall, Gordon Gall, carter
	James Gall, builders foreman
1957 – 1966	William Gall, carter
1920 - 1957	William Gall, carter
	Janet Gall
	(Part Lot 14 DP 7179 being part Portion 139 Parish Hunters Hill -
	Area 3 Roods 33 Perches - CT Vol 2676 Fol 35)
1916 - 1920	Herbert Wheatley Holmes, machinist
	(Lot 14 DP 7179 being Part Portion 139 Parish Hunters Hill - Area
	1 Acres 3 Roods 39 Perches - CT Vol 2529 Fol 146)
1914 – 1916	Philippa Jane Werner, married woman
	(Part Portion 139 parish Hunters Hill - Area 16 Acres 1 Rood 36
	Perches - CT Vol 846 Fol 141)
1887 - 1914	John George Schweikert, orchardist

Note (c)

	(Lot 1 DP 591284 - CT Vol 13433 Fol 247)
1979 – 1979	Local Government Superannuation Board
1977 – 1979	Eutectic (Australia) Pty Limited
	(Lot 1 DP 575222- CT Vol 12726 Fol 163)
1975 – 1977	Eutectic (Australia) Pty Limited
1975 – 1975	Maria Josephine Teresa Papallo, widow
	Ben Papallo, motor mechanic
	John Papallo, manager
	Jack Papallo, boot maker
	Joseph Papallo, storeman
	(Part Lot 14 DP 7179 being Part Portion 139 Parish Hunters Hill -
	Area 1 Acre 0 Rood 6 Perches - CT Vol 2868 Fol 151)
1972 – 1975	Maria Josephine Teresa Papallo, widow
	Ben Papallo, motor mechanic
	John Papallo, manager
	Jack Papallo, boot maker
	Joseph Papallo, storeman
1968 – 1972	Frank Papallo, boot maker
	Ben Papallo, motor mechanic
	John Papallo, manager
	Jack Papallo, boot maker
	Joseph Papallo, storeman
1955 – 1968	Mary Philomena Papallo
1947 – 1955	George Papallo, retired
	Mary Philomena Papallo
1918 – 1947	Joseph Phillip Harrington, electrician
	(Lot 14 DP 7179 being Part Portion 139 Parish Hunters Hill - Area
	1 Acres 3 Roods 39 Perches - CT Vol 2529 Fol 146)
1914 - 1918	Philippa Jane Werner, married woman
	(Part Portion 139 parish Hunters Hill - Area 16 Acres 1 Rood 36
	Perches - CT Vol 846 Fol 141)
1887 - 1914	John George Schweikert, orchardist

Note (d)

	(Lot 2 DP 591400 - CT Vol 13448 Fol 199)		
1979 - 1979	Local Government Superannuation Board		
1977 – 1979	Eutectic (Australia) Pty Limited		
	(Lot 1 DP 573552- CT Vol 12639 Fol 110)		
1975 – 1977	Eutectic (Australia) Pty Limited		
1974 - 1975	Canalete Pty Limited		
	(Lot 13 DP 7179 being Part Portion 139 Parish Hunters Hill - Area		
	3 Acres 0 Roods 0 ½ Perches - CT Vol 2522 Fol 148)		
1974 – 1974	Canalete Pty Limited		
1973-1974	I.C.D Traders Pty Limited		
1966 - 1973	Sanjan No.2 Pty Limited		
1943 - 1966	Maud Elizabeth Walters, widow		
1938 - 1943	Arthur William Redding, labourer		
1919 - 1938	Bartolo Butta, fruiterer		
1916-1919	Iguazio Allotta, orchardist		
1914 - 1916	Antonio Caffarella, fruiterer		
	(Part Portion 139 parish Hunters Hill - Area 16 Acres 1 Rood 36		
	Perches - CT Vol 846 Fol 141)		
1887 - 1914	John George Schweikert, orchardist		

Note 2:

Current Search

Folio Identifier 21/602327 (title attached) DP 602327 (plan attached) Dated 22 May 2006 Registered Proprietor: **MIFF PTY LIMITED**

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Title Tree Lot 21 DP 602327

Folio Identifier 21/602327

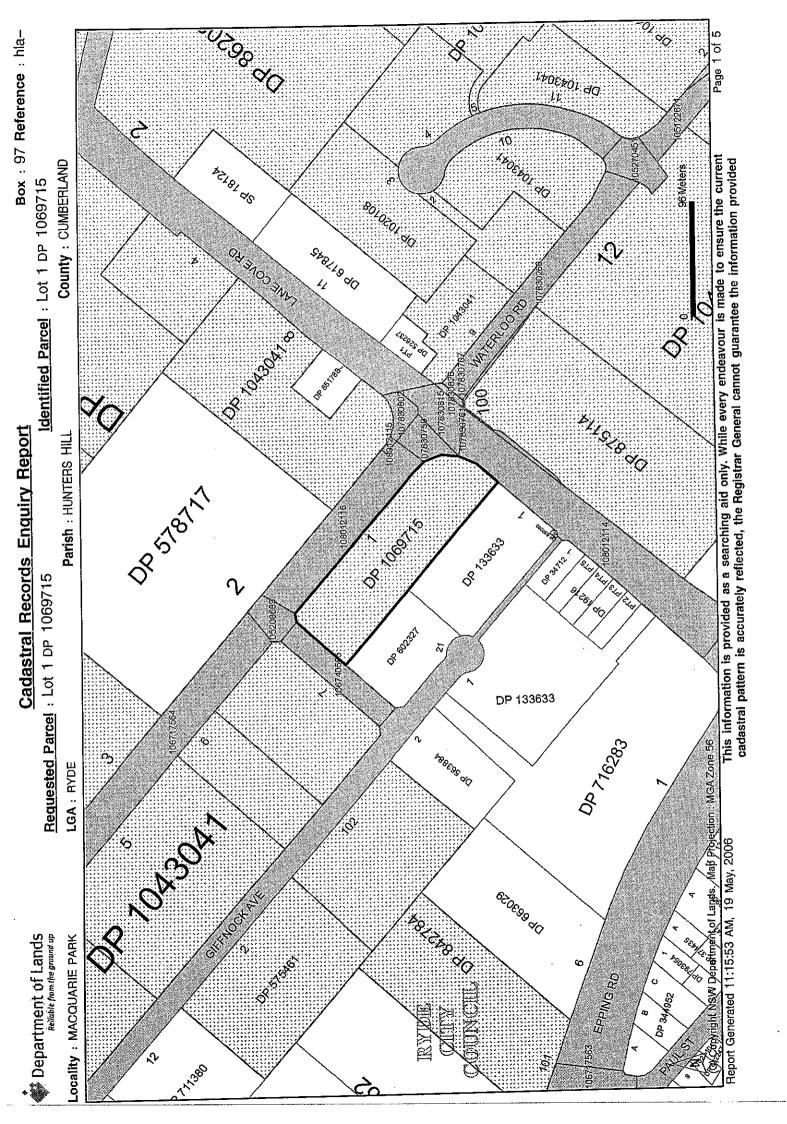
Certificate of Title Volume 13892 Folio 112 Certificate of Title Volume 13448 Folio 199 Certificate of Title Volume 12639 Folio 110 Certificate of Title Volume 2522 Folio 148 Certificate of Title Volume 846 Folio 141

Summary of proprietors Lot 21 DP 602327

Year

Proprietor

	(Lot 21 DP 602327)		
1988 – todate	Miff Pty Limited		
(2002 – todate)	(Lease to D Link Australia Pty Limited)		
(1988 - 2002)	(Various Leases See Historical Folio 21/602327)		
(1900-2002	(Lot 21 DP 602327- CT Vol 13892 Fol 112)		
1984 1988	Miff Pty Limited		
(1984 - 1988)	(Lease to Samuelson Film Services (Australia) Pty Limited)		
(1984 - 1986) (1980 - 1984)	(Lease to Second Low Land Australia Pty Limited)		
<u>1979 – 1984</u>	Local Government Superannuation Board		
1779-1704	(Lot 2 DP 591400 - CT Vol 13448 Fol 199)		
1979 – 1979	Local Government Superannuation Board		
<u>1977 – 1979</u>	Eutectic (Australia) Pty Limited		
	(Lot 1 DP 573552 - CT Vol 12639 Fol 110)		
1975 – 1977	Eutectic (Australia) Pty Limited		
1974 – 1975	Canalete Pty Limited		
1977 19770	(Lot 13 DP 7179 being Part Portion 139 Parish Hunters Hill - Area		
	3 Acres 0 Roods 0 ½ Perches - CT Vol 2522 Fol 148)		
1974 1974	Canalete Pty Limited		
1973- 1974	I.C.D Traders Pty Limited		
1966 - 1973	Sanjan No.2 Pty Limited		
1943 – 1966	Maud Elizabeth Walters, widow		
1938 - 1943	Arthur William Redding, labourer		
1919 - 1938	Bartolo Butta, fruiterer		
1916-1919	Iguazio Allotta, orchardist		
1914 – 1916	Antonio Caffarella, fruiterer		
	(Part Portion 139 Parish Hunters Hill - Area 16 Acres 1 Rood 36		
	Perches - CT Vol 846 Fol 141)		
1887 - 1914	John George Schweikert, orchardist		



Information Provided Through

Advance Legal Search Pty Ltd

Title Search

EziSearch An Approved LPI NSW Information Broker

Ph. 0297541590 Fax. 0297541364

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 1/1069715

SEARCH DATE	TIME	EDITION NO	DATE
22/5/2006	1:50 PM	3	14/3/2005

LAND

LOT 1 IN DEPOSITED PLAN 1069715 AT MACQUARIE PARK LOCAL GOVERNMENT AREA: RYDE PARISH OF HUNTERS HILL COUNTY OF CUMBERLAND TITLE DIAGRAM: DP1069715

FIRST SCHEDULE

MIFF PTY LIMITED

SECOND SCHEDULE (9 NOTIFICATIONS)

- 1. RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2. THE LAND ABOVE DESCRIBED IS LIMITED IN STRATUM IN THE MANNER DESCRIBED IN IN THE TITLE DIAGRAM
- 3. \$331800 LEASE TO THE SYDNEY COUNTY COUNCIL OF SUBSTATION PREMISES NO. 5395 TOGETHER WITH R.O.W. & EASEMENT FOR ELECTRICITY PURPOSES OVER OTHER PART OF THE LAND WITHIN DESCRIBED EXPIRES 1-1-2030
- 4. 9420523 LEASE TO MAN B & W DIESEL AUSTRALIA PTY LIMITED OF PT OF GROUND FLOOR (TECHNICAL SPACE & WAREHOUSE), PLANT ROOM & LANDING AREA ON LEVEL 1, & PT OF OFFICE AT LEVEL 1, KNOWN AS 396 LANE COVE RD, NORTH RYDE SHOWN HATCHED IN PLAN (PAGE 22) WITH 9420523. EXPIRES: 31/3/2012. OPTION OF RENEWAL: 5 YEARS.
- 5. 9753724 LEASE TO FULFILNET AUSTRALIA PTY LIMITED OF OFFICE AREA 6, 1ST FLOOR, 396 LANE COVE RD, NORTH RYDE AS SHOWN HATCHED (PAGES 14 & 15) IN PLAN WITH 9753724. EXPIRES: 14/6/2008. OPTION OF RENEWAL: 5 YEARS.
- 6. 9753725 LEASE TO THE STATE RAIL AUTHORITY OF NEW SOUTH WALES OF OFFICE AREA 2 AT LEVEL 1 AND OFFICE 4 AT GROUND FLOOR, 396 LANE COVE ROAD, NORTH RYDE AS SHOWN HATCHED (PAGES 14 TO 16) IN PLAN WITH 9753725. EXPIRES: 31/12/2008.
- 7. AA200771 LEASE TO THE STATE RAIL AUTHORITY OF NEW SOUTH WALES OF THE PART OF THE LAND ABOVE DESCRIBED FORMERLY COMPRISED IN LOT 12 DP1044956 COMMENCES 1/1/2004. EXPIRES: 31/12/2008.
- 8. AB177885 LEASE TO AUSTRALIAN BUSINESS TELEPHONE CO PTY LIMITED OF OFFICE ARÉA 5 & WAREHOUSE 2, 396 LANE COVE ROAD, NORTH RYDE. EXPIRES: 31/12/2009. OPTION OF RENEWAL: 5

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END OF PAGE 1 - CONTINUED OVER

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LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 1/1069715

PAGE 2

SECOND SCHEDULE (9 NOTIFICATIONS) (CONTINUED)

YEARS.

9. AB289018 LEASE TO ENERGYAUSTRALIA OF SUBSTATION PREMISES 8387 "WATERLOO COOLINGA NO 2" AS SHOWN IN PLAN WITH AB289018 TOGETHER WITH RIGHT OF WAY AND EASEMENT FOR ELECTRICITY PURPPOSES OVER ANOTHER PART OF THE LAND ABOVE DESCRIBED. EXPIRES: 31/12/2054.

NOTATIONS

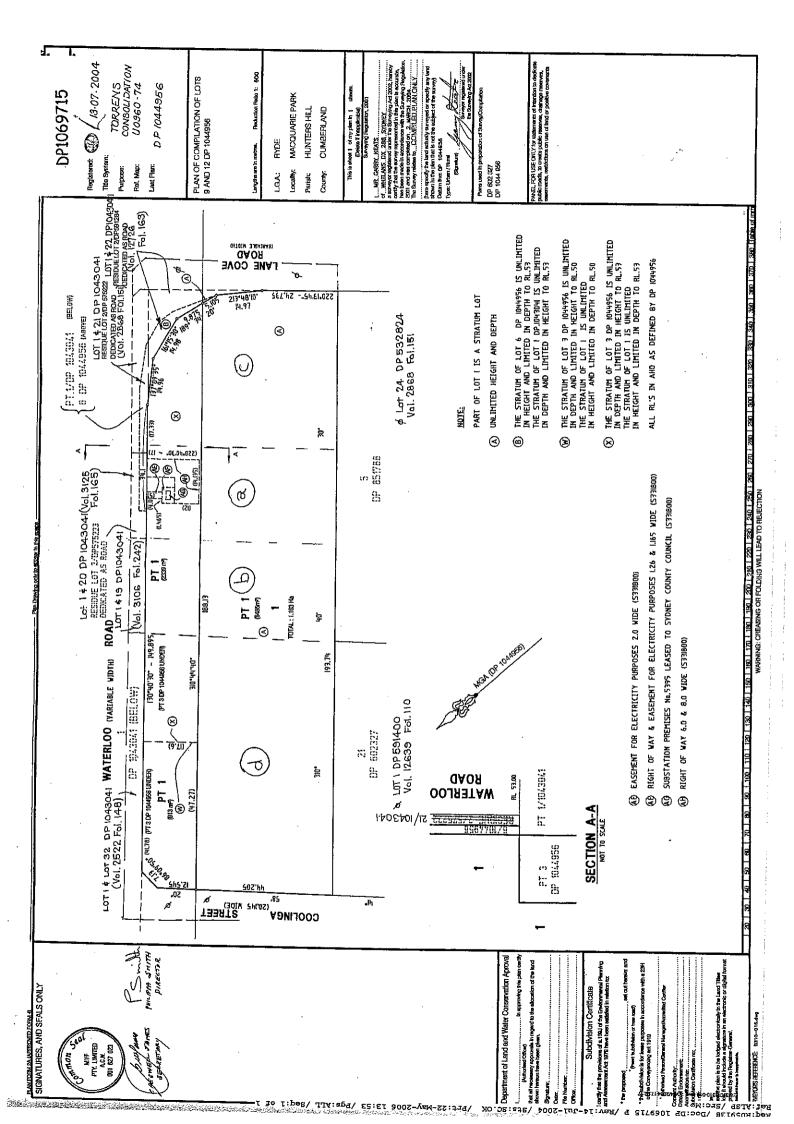
UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

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Title Search

EziSearch An Approved LPI NSW Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 21/602327

SEARCH DATE	TIME	EDITION NO	DATE
23/5/2006	7:10 PM	3	5/7/2002

LAND

LOT 21 IN DEPOSITED PLAN 602327 AT NORTH RYDE LOCAL GOVERNMENT AREA: RYDE PARISH OF HUNTERS HILL COUNTY OF CUMBERLAND TITLE DIAGRAM: DP602327

FIRST SCHEDULE

MIFF PTY LIMITED

(T V222363)

SECOND SCHEDULE (2 NOTIFICATIONS)

1. RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)

2. 8745999 LEASE TO D-LINK AUSTRALIA PTY LIMITED EXPIRES: 31/7/2007. OPTION OF RENEWAL: FOUR YEARS.

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

HLA - Macquarie Park ALSP

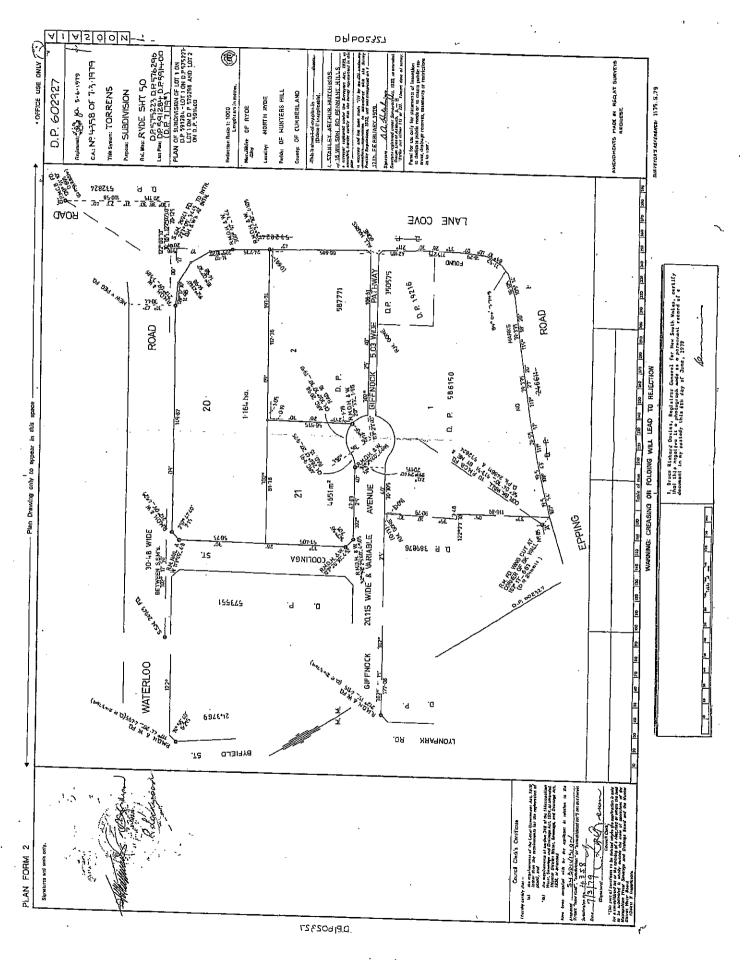
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Historical Search

EziSearch An Approved LPI NSW Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL' SEARCH

12/1044956

FOLIO: 1/1069715

First Title(s): OLD SYSTEM Prior Title(s): 9/1044956

Recorded	Number	Type of Instrument	C.T. Issue
13/7/2004	DP1069715	DEPOSITED PLAN	FOLIO CREATED
13/7/2004	AA796482	DEPARTMENTAL DEALING	
2/2/2005	AB260647	DEPARTMENTAL DEALING	
3/2/2005	AB177885	LÊASÊ	EDITION 2
14/3/2005	AB289018	LEASE	EDITION 3

** END OF SEARCH ***

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Historical Search

EziSearch An Approved LPI NSW Information Broker

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE

FOLIO: 9/1044956

First Title(s): OLD SYSTEM Prior Title(s): 20/602327

Recorded	Number	Type of Instrument	C.T. Issue
20/12/2002	DP1044956	DEPOSITED PLAN	LOT RECORDED FOLIO NOT CREATED
12/11/2003	AA151060	DEPARTMENTAL DEALING	FOLIO CREATED CT NOT ISSUED
12/11/2003	AA151164	DEPARTMENTAL DEALING	
14/11/2003	AA157889	DEPARTMENTAL DEALING	EDITION 1
13/7/2004	DP1069715	DEPOSITED PLAN	FOLIO CANCELLED

*** END OF SEARCH ***

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PRINTED ON 22/5/2006

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Historical Search

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22/05/2006

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

FOLIO: 12/1044956

First Title(s): OLD SYSTEM Prior Title(s): 20/602327

Recorded Nu	mber	ype of Instrument	C.T. Issue
	1044956 DI	EPOSITED PLAN	LOT RECORDED FOLIO NOT CREATED
12/11/2003 AA	151060 DI	EPARTMENTAL DEALING	FOLIO CREATED CT NOT ISSUED
12/11/2003 AA	151164 DI	EPARTMENTAL DEALING	
8/3/2004 97	75407 RI	EQUEST	
8/3/2004 AA	443392 DI	ETERMINATION OF LEASE	
8/3/2004 AA	200503 Li	EASE	
8/3/2004 AA	200771 Ll	EASE	EDITION 1
13/7/2004 DP	1069715 DI	EPOSITED PLAN	FOLIO CANCELLED

*** END OF SEARCH *

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Information Provided Through Advance Legal Search Pty Ltd Ph 0297541590 Fax. 0297541364

Historical Search

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Page 1 of 1

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - HISTORICAL SEARCH

SEARCH DATE ____ 22/5/2006 7:17PM

FOLIO: 20/602327

First Title(s): SEE PRIOR TITLE(S) Prior Title(s): VOL 13892 FOL 111

Service States

Recorded	Number	Type of Instrument	C.T. Issue
28/3/1988		TITLE AUTOMATION PROJECT	LOT RECORDED FOLIO NOT CREATED
1/9/1988		CONVERTED TO COMPUTER FOLIO	FOLIO CREATED CT NOT ISSUED
28/6/1989	Y449562	TRANSFER OF MORTGAGE	EDITION 1
8/9/1989	¥583932	TRANSFER OF MORTGAGE	EDITION 2
12/4/1990	¥947295	DISCHARGE OF MORTGAGE	EDITION 3
16/12/1993	1863560	LEASE	EDITION 4
6/9/1996	2439919	LEASE	EDITION 5
15/1/1999	5526986	VARIATION OF LEASE	EDITION 6
20/12/2002	DP1044956	DEPOSTTED PLAN	
19/5/2003	9620750	DEPARTMENTAL DEALING	
14/7/2003	9786144	DEPARTMENTAL DEALING	
25/7/2003	9420523	LEASE	
8/10/2003 8/10/2003	9753724 9753725	LEASE LEASE	
31/10/2003 31/10/2003	9306130 9411705	REQUEST REQUEST	
11/11/2003 11/11/2003	9753726 9433361	REJECTED - LEASE REQUEST	FOLIO CANCELLED

END OF SEARCH 4.4.4

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