



Industrial Land Contamination - Reducing Your Risk

Executive Summary

- Environmental risk identification is now proving to be a crucial stage in the process of marketing industrial property for sale.

In order to maximise return from the sale of potentially contaminated land, a vendor should seek to minimise the environmental and financial risks a purchaser is asked to accept in the contract of sale.

- A vendor should know the extent of potential risk allowing time to conduct environmental assessments and establish a strategy to deal with the issues before going to the market.
- The risks of incomplete information during the sale process include losing a potential purchaser, failed due diligence, litigation and an unwillingness of financiers to approve loans.
- Remediation can be a costly process, a preliminary site investigation typically ranges from \$2,000 - \$4,000 whilst a detailed site investigation ranges from \$15,000 / ha - \$25,000 / ha for larger sites (as at October 2004).
- Most buyers of industrial land expect that an environmental report should contain the processes involved in identifying, remediating and the certification of use for contaminated sites.
- If a complete understanding of the contamination issues exists, vendors and purchasers are well positioned to negotiate the best outcome on price, terms and risk.

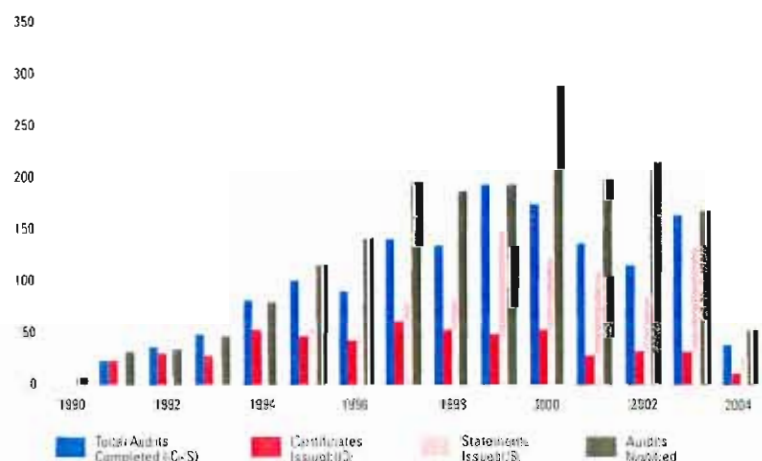
- In an age of increasing liability and stricter environmental regulation, environmental due diligence on all types of property, particularly industrial, will become essential.

Introduction

There have been an increasing number of industrial land transactions that have not reached settlement, end up in litigation or fail the due diligence process as a result of the potential liabilities and risks faced by purchasers and vendors when selling contaminated land. Resolving these issues can be an extremely costly and complex exercise for both the vendor and purchaser. (Chart 1)

Environmental risk identification is now proving to be a crucial stage in the process of marketing industrial property for sale. This paper aims to outline a vendor's legal obligations when faced with contaminated land and offers a road map that mitigates future liability and investment risk in order to maximise the potential sale price.

Chart 1: No. of environmental audits conducted in Victoria



Source: EPA Victoria

Land use activities causing contamination include:

- Disposal of wastes (controlled or uncontrolled);
- Onsite filling or levelling of land;
- Accidental spillage;
- Leakage during plant operation;
- Spreading of raw sewage sludge;
- Air fallout from an adjoining chimney;
- Migration of contaminants into a site from neighbouring land, either as a vapour, leachate or movement of liquids through the soil;
- Use of agricultural chemicals; and
- Hazardous contaminants from building demolition.

Issues for the Vendor

In order to maximise return from the sale of land, a vendor should seek to minimise the risks a purchaser is asked to accept in the contract of sale.

This task involves two elements that can be described as ‘risk identification’ and ‘risk allocation’. Risk identification is where the vendor assesses the likely levels of contamination from previous uses of the land. Under the *Environment Protection Act 1970* (Vic), the ‘polluter pays’ principles applies which means that a vendor has ongoing liability for land contamination it has caused or contributed to. The ‘risk allocation’ element refers to the vendor allocating responsibility for such liability to the purchaser in a contract of sale.

Risk Identification

In order to identify the risks of liability for contaminated land, a vendor has two options. Vendors can choose to engage an environmental consultant to conduct testing and analysis and ultimately produce a report for due diligence purposes. Alternatively, a vendor may engage an EPA-accredited environmental auditor who will

conduct an environmental audit in accordance with the statutory environmental audit system.

A statutory environmental audit is likely to provide a vendor and purchaser with a greater level of certainty of the land contamination risks. The auditor will issue either a Certificate (certifies that the site is suitable for all uses) or a Statement of Environmental Audit (certifies that the land has been cleaned up for certain beneficial uses of the land, but not for others).

This may result in the purchaser being prepared to offer a higher price for the land, or accept more of the risk under the contract of sale.

Risk Allocation

A vendor may seek to allocate the risk of liability for contaminated land to a purchaser by including warranties and indemnities in a contract of sale. However, an indemnity will not be enforceable against a third party.

Taking extra steps to identify risks at the ‘risk identification’ stage, can reduce the uncertainty associated with a vendor’s liability for contaminated land.

Therefore, if the purchaser onells the land, any indemnity will not be enforceable against the subsequent purchaser.

This will alert a purchaser and subsequent ‘occupiers’ of the land to the levels of contamination as well as any action required to contain pollution. If a vendor undertakes a Certificate or Statement of Environmental Audit, both parties will be better informed on the level of environmental risk, and therefore the purchaser may be more willing to accept responsibility for such risk and possibly even pay a higher price for the property.

Where the risks associated with land contamination are significant, the parties may consider obtaining insurance to minimise these risks. For example, clean up cost cap insurance covers the insured for clean up costs in excess of the anticipated costs of remediation. Vendors, purchasers and lenders can be named on one policy.

Issues for the Purchaser

A purchaser of industrial land should also ascertain the environmental condition of any site it proposes to buy and consider whether it is willing to accept the risks associated with any land contamination. Land contamination risks may be allocated to the purchaser under the contract of sale and also arise under the *Environment Protection Act 1970* (Vic) which potentially makes an occupier of land liable for remediation of land contamination, even if the occupier is not the polluter. Although a purchaser can seek to recover the costs of 'clean up' from the actual polluter, it would need to prove that the alleged polluter caused the pollution. The purchaser's successful recovery of costs would also depend on whether the 'polluter' can actually pay the costs.

The *Environment Protection Act 1970* (Vic) also provides mechanisms by which a purchaser may be alerted to pollution of certain land. If an occupier of land has been issued with a notice or a Statement of Environmental Audit, they are required to provide details to any person who proposes to become the occupier of the premises. In addition, the Environment Protection Authority's (EPA) Priority Sites Register lists all sites for which the EPA has issued a clean-up notice or a pollution abatement notice. The Priority Sites Register may be searched by anyone wishing to ascertain whether a site is known to be contaminated.

Environmental Site Assessments

There are two types of environmental assessment; one is an assessment solely for the purpose of due diligence that requires a lower level of assurance, and secondly one in accordance with EPA guidelines and likely to go through the environmental audit process.

An assessment in accordance with the EPA guidelines is usually divided into two stages:

1. ESA Phase I - also known as a Preliminary Site Investigation (PSI)

2. ESA Phase II - also known as a Detailed Site Investigation (DSI)

Phase I Investigation or Preliminary Site Investigation

An initial investigation of a property is essentially a desktop study and site walkover and should assess the need for further investigation. The desktop review involves assessing site history for contaminating activities, the nature of contamination and reviewing the site's geology, soil, groundwater and topography to assess the interaction of contamination with the environment.

A thorough historical investigation is essential to a site investigation and can save money and time in the long run.

Typically an ESA Phase I costs between \$2,000 and \$4,000 (as at October 2004).

If potential for contamination is found a Phase II ESA should be undertaken.

Phase II Investigation or Detailed Site Investigation

The Phase II investigation includes sampling of soil and groundwater to derive the nature and extent of contamination. Often, if the site is known to be contaminated prior to commencing, then it is prudent to combine the Phase I and Phase II investigations into one study.

It is important to note that the level of investigation undertaken at a site is often determined by the client's budget and whether the assessment is complying or non-complying with EPA guidelines. A higher level of assessment is required if the site is to be audited.

Typically on a large site of several hectares, costs can range from \$15,000/hectare to \$25,000/hectare. Smaller sites start from about \$8 000 (as at October 2004).

Detailed Contamination Investigation



Often further work is required to accurately delineate the extent of contamination and to devise a remediation strategy and prepare a cost for clean up of the site. This type of investigation usually only occurs on substantially contaminated sites and is required to reduce the uncertainty remaining after the Phase II Investigation.

The Remediation Process

Once remediation is required, the process involves preparing a Remediation Action Plan (RAP), undertaking remediation, confirming the success by validation and independent review of the process by an auditor.

As remediation can be very expensive, the best solution requires a team of contractor, consultant and auditor that work together quickly, efficiently and creatively from the outset.

This RAP sets out how the contamination will be cleaned up and covers community consultation, occupational health and safety and environmental monitoring programs. These requirements, as well as those for the process of site remediation and subsequent validation, are usually reported in the RAP.

The remediation process depends on the type of contaminants and the available technology and time. The preferred order of remediation is as follows:

1. On site treatment
2. Off site treatment
3. Isolation (cover with a suitably designed barrier)
4. Disposal to an approved facility or site
5. Land use restriction (i.e. choose a less sensitive land use)
6. Remain in-situ (with appropriate environmental controls)

Some of the more common site remediation methods are outlined below:

Soil	Groundwater
Bioremediation	Pump and treat
Chemical or thermal destruction	In-situ microbial degradation
Dig and dump	In-situ chemical degradation
Cap and contain	Monitored natural attenuation
Immobilisation	Phytoremediation
Phytoremediation (the use of plants)	

Generally speaking, "Dig and Dump" is the quickest remediation method and will remove environmental liability, however it is very costly and does not fit in with the EPA's waste hierarchy.

Conversely on site treatment and bioremediation can be more cost effective, however some methods can take time and this should be factored into the sales process. It should be noted that remediation of contaminated groundwater at a site is generally a lot more complicated and costly than remediation of contaminated soil.

Once the chosen remedial strategy(s) has been implemented, validation sampling is required to confirm that the goals of remediation have been met and to ensure that the measures undertaken were adequate for the protection of local amenity, public health and the environment. Future monitoring may be required, particularly at sites employing in-situ treatment technologies or containment options.

Where it is acceptable to the EPA, groundwater may be cleaned up to the extent practicable (CUTEP). This involves an assessment of the risk associated with the residual contamination (particularly if existing uses of groundwater are affected), and the technical, logistical

and financial factors of differing remediation options. The consultant who undertook the site assessment usually carries out the CUTEP assessment, the auditor reviews this assessment and, if in agreement, prepares the CUTEP report reviewing the assessment and advising EPA as to whether CUTEP has been achieved. The EPA then makes the final determination. CUTEP can take a long time.

Importantly, the use of a consultant who has wide experience in remediation assessment, supervision and validation and at the very least is a member of the Australian Contaminated Land Consultants Association (ACLCA) is essential in ensuring cost and time efficiency.

Case studies

Case Study 1 – Insufficient Detailed Assessment

Environmental & Earth Sciences Pty Ltd was requested to review numerous small-scale investigations by different consultants for an industrial site located in Melbourne's southeastern suburbs. Due to the repeated nature of investigations, no clear picture of the extent of site contamination was evident. Several widely different remediation cost estimates were provided by different consultants acting on behalf of the owner and potential purchaser, which resulted in both parties (and the bank) hesitating, a break down in the working relationship, and a delay in the sale process. Appropriate detail from the outset may have resulted in a better outcome.

Case Study 2 – Cohesive team (consultant, contractor and Auditor) producing the right result



Environmental & Earth Sciences Pty Ltd and EESI Contracting were requested by a large industrial client to assess and remediate a 20 ha industrial site in Melbourne's inner northwest. The site required a Statement of Environmental Audit prior to sale. Environmental & Earth Sciences undertook a Detailed Site Investigation of the property to ensure a good understanding of site contamination issues. An auditor was appointed by the client and Environmental & Earth Sciences and EESI Contracting worked closely with the auditor throughout the remediation and validation of the site, which ensured there were no surprises for the client (either extending budget or timeframe). The entire clean up which included the removal of five underground storage tanks, and treatment and handling of approximately 11 000 m³ of material and auditor sign off was completed within six months. The close working relationship between all parties ensured a smooth sales process.

Impact on the sales process

With a complete understanding of the contamination issues, vendors and purchasers are well positioned to negotiate the best outcome on price, terms and risk.

Pretending contamination is non-existent will do nothing to protect the vendors' or purchasers' interests over the short or longer term. Incomplete information can lead to:

- **A potential purchaser walking away.** A site assessment and report can take up to six weeks or longer if contamination issues are identified. By the time a detailed report is available, the potential purchaser or other interested parties may have moved on. The vendor is then virtually forced to restart the marketing process or is left trying to commence negotiations from a very weak position.
- **Failed due diligence and time delay.** The uncertainty and risk a potential purchaser is confronted with when considering contaminated property may cause a transaction to fall over at the due diligence stage. By this time, considerable time and effort has been spent with one purchaser, the property may have been taken off the market, and again, other potential purchasers may have moved on. Often under the scenario where the purchaser prepares the report, the vendor is unwilling to accept the consultant's recommendations and is placed in a very weak position to negotiate a favourable outcome.
- **The factoring of contingencies into calculations in order to allow for risk.** These costs are usually worst-case scenarios and can cost the vendor more in terms of reduced sale price than the costs of an initial assessment and remediation. In most cases, a less detailed site inspection will result in a broader range of remediation costs.
- **The purchasers' bankers refusing to finance the purchase without detailed information.** Credit risk managers are increasingly becoming aware of the potential risk involved with land contamination. If they are forced to foreclose they will effectively become

the occupier of the land and could themselves become subject to a clean up notice or unable to sell the land. There have been cases where the cost to remediate is more than the value of the land.

- **Litigation over the longer term if the purchaser does not identify the issues prior to settlement.** Despite a vendor having sold a property a number of years ago, the vendor may still be at risk should they be deemed to be the 'polluter'. Selling the property does not remove the problem or the liability under the 'polluter pays' principle.

Most importantly, vendors and purchasers must be conscious of the following when considering the sale of industrial land:

- Always consider the environmental issues above and below ground when required to make good a property, especially at the end of a lease to manufacturing companies.
- Tenants have the right to refuse access to a potential purchaser to conduct a detailed site investigation under the 'quiet enjoyment' provisions of a lease. This situation can stop a sale going ahead.
- If remediation is required, the process may necessitate the removal of improvements in order to get access to the effected area.
- A Statement of Environmental Audit often requires ground water monitoring which could be for up to 10 years.

Conclusion

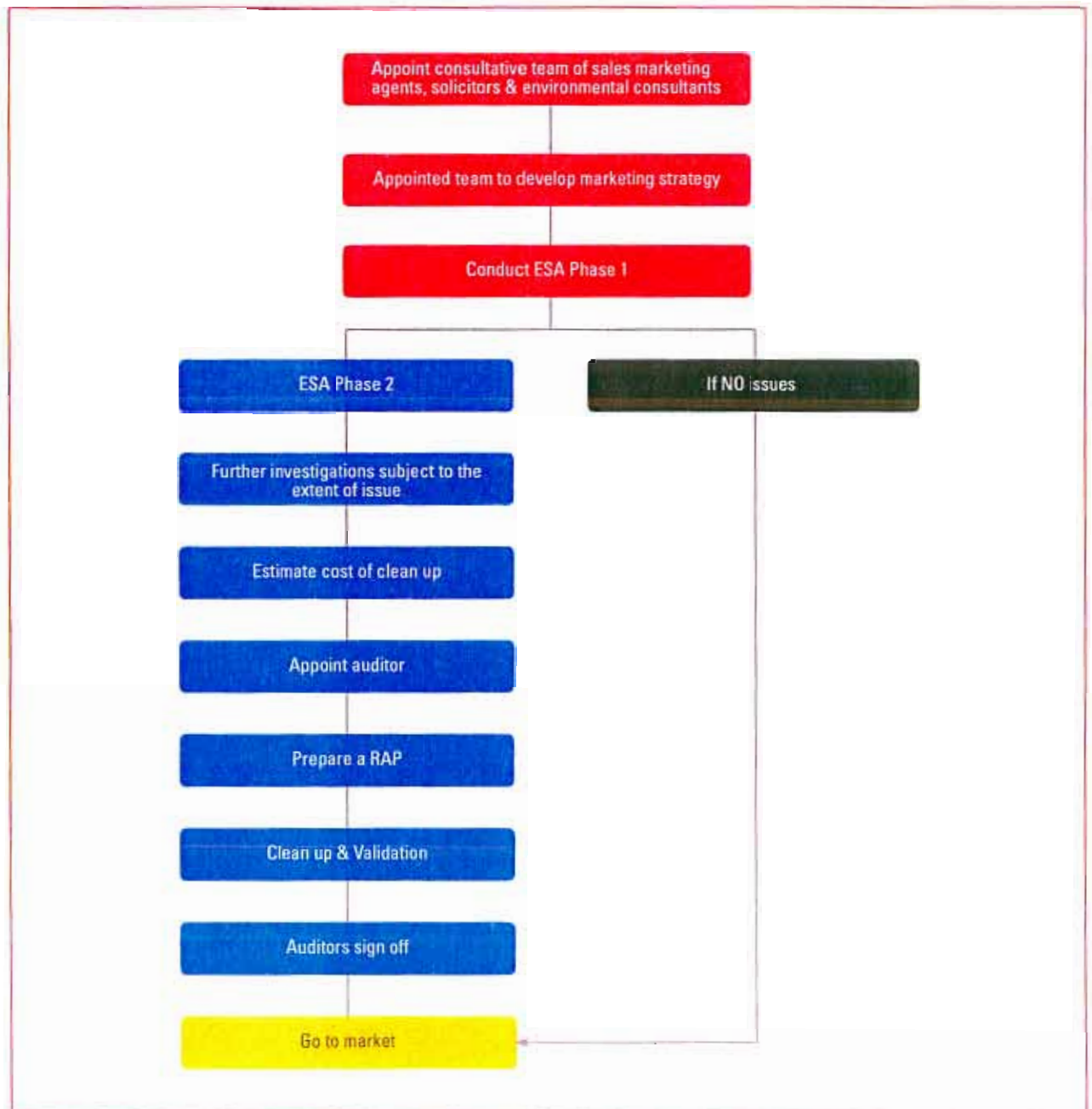
In an age of increasing liability and stricter environmental regulation, environmental due diligence during any kind of property transaction (whether it be industrial, commercial or even residential) is essential. Furthermore most buyers of industrial land expect that an environmental report should contain the processes involved in identifying, remediating and the certification of use for contaminated sites.

Temporary fixes have the potential to devalue investments. A vendor or investor should know the extent of potential risk allowing sufficient time to conduct environmental assessments and establish a strategy to

deal with the issues before going to the market. The findings of the report may affect the timing of the strategy and the approach to the market, extending the marketing timeline from three months to more than two years subject to the RAP and the extent of the issue.

Engaging a team of environmental consultants, solicitors and marketing agents well in advance of taking a property to the market will achieve a marketing strategy that minimizes environmental and financial risk and maximizes the outcome for the vendor.

Roadmap to Reducing your Risk



About the Authors



James Kaufman
National Director, Jones Lang LaSalle

James Kaufman is a Director of Jones Lang LaSalle and the Divisional Head of Victorian Industrial Services. He has been employed in the real estate industry for 18 years.

In the past James has been involved in negotiating pre-lease agreements, a consultant to developers concerning land and strata subdivisions, advising lessee companies in rationalizing and consolidating lease hold properties, strategic advice, feasibility studies, design consultancy, business park development, alternative use analysis and general sales, leasing and investment sales activities.

James also has considerable experience in disposing of contaminated industrial sites, developing marketing strategies and assisting purchasers to navigate through land contamination issues.




Felicity Ambler
Research Analyst, Jones Lang LaSalle

Felicity Ambler graduated from the University of Melbourne with a Bachelor of Commerce, majoring in Economics and has four years experience in the property industry. Upon joining Jones Lang LaSalle in early 2002 she has assisted in the role of providing ongoing property consultancy to the Docklands Authority and other Melbourne Docklands project stakeholders, whilst also involved in the equity facilitation of the QV project in Melbourne.

In January 2004, Felicity joined the Australian research team in Melbourne as an Analyst. She is responsible for contributing market and economic analysis to a range of government, corporate, institutional and private sector clients. She has a detailed understanding of the dynamics of the Victorian property market.



Allens Arthur Robinson 
Chris Schulz
Partner, Allens Arthur Robinson

Chris Schulz has practiced in the areas of commercial property, planning and environment for more than 25 years. In addition, he has expertise in the planning and environmental issues that arise in the context of dealings in property, including advice in respect of rezoning, planning permits and all aspects of land contamination.

He has acted for Shell for more than 20 years in relation to its network of Victorian retail sites, which includes a complete range of property, planning and environmental issues. Other clients that Chris regularly works with in the area of property law are Ford, Orica, Rio Tinto and Stanwell Corporation.




Ian Brookman
Group Marketing Manager
Environmental & Earth Sciences

Ian Brookman has been with Environmental & Earth Sciences for the past six years. In that period, he has project managed and been involved in over 50 contaminated site investigations throughout Australia, assisted with over ten detailed groundwater investigations, and has been involved as a project geologist in several large scale site remediations.

Currently Ian is Group Marketing Manager with Environmental & Earth Sciences, and in this role, he actively sources many of Environmental & Earth Sciences new projects throughout Australia and New Zealand. He was also the inaugural treasurer of the Victorian branch of the Australian Contaminated Land Consultants Association (ACLCA), and is currently a member of the Property Council of Australia's (Victoria Division) Industrial Land Committee.



About Jones Lang LaSalle

Jones Lang LaSalle is the world's leading real estate services and investment management firm, operating across more than 100 key markets around the globe. The company provides comprehensive integrated expertise, including management services, implementation services and investment management services on a local, regional and global level to owners, occupiers and investors. Jones Lang LaSalle is also the industry leader in property and corporate facility management services, with a portfolio of approximately 725 million square feet (67 million square meters) under management worldwide. LaSalle Investment Management, the company's investment management business, is one of the world's largest and most diverse real estate investment management firms, with approximately US\$23 billion of assets under management.

Jones Lang LaSalle has over 45 years of experience in Asia Pacific. The company has an established presence in the Asia Pacific region with operations in 26 markets and a total staff strength of approximately 8,100.

Jones Lang LaSalle Offices

Adelaide

Level 22
Grenfell Centre
25 Grenfell Street
Adelaide SA 5000
Tel +61 8 8233 8888
Fax +61 8 8233 8855

Brisbane

Level 33
Central Plaza One
345 Queen Street
Brisbane QLD 4000
Tel +61 7 3231 1311
Fax +61 7 3231 1313

Canberra

Level 7
Canberra House
40 Marcus Clarke Street
Canberra ACT 2601
Tel +61 2 6274 9888
Fax +61 2 6248 7501

Canberra

Jones Lang LaSalle in
association with Ray L Davis
Level 10
12 Moore Street
Canberra ACT 2601
Tel +61 2 6257 3099
Fax +61 2 6248 6038

Glen Waverley

Ground Floor
Brandon Office Park
540 Springvale Road
Glen Waverley VIC 3150
Tel +61 3 9565 6666
Fax +61 3 9562 1725

Mascot

Level 3 Airport Central Tower
241 O'Riordan Street
Mascot NSW 2020
Tel +61 2 9693 9800
Fax +61 2 9313 5384

North Sydney

Level 27 North Point
100 Miller Street
North Sydney NSW 2060
Tel +61 2 9936 5888
Fax +61 2 9957 5126

Parramatta

Level 8 79 George Street
Parramatta NSW 2150
Tel +61 2 9806 2800
Fax +61 2 9633 9923

Perth

Level 3
St Georges Square
225 St George's Terrace
Perth WA 6000
Tel +61 8 9322 5111
Fax +61 8 9481 0107

Melbourne

Level 21
Bourke Place
600 Bourke Street
Melbourne VIC 3000
Tel +61 3 9672 6666
Fax +61 3 9600 1715

Sydney

Level 18
400 George Street
Sydney NSW 2000
Tel +61 2 9220 8500
Fax +61 2 9220 8555

www.joneslanglasalle.com

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