



AUSTRALIAN
ENVIRONMENT
BUSINESS
NETWORK



LOTSEARCH

Spatial Intelligence | Mapping Risk

**AEBN Contaminated Land Webinar –
Understanding the New laws and the impacts**

How to identify environmental risk using our industry leading reporting solutions

Howard Waldron
Director

Overview

- Lotsearch Background & Capabilities
- Environmental Risk & Contaminated Land
- Regulatory Framework & Legislative Changes
 - Polluter Pays Principle
 - General Environmental Duty (GED)
- Helping You Meet Your New Requirements
 - Lotsearch Historical Land Use Database
 - Product: Enviro Pro Report
 - Product: Contaminated Land Screening
 - Product: Environmental Risk Search
- Q&A



Introduction

Howard Waldron



Howard co-founded Lotsearch in 2014, which has since become the market leader in providing comprehensive environmental risk reports in Australia.

Using the latest geographical information systems (GIS) and database technologies, Lotsearch turn data into meaningful information to help protect you and your client's interests but also to help meet the new obligations under the general environmental duty (GED).

Our vision is to be the 'go-to' industry standard for environmental hazard data in Australia, promote best practice and bring about greater environmental awareness.



Accurate &
Comprehensive
Data



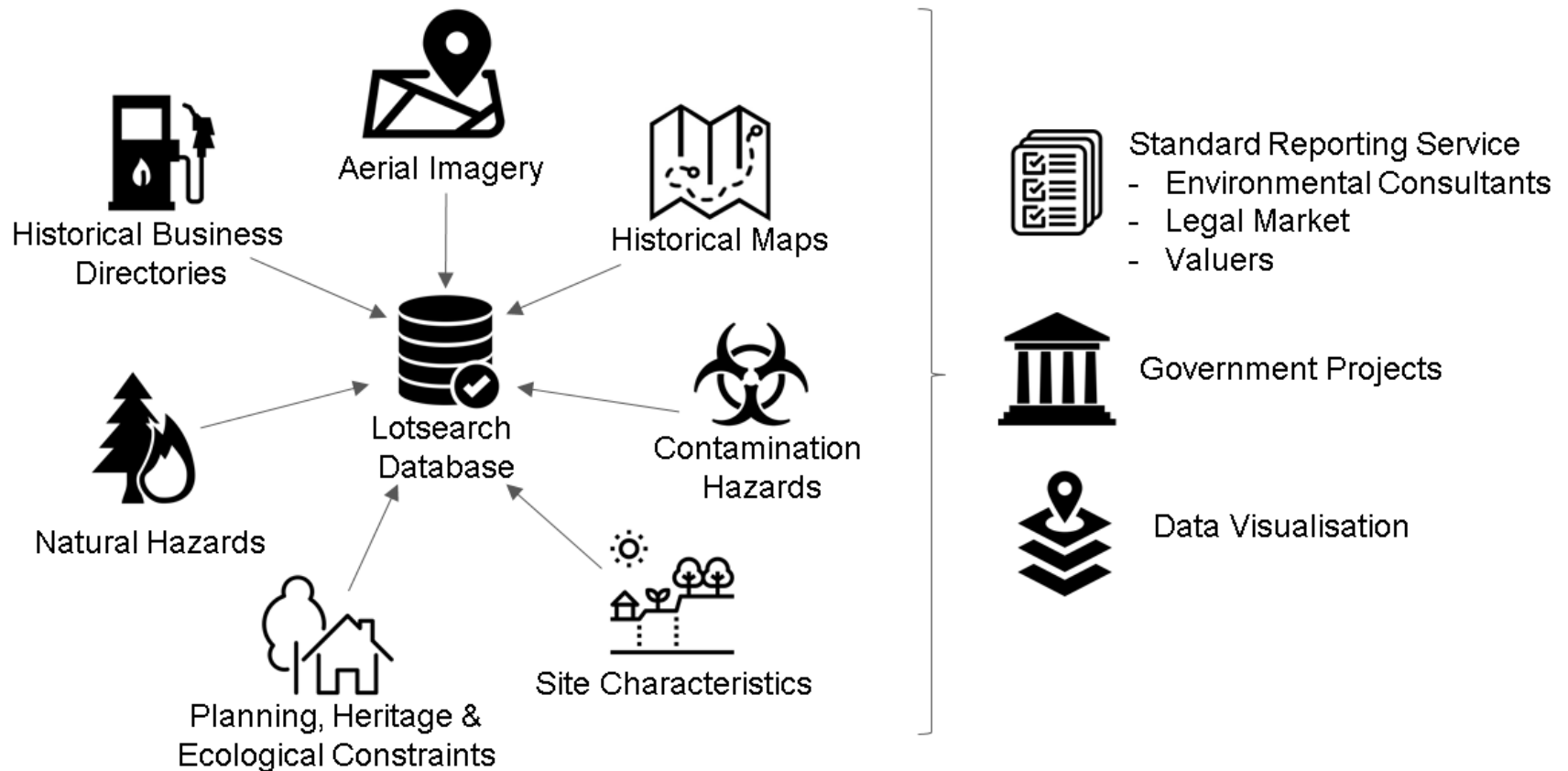
Easy to
Interpret
Reports



Fast & Cost
Effective
Service



Lotsearch 'Enviro Risk' Capabilities



Environmental Hazards & Issues

What are the various environmental risks in Australia?



Contaminated Land Overview

It is estimated that there are over **160,000** potentially contaminated sites in Australia:

- highlighted through a 2017 ABC Four Corners program and a major Sydney Morning Herald investigation.
- amplified by changes in the residential and commercial property markets, a growing population, increased demand for housing and infrastructure, and the subdivision and re-use of land in urban areas.

State-based environmental and planning **regulations are in place to control the most contaminated sites**, or contamination disturbed during site redevelopment.

The majority of potentially contaminated sites remain unidentified.

Significant commercial risk to property owners and investors.



<https://www.smh.com.au/interactive/2017/toxic-state/site/>
<https://www.abc.net.au/4corners/contamination/9032140>

Common Sources of Contamination

Site contamination issues can be the result of past practices including:

- industrial sites such as gasworks and tanneries
- fuel and chemical storage and associated spills and leaks
- agricultural chemicals, herbicides and pesticides/termiticides
- waste products such as ash (which were often buried) and hazardous materials

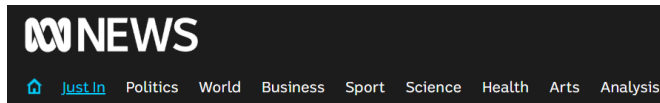
Contamination is often detected as a result of the site investigations associated with land use planning and development processes.

Identifying hazards beforehand will reduce uncertainty and potential liability.



New Contaminants - PFAS

PFAS are a group of chemicals used in fire fighting foams, hydraulic fluids, non-stick coatings and waterproofing treatments.



PFAS crisis opens residents to compensation payouts after federal inquiry report tabled

By Kevin Nguyen

Updated 8 Dec 2018, 8:30am

A federal parliamentary inquiry has recommended the Federal Government offer financial compensation to residents caught up in the PFAS contamination crisis.

The communities of Williamtown in New South Wales, Oakey in Queensland and Katherine in the Northern Territory have been campaigning for some form of financial redress since it was revealed properties were contaminated with potentially toxic PFAS chemicals from firefighting foam used on nearby defence bases.

The substance, known as per- and poly-fluoroalkyl, has been used in firefighting foams at dozens of bases across the country since 1970, and the chemicals have remained in the soil and groundwater at some Australian airports and defence bases.

The Air Force started phasing out the use of the firefighting chemical in 2004 and undertook a national review of its impact on the environment around bases.

Residents at some impacted sites, such as Richmond Air Base in NSW, were advised by the Department of Defence to [reduce their locally sourced fish, egg and red meat](#) intake due to contamination fears.



PHOTO: Firefighting foam containing PFAS chemicals was used by Airservices Australia until 2010. (CRC CARE)

RELATED STORY: Food contamination warning issued to residents near NSW air base

RELATED STORY: 'World's next asbestos disaster': Fears grow for firefighters exposed to toxic foam

RELATED STORY: 'Our hands were saturated in it': Workers angry contamination risks not explained at airport site

Key points:

- Department of Defence is looking into 28 sites contaminated with PFAS chemicals
- After seven months of investigation the inquiry found residents should be compensated
- Test results from 2013 found aviation firefighters had 20 times the normal level of toxic chemicals in their blood



Regulatory Framework - 'Polluter Pays' Principle

- Applicable in all states and territories
- Clean-up and remediation costs must be borne by the polluter or
- By the landowner if the original polluter of the land cannot be found or identified.

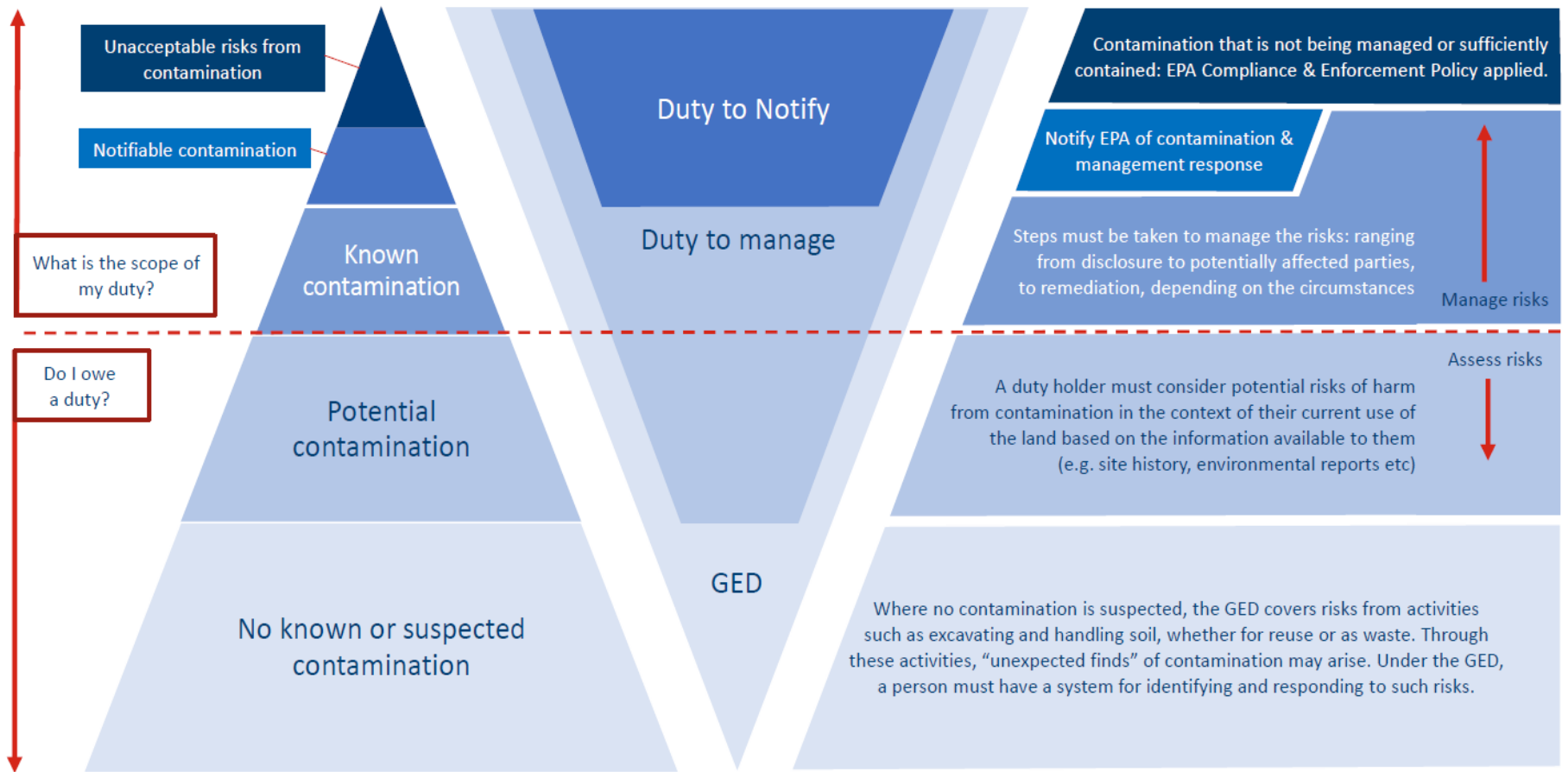


New Victorian Legislation – (General Environment Duty)

Status of Contamination

Obligation(s)

What EPA expects



New Victorian Legislation

The General Environmental Duty (GED)

Potential
contamination



A duty holder must consider potential risks of harm from contamination in the context of their current use of the land based on the information available to them (e.g. site history, environmental reports etc)



GED Requirements – Site History

- Developed largest **Historical Land Use Database** (HLUD) in Australia
- Millions of historical business records, photos and maps
- Records are quality checked and gold starred by Lotsearch Analysts
- Lotsearch reports help meet the requirements of the GED & NEPM.



Lotsearch Historical Land Use Database



Historical Business Directories

"If so, where?"



The most-asked question in business today. Is it available? who has it? You need to locate the source as fast as possible - time is money these days. So we place all the essential information right at your fingertips. In a series of volumes that cover Cities, Towns and villages throughout Australia, New Zealand and the Pacific Islands. You get more data - quicker - from our fully classified alphabetical business listings of trades and professions. Plus invaluable reference to Brand and Trade Names, facts and figures used everyday in business, and the location of businesses through up-to-date area maps.

The source is assured - if not the supply - in UBD



UNIVERSAL BUSINESS DIRECTORIES PTY. LTD.

ADELAIDE BRISBANE MELBOURNE PERTH SYDNEY

	<i>"Where can I get a supply of diatomaceous earth?"</i>		<i>"Where can I hire Arabian Nights fancy dress costumes?"</i>
<i>"Do you know anyone who can supply us with black-lipped Mother-of-Pearl Shells?"</i>		<i>"Who makes high-jump standards and hurdles?"</i>	
	<i>"What's the address of the Chamber of Commerce in the capital city of Peru?"</i>		<i>"Can you give me the name of a Hong Kong firm dealing in deer tails and antlers in velvet?"</i>

These are actual enquiries taken from the files of the Universal Business Directories Information Service.

We've been answering questions of one kind or another for over 36 years. Each UBD office operates a full-time Information Service, staffed by trained researchers. Only when there's an actual out-of-pocket expense do we make a charge - and then only on client's O.K. Mostly it's free. Phone the UBD Information Service for the answer to your business queries.

Use the Universal Business Directories. They give 100% up-to-date coverage of all Australia, in 15 volumes. 80% of Australian business houses use them as a sales tool and standard reference. Universal Business Directories are consulted in 87 countries. And there's a separate directory for the Pacific Islands.



U-B-D

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SOUTH MELB., 3205

Phone: 69 7161

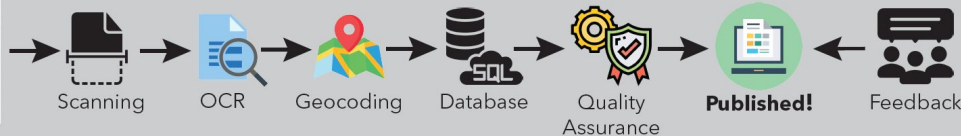
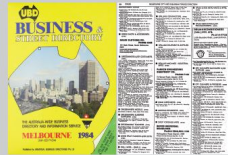


Lotsearch Historical Land Use Database

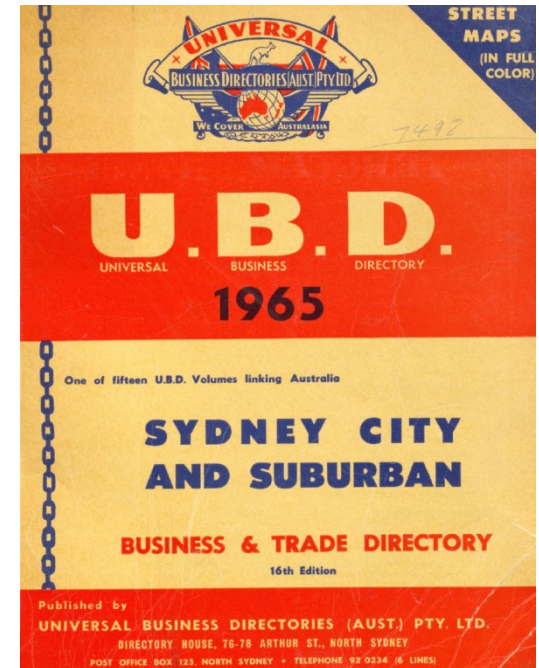


Historical Business Directories

Methodology



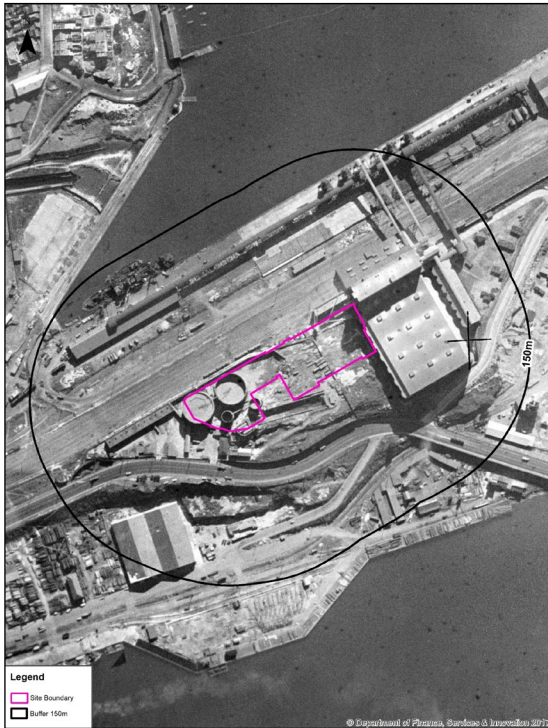
Activity	Premise	Page	Directory	Year	LocConf	RiskRank	PKey
ALUMINIUM FABRICATORS.	Punchbowl Forge Welding, 1188 Canterbury Rd., Punchbowl	18	Sydney City & Suburbs	1978	1b	HIGH	2280
DIE CAST WELDING SPEC.(D240)	Punchbowl Forge Welding, 1188 Canterbury Rd., Punchbowl	163	Sydney City & Suburbs	1970	1b	HIGH	289513
MOTOR PAINTERS (M672)	Punchbowl Forge Welding, 1188 Canterbury Rd., Punchbowl	423	Sydney City & Suburbs	1970	1b	HIGH	339579
MOTOR PANEL BEATERS (M680)	Punchbowl Forge Welding, 1188 Canterbury Rd., Punchbowl	426	Sydney City & Suburbs	1970	1b	HIGH	340349
STEEL FABRICATORS (S673)	Punchbowl Forge Welding, 1188 Canterbury Rd., Punchbowl	574	Sydney City & Suburbs	1970	1b	HIGH	365342



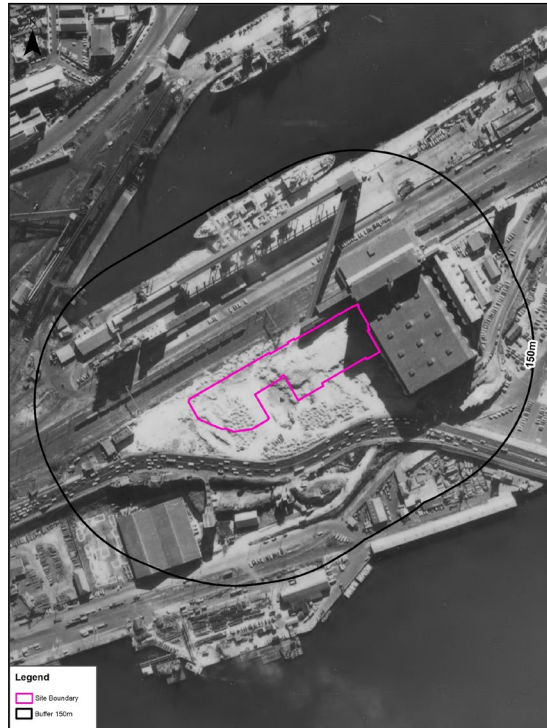
Lotsearch Historical Land Use Database



Historical Aerial Imagery



1943



1970



2020



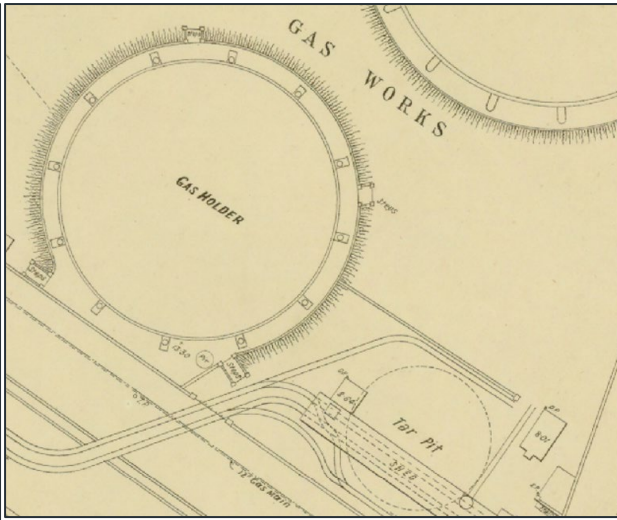
Lotsearch Historical Land Use Database



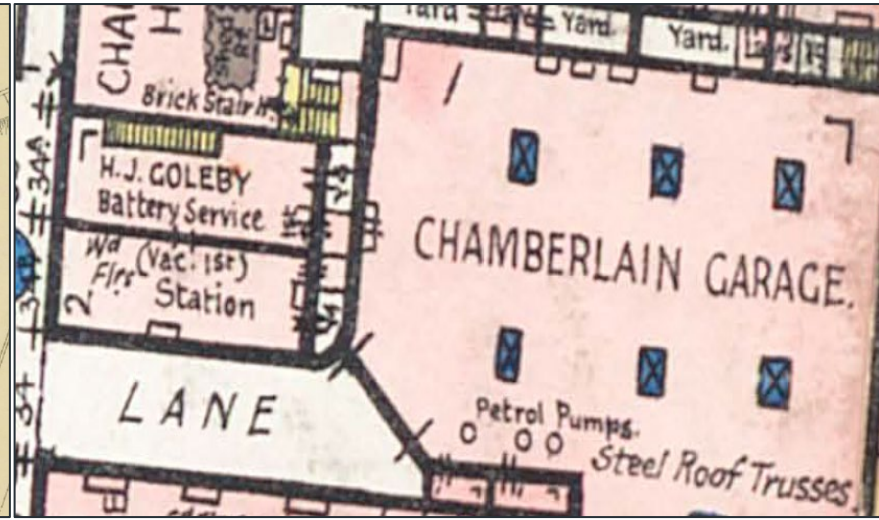
Historical Maps



Northfield
South Australia



North Melbourne
Victoria



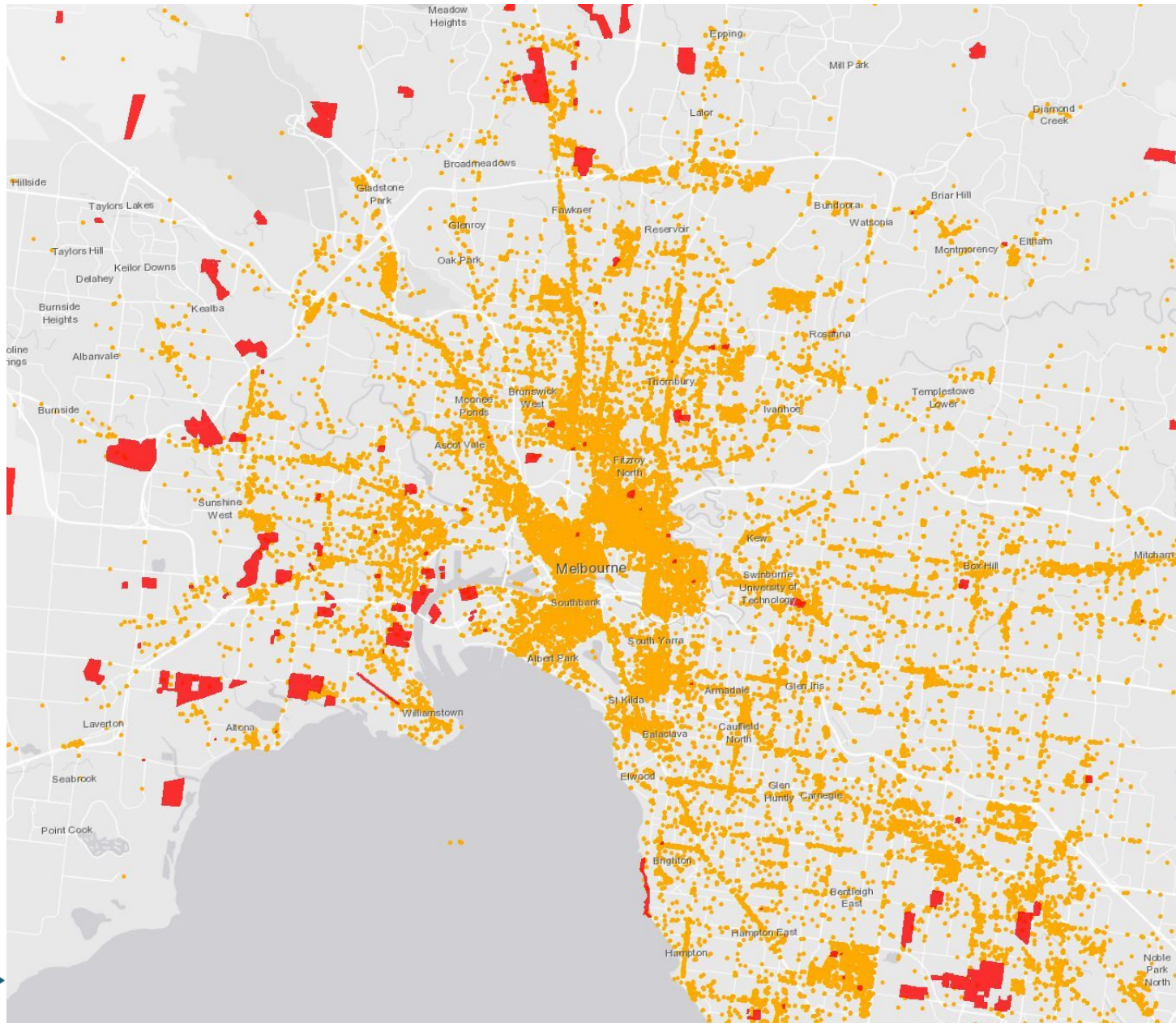
Sydney CBD
New South Wales



The map displays the city of Melbourne with its street grid and major water bodies. Red dots, representing 1000 randomly generated addresses, are distributed across the city. The distribution is relatively uniform, with a higher density in the central urban areas and a lower density in the more suburban and rural areas. The map includes labels for numerous suburbs and landmarks, providing a geographical context for the address distribution.



Potential Contamination Hazards (+25,000 Sites)



Lotsearch Enviro Pro Report



Date: 10 May 2018 12:34:18

Reference: Sample

Address: 198 Liverpool Street, Darlinghurst, NSW 2010

Disclaimer:

The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features. You should obtain independent advice before you make any decision based on the information within the report. The detailed terms applicable to use of this report are set out at the end of this report.

- Detailed Site History
 - Aerial Photos
 - Maps
 - Business Activities
- EPA Public Register Information
 - Priority Sites Register
 - Environmental Audits
 - Pollution Notices
- Site Characteristics, Pathways & Receptors
 - Boreholes
 - Geology, Soils & Hydro
 - Contours

References over 600 Different Datasets



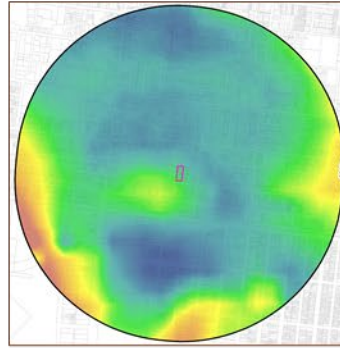
Lotsearch Enviro Pro Report



Boreholes



Contours



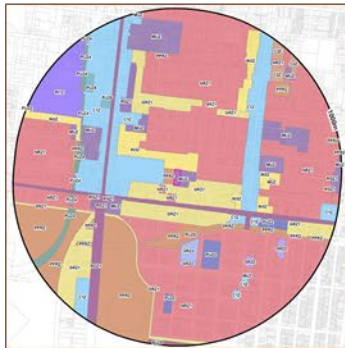
Depth to Groundwater



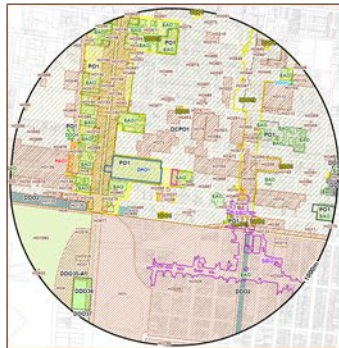
Geology



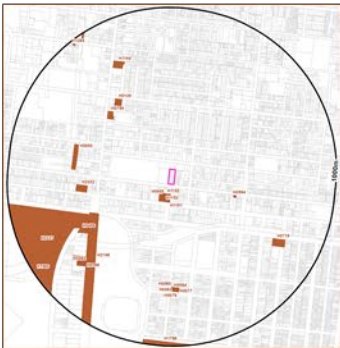
Features of Interest



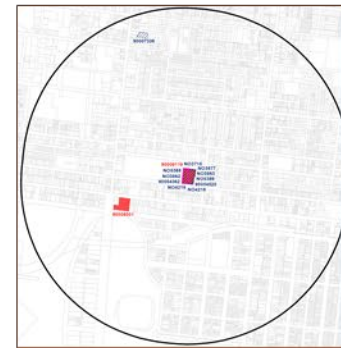
Plan Zones



Plan Overlays



Heritage



EPA VIC Priority Sites
and Pollution Notices



EPA VIC Environment
Audits and Groundwater
Zones with Restricted
Uses



Lotsearch

Contaminated Land Screening Report (CLSR)



Contaminated Land Screening Report

Lotsearch Reference: LSSample01 SR

Client Id: Client001

Report Date: 25 Oct 2018 18:36:23

Address: 52-62 John Street, Erskineville, NSW 2043

Lot & Plans: Lot 54, DP852576

Disclaimer:

The purpose of this report is to provide an overview of some of the site history and environmental risk information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features.

You should obtain independent advice before you make any decision based on the information within the report. The detailed terms applicable to the use of this report are set out at the end of this report.

Contaminated Land Screening Assessment Residential Property

Site: 52-62 John Street, Erskineville, NSW 2043

Lot & DPs: Lot 54, DP852576

Lotsearch Reference: LSSample01 SR

Date of Issue: 25 Oct 2018

This Contaminated Land Screening Assessment has been prepared to assist interested parties in considering the potential for contamination to be present on the subject residential property (the site). Information is provided below about the basis of this assessment, its limitations and how you can get further advice and guidance on additional investigations that could be undertaken.

For additional information please refer to the User Guide. If you have any questions, or need further advice please email support@lotsearch.com.au or call our customer support team on (02) 8287 0680

A. Potential for contamination to affect the site



B. Inclusion of the site on a contaminated land register by the environmental regulator

Yes

C. Inclusion of the site or the surrounding area (2km) on an environmental regulator's PFAS (per and polyfluoroalkyl substances) register or program

Yes

Next Steps: To better understand the contamination rating of a property you should discuss your screening assessment with an experienced contaminated land consultant. For further advice about how to manage potential contamination issues and discuss your property with a technical consultant, please contact our customer support team. Email: support@lotsearch.com.au Phone: (02) 8287 0680

This Contaminated Land Screening Assessment has been completed by GHD Pty Ltd (GHD) based solely on the accompanying Lotsearch report. No physical site inspection or survey has been carried out and therefore no consideration has been given to current or proposed uses of the site, or other conditions that may be present. This assessment does not comprise a Phase 1 preliminary site investigation as defined under Schedule B2 - Guideline on Site Characterisation, National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013). As such, no expressed warranty is given by GHD in relation to the accuracy or completeness of the data reported, the actual state or condition of the property, or the suitability of the site for any current or proposed use. This assessment must be read in conjunction with the accompanying Contaminated Land Screening Report which is subject to Lotsearch's Terms and Conditions.

Assessment provided by GHD Pty Ltd.



Lotsearch Contaminated Land Screening Report

Key Features


- Search of the EPA public registers
- Additional searches of other relevant government datasets
- Land use activities from our historical land use database
- Results are included for your site and the surrounding area
- Includes Contaminated Land Screening Assessment

Benefits

- Fast turnaround – 24hrs
- In line with the new legislative (GED) requirements
- Can help to screen large portfolios quickly to determine which need further investigation or assessment



Lotsearch Contaminated Land Search (Managed or Regulated Sites by the EPA)



Contaminated Land Search

Data Summary

This report provides information collated from Environment Protection Authority registers and datasets that relate to your site or the surrounding area.




EPA Contaminated Land
N
No: No records from an EPA Contaminated land register or former gasworks list have been identified within the surrounding area (100m)



EPA PFAS Investigation Program
N
No: No records on the EPA PFAS investigation program have been identified within the surrounding area (100m)



EPA POEO Licence Register
Y
On-site Yes: Records from the EPA POEO licence dataset have been identified on-site



EPA Other Dataset
N
No: No records from the EPA Other dataset have been identified within the surrounding area (100m)

LOTSEARCH REFERENCE
NSWSampleEPC2

REPORT DATE
18 Apr 2020 11:17:38

CLIENT ID
Client 001

ADDRESS
30 Davis Road, Wetherill Park, NSW 2154

AREA
17265m²

COUNCIL
Fairfield City Council

LOT/PLAN
Lot 1, DP845292

CUSTOMER SUPPORT
support@lotsearch.com.au
+61 (02) 8297 0680
lotsearch.com.au

Information Sources	VIC EPA Priority	LS Contaminated
EPA Priority Site Register	Y	Y
EPA Pollution Notices	N	Y
EPA Environmental Audits	N	Y
PFAS Investigation Programs	N	Y
EPA Licenced Premises	N	Y
EPA Groundwater Restricted	N	Y
EPA Prescribed Waste	N	Y
EPA Works Approvals	N	Y
EPA Landfill Sites	N	Y



Lotsearch Contaminated Land Search (Managed or Regulated Sites by the EPA)

Features

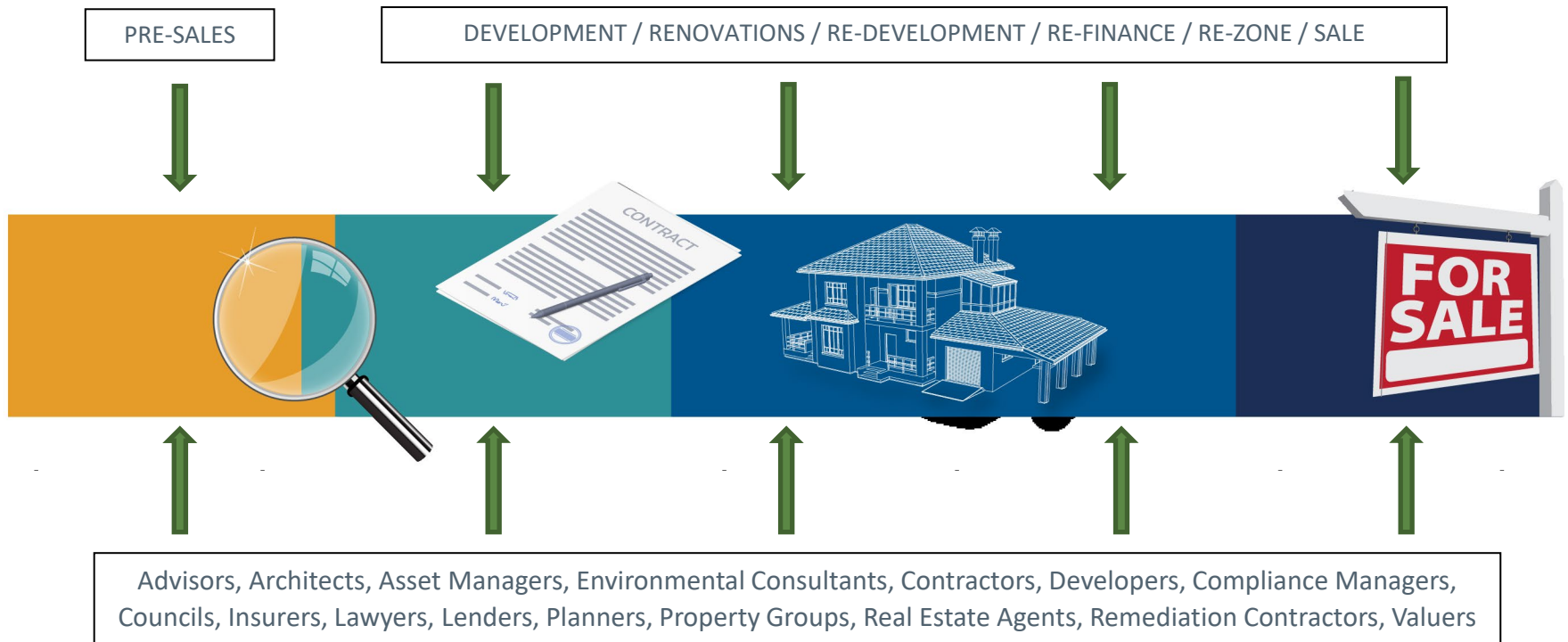
- An efficient search for records of the EPA public registers:
 - Priority Sites Register
 - Environmental Audits
 - Licenced Activity Register
 - PFAS Investigation/Monitoring Program
 - Waste Sites & Other EPA Registers

Benefits

- Fast turnaround – 24hrs
- Easy to interpret maps & easy to digest summary
- Contains accurate, high quality and up-to-date information



Property / Information Lifecycle



Summary - Lotsearch Reports

- **2014** – Lotsearch Founded
- **2015–2018** – Lotsearch launch the industry leading **Enviro Pro Report**.
- **2018** - Lotsearch launch the **Contaminated Land Screening Report**.
- **2019** - Lotsearch launch the **Contaminated Land Search**.
- **2020** - Lotsearch launch the **Bushfire Risk Search**.

Lotsearch provide automated reports and searches that help in the due diligence process by identifying potential environmental hazards that may require further assessment.



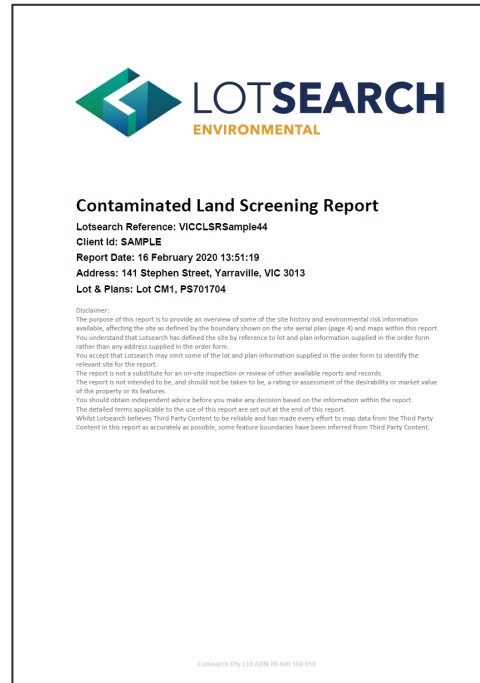
Industry Leading Solutions

Contaminated Land Search



EPA Priority Sites Register
EPA Pollution Notices
EPA Licences
EPA Audits
EPA Waste
+ More Registers

Contaminated Land Screening Report



EPA Public Registers
National Contamination Datasets
Historical Business Activities & Land Use
PFAS Investigation Sites
Contaminated Land Assessment (GHD)

Lotsearch Enviro Pro



EPA Public Registers
National Contamination Datasets
Historical Business Activities & Land Use
Historical Aerial Photos & Maps
PFAS Investigation Sites
Site Characteristics
Potential Receptors



Next Steps - How to Order

- We can help with single sites, property transactions, property portfolios and / or asset management.
- Visit lotsearch.com.au to order direct
- Email us support@lotsearch.com.au
- Phone us (02) 8287 0680
- Email: howard.waldron@lotsearch.com.au

Lotsearch Reports available on InfoTrack



