



AEBN Contaminated Land Webinar Understanding the New laws and the impacts

How to identify environmental hazards before they become a risk

Howard Waldron Founding Director



Content

- Introduction

Company Background, Mission, Vision, Values

- New Contaminated Land Legislation

Meeting Victoria's New General Environmental Duties

Identifying 'Known' Contamination & 'Potential' Contamination

- Key Information Sources

Useful Information To Obtain About Your Site Site History & Desktop Assessments

- Lotsearch Reports

A 'One Stop Shop' for Identifying 'Known' & 'Potential' Risk

- Case Studies

'In the News' – Examples of Problem Sites Lotsearch Insights

- Summary & Q&A



Company Background

Founded: 2014.

Vision: To build a more environmentally aware Australia.

Mission: Pioneers of best in class environmental information and insight.

Comprehensive: We have built the largest database in Australia with over 700 individual datasets

Coverage: We offer nationwide reporting services covering contaminated land, natural hazards, planning, heritage and ecology.

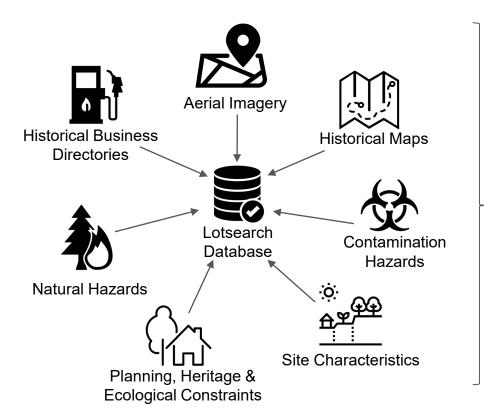
Quality: Our industry leading reporting solutions are used and relied upon by environmental specialists.

Capabilities: We have built a customised suite of reports to empower professionals to help them to make more informed decisions relating to land and property.

Technology: Smart tools and techniques used to enable clients to identify hazards quickly and efficiently saving time and resources later on.



The Leading Provider of Environmental Risk Reporting Across Australia





Standard Reporting Service

- Environmental Consultants
- Lawyers & Conveyancers
- Valuers
- Developers
- Compliance & Asset Managers



Government Projects Infrastructure Utilities



Data Visualisation

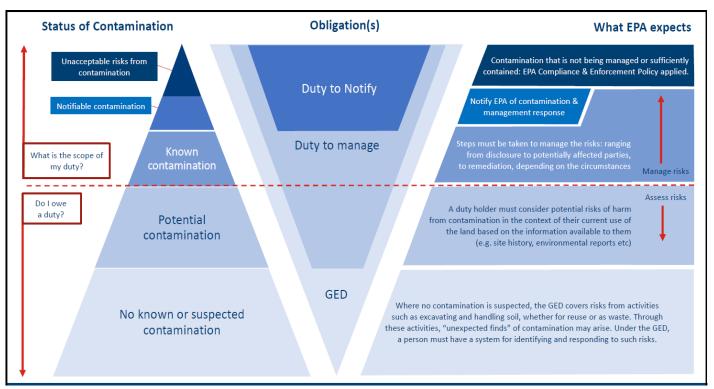


Lotsearch Reports – Done Well – By Design!



Contaminated Land Legislation – Helping You Meet Your Duties

New Victorian Legislation – General Environment Duties





The General Environmental Duty (GED) - Known Contamination

Known Contamination



Steps must be taken to manage the risks: ranging from disclosure to potentially affected parties, to remediation, depending on the circumstances



The General Environmental Duty (GED) - Potential Contamination

Potential contamination



A duty holder <u>must</u> 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)



How to Identify 'Known' Contaminated Land

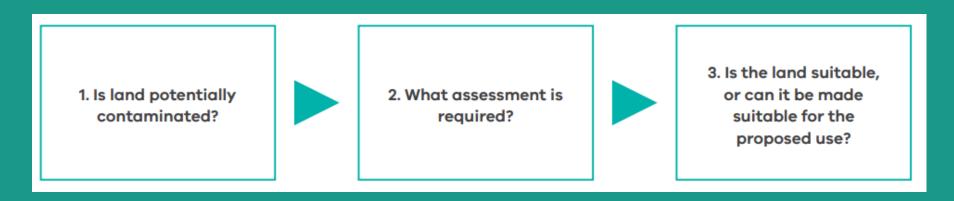




Lotsearch 'Contaminated Land Search'

Provides key information from publicly available government registers to identify contaminated land & groundwater

How to Identify Potentially Contaminated Land



Sourced from DELWP Planning Practice Note 30 (July 2021)

Public Information Sources Available

Table 1: Basic information sources for identifying potentially contaminated land

Planning/ responsible authority information	Presence of EAO (while noting that not all potentially contaminated sites will have an EAO).
	 Current and previous zoning, planning or building permits, ownership or activities for the site and surrounds.
	Any known contamination investigations or other relevant environmental assessments.
Public databases	Victoria Unearthed https://mapshare.vic.gov.au/victoriaunearthed/ which brings together existing information on potential land and groundwater information, including EPA datasets and historical land use information from Sands and McDougall.
	Databases on the EPA website www.epa.vic.gov.au, including EPA's Public Register, which provides access to PRSA and environmental audit statements, information on licenced businesses, court proceedings and other regulatory information. EPA's database of groundwater quality restricted use zones also includes information on past land uses.

^{**}Lotsearch combine these information sources (and more) into our comprehensive reports.**



Lotsearch Sources Available (Over 700 Datasets)

Current Datasets

- Contaminated Sites
- Licensed Activities
- Waste/Landfill Sites
- Topography
- Contours
- Features of Interest
- Boreholes
- Hydrogeology

- Geology
- Soil
- Natural Hazards
- Planning
- Landuse
- Heritage
- Ecology
- ...and much more!

Historical

- Business Directories
- Aerial Imagery
- Maps
- Landfills
- Quarries & Mines
- Gasworks

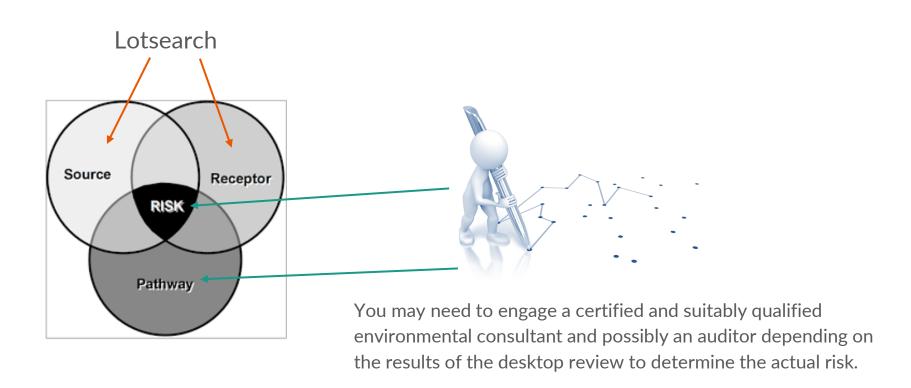
Assemble, map, and utilise multiple lines of current and historical evidence to help generate a robust site history.

In line with requirements of National Environment Protection (Assessment of Site Contamination) Measure (NEMP) 1999





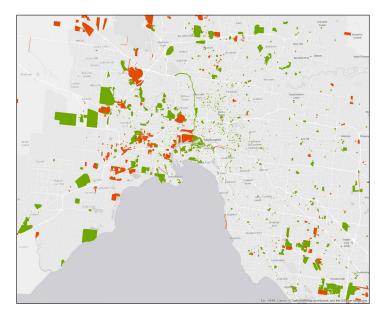
Identifying Hazards Vs Risk (Desktop Review)





Contemporary Datasets

- Some datasets are supplied by government agencies as spatial data files.
 - o 'Plug and play'
 - O Series of checks for spatial accuracy and ensure the data is fit for purpose.
 - O Query back to data custodian if errors are found.
- Some datasets are mapped by Lotsearch.
 - O Supplied lot/plan numbers, street address, or lat/long co-ordinates are geocoded to polygon boundaries.
 - Each record looked at manually to determine accurate boundary.
 - O Contradictory or erroneous records are queried back to data custodian.



EPA VIC Pollution Notices, Priority Sites, and Audits (~4300 sites in Melbourne region)

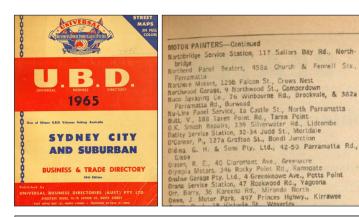


Lotsearch Mapping Vs Victoria Unearthed





Site History - Historical Business Directories



SYDNEY CITY AND SUBURBAN TRADES DIRECTORY

MOTOR PAINTERS-Continued

Ryde Panel Beaters Pty. Ltd., Cnr. Wells & Parsonage Sts.,

St. George Motors Industries Ltd., 132-140 Princes Hghwy., Arncliffe Sabb Mfrg. Co. Pty. Ltd., 160 Willoughby Rd., Crow's Nest

Sadler, A. D. Pty. Ltd., 377 Princes Hghwy., St. Peters Saleyard's Service Station (Flemington). Pty. Ltd., Cnr. Parramatta & Flemington Rds., Flemington Sands Bros., 151 Parramatta Rd., Granville Savell Bros., 419 Forest Rd., Penshurst Seleny, J. D., 56 Wellington Rd., Granville Schenk & Co., 1 Alban St., Lidcombe Schofield Bros., Arundel St., Glebe

Schu-Nox Service Station, 71 Victoria Rd., Drummoyne Sea Breeze Service Station, 2 General Holmes Drv., Brighton-le-Sands

Seven Ways Garage, Cnr. Glenayr & Warners Aves., Bondi Shannon, D., Cnr. Church & Early Sts., Parramatta Shaw, P. J. Repairs, 228 Harbord Rd., Brookvale Shell Service Station Girraween, 97 Targo Rd., Girraween Shield Motor Service, Cnr. Penrose St. & Burns Bay Rd., Lane MOTOR PAINTERS-Continued

Vern Potts, 505 Old South Head Rd., Rose Bay Victory Garages Pty. Ltd., 6 Humphrey St., Mascot Vineyard Service Station, Windsor Rd., Riverstone Voss, L. H. Pty. Ltd., 169 Woodville Rd., Merrylands Wacher, J. G., 1600 Canterbury Rd., Punchbowl Wagg, A. J., Pacific Hghwy., Lindfield Wallis, A. R., 239 Rawson St., Auburn Wallis & Parkes, 26 Box Rd., Taren Point Walsh, G. A. Pty. Ltd., 3-7 East St., Granville Ward, W. D. Blakehurst Motor Body Works, 1002 King Georges Rd., Blakehurst

Warner Bros., 63 Princes Hghwy., St. Peters Warringah Sheet Metal & Welding Co. Pty. Ltd., Wattle Rd., Brookvale

Webb and McWhirter, 35 Dixon St., Parramatta Weinert Pty. Ltd., 19 Canterbury Rd., Canterbury Wells, A. P., Cnr. Liverpool and Riley Sts. Wells & Price, 541 New Canterbury Rd., Dulwich Hill Wells Smash Repairs, 150 Clyde St., Granville Welsh's Motor Repairs, 43 Cook St., Rozelle Wentworth Motors, Cnr. Balaclava & Blaxland Rds., Eastwood West, Norton, 22 Chard Rd., Brookvale

Methodology













MOT 423

Published!

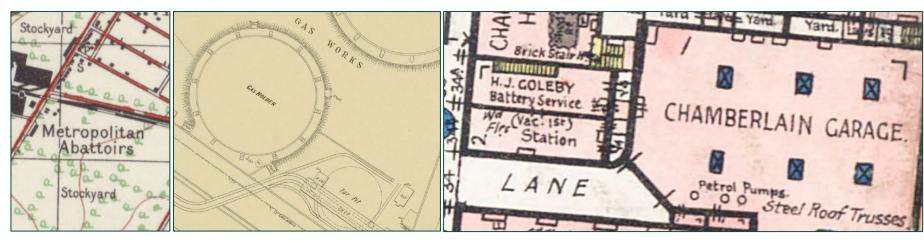
Feedback

Assurance



Historical Maps

Another great resource for understanding historical land use.



Northfield, SA North Melbourne, VIC Sydney CBD, NSW



Historical Aerial Imagery



1943 1970 2016



Results

- Lotsearch have developed the most comprehensive 'Historical Land Use Database' (HLUD) in Australia.
- Millions of historical business records (Universal Business Directories & Sands & McDougall).
- Over 500,000 historical aerial photographs.
- Over 50,000 historical maps & plans.
- We have identified over 25,000 'known' contaminated, regulated or sites under investigation.
- We have identified over 250,000 'potentially' contaminated sites (former high-risk activities).
- Site history can now be easily delivered as <u>one</u> package.

'Known' Contamination – VIC EPA Priority Sites Register



'Potential' Contamination Hazards (+25,000 Sites)



Lotsearch Enviro Pro Report



Date: 10 May 2018 12:34:18

Reference: Sampl

Address: 198 Liverpool Street, Darlinghurst, NSW 2010

Disclaimer:

The purpose of this report is to provide an overview of some of the size history, environmental risk and planning information available, affecting an inforbula utderes 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 assistement off the destinable transport market value of the property or its factories. Vou should obtain independent advice before you make any decision based on the information within the report. The destailed terms applicable to specify only its popular are set out 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 700 Different Datasets

Lotsearch Contaminated Land Screening Report (CLSR)



Includes 'known' and 'potential' hazards and a contaminated land assessment.

Case Studies - 'In the News'

Case Study – PFAS



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.

foam used on nearby 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 hase

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:

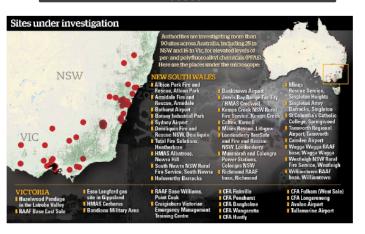
- · Department of Defence is looking into 28 sites contaminated with PFAS chemicals
- · After seven months of investigation the inquiry found residents should be compensated
- · Test results from 2013 found aviation firefighters had 20 times the normal level of toxic chemicals in their blood

Williamtown, NSW

Oakey, QLD

National coalition launches for residents of country's 90 toxic sites

"The aim, he said, was to create a unified national voice that could force the government to clean up contaminated sites and compensate people for depressed property values and business losses"



https://www.abc.net.au/news/2018-12-03/pfas-contamination-residents-compensated-federal-inquiry/10576552 https://www.smh.com.au/national/national-coalition-launches-for-residents-of-country-s-90-toxic-sites-20180702p4zp1f.html

Nelson Parade, Hunters Hill, NSW



Further delay in the clean-up of radioactive contamination at Nelson Parade

John Besley, Northern District Times December 1, 2015 4:53pm





Hunters Hill Mayor Richard Quinn has slammed the delay of the removal of radioactive waste from Nelson Parade, calling the situation "gravely disappointing."

A Government Property NSW report released last week revealed that the clean-up of radioactive waste that was scheduled to commence earlier this year has been delayed until 2016-17 with the completion of the process in 2018-19

The delay is due to a change in the location of where the waste will be removed to, after the Baird Government's original plans to transfer the waste to Kemps Creek in Western Sydney were scrapped following public uproar from Kemps Creek residents.

"I'm certainly not happy," said Cr Quinn.

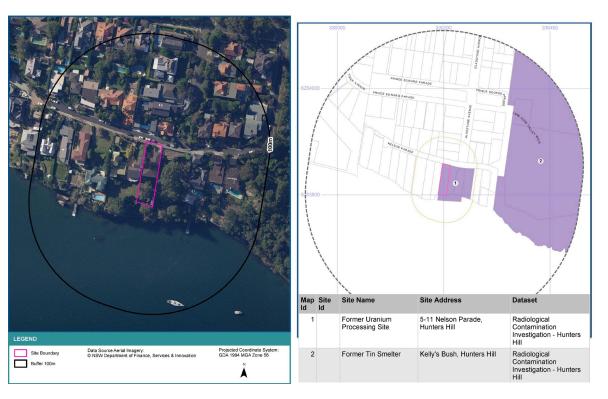
Former Uranium Smelter (1911-1915)

The government has bought contaminated blocks at 7, 9 and 11 Nelson Parade

Parliment inquiry recommending the site be decontaminated



Lotsearch Sample – Hunters Hill



Camden High School, Camden, NSW



School was built on the site of a Gasworks.

After deaths and illness, a class action against NSW Education Department is likely.

School was closed in 2001 after contamination was discovered in soil.

http://www.abc.net.au/news/2013-07-23/cancer-cluster-fears-over-former-sydney-high-school/

Lotsearch Sample – Former Camden High School



Spotless Dry Cleaners, Brunswick, VIC



Spotless slammed by Supreme Court on Brunswick apartment block contamination

Ben Butler HeraldSun October 6, 2007 12:00am





TACTICS adopted by listed catering and cleaning group Spotless lacked "commercial morality", a Supreme Court judge said vesterday.

Justice David Byrne said the company has used the corporate veil of the law to claim it was not responsible for the chemical contamination of a Brunswick apartment block.

He said the company's course of action "... reflects no credit on the commercial morality" of those involved.

Spotless chief executive Peter Wilson defended the company and its people. He said an appeal was being considered.

In a 233-page judgment, Justice Byrne ordered Spotless to pay between \$3 million and \$4 million to Premier Building and Consulting for the clean-up of a residential development in Barkly St, Brunswick, next door to a former dry-cleaners operated by the company.

Although Spotless has not operated a dry-cleaning business at the address since 1989, Justice Byrne found it liable under the Environment Protection

The judgment may have significant consequences for Spotless which operated dry-cleaning businesses across Australia.

A nationwide clean-up of all these sites could cost the company hundreds of millions of dollars.

However, the amount is not clear because the company says it does not know precisely how many sites there are.

The case has been running since 2003 and legal costs, expected to be millions of dollars, will be decided later this year.

Three Spotless subsidiaries operated dry-cleaners at the Brunswick site

The 49 unit project pre-sold the flats without first obtaining Environment Protection Authority certification that the land was habitable.

The company had to cancel the sales AND pay construction costs of the building, forcing them into administration.

Colonial First State, was the major investor behind the \$14 million project.

Lotsearch Sample – Brunswick



Former Tip, Ballarat, VIC

Black Hill residents trash Ballarat Council over former tip contamination ABC Ballarat By Danna Diaz Updated 24 Jun 2016, 11:56am Victoria's environmental watchdog has intervened in a dispute between the City of Ballarat and a resident, who is claiming 10 Olympic-sized swimming pools of rubbish has contaminated his property. Mark Hosking, who owns a three-acre property across the road from the landfill, points to a large pile of rocks covering what used to be a trench. After initially uncovering trash on his property in 2008, he paid an environmental firm, Cardno Land Piner, to assess the full extent of the problem. "That's where they dug up and found the rubbish," he said. The firm found almost 14,000 cubic metres of waste underneath an acre of Mr. Hosking's property equating to an area about the size of 10 Olympic swimming pools. It is believed to have leaked from the historic council-owned Black Hill tip, now known as the Chisholm Street Recreation Reserve across the road. Rubbish removal quote \$3.5M The former paramedic said he had spent more than \$350,000 on legal fees in an effort to get the Ballarat Council to own up to the contamination. "I'd just like the council to take responsibility for this and take responsibility for their lack of transparency." "I had a quote on removing the rubbish from my land and it was \$3.5 million dollars." Mr Hosking said his property was now worthless because of the extent of the waste. "Basically, I've got a noose around my neck and the council is pulling it tighter," he said. Robert Brookes used to own a house on the same street, and believes the nearby Leerama Court housing estate was actually built on top of a rubbish dump. Mr Brookes said when he worked on the site in 1991, now the site of 21 houses, he often dug out large mounds of trash including rubble and plastic. "When I was digging stuff out, I could smell all the gases coming out of the ground," he said "As they started building more blocks for the housing, more and more was coming up. There was a hell of "The land developers should have been on to that straight away because they knew it was there, but why didn't they say something? "How did they even get permits to build houses on it?" EPA calls on council for report on tip boundary The Environment Protection Authority (EPA) has ordered the City of Ballarat to "detail exactly where

waste extends beyond the boundary of its former Black Hill landfill

Resident discovered that his property had waste underneath equating to the size of ten Olympic swimming pools.

Rubbish removal quote for \$3.5 million.

Historical aerial photos highlight former tip.

http://www.abc.net.au/news/2016-06-23/black-hill-residents-trash-ballarat-council-over-former-tip/7537752

Case Studies – 'Lotsearch Insights'

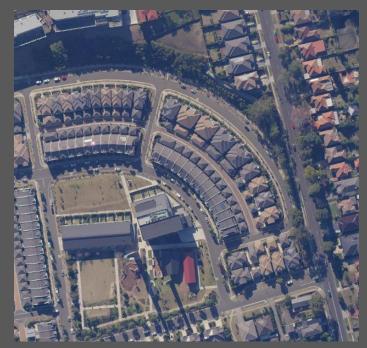


Case Study showing modern housing estate built on historical landfill site - Victoria





Case Study showing modern housing estate built on historical filled land - NSW





2018 1943



Insights From Historical Maps & Imagery



Rifle range

Map - 1975



Map - 2015

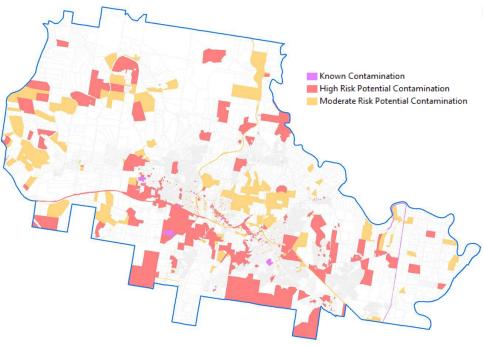


Ray Proudley – a history of the gas industry in Victoria



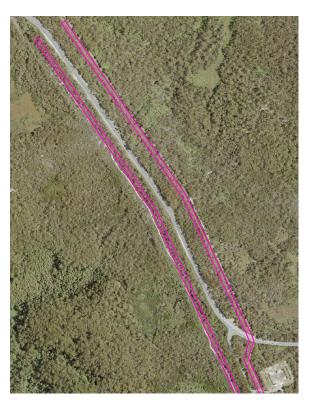
Local Government Authority (LGA) Insights!

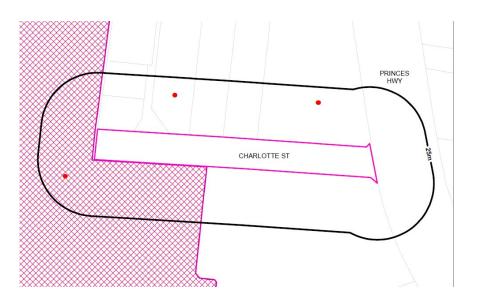






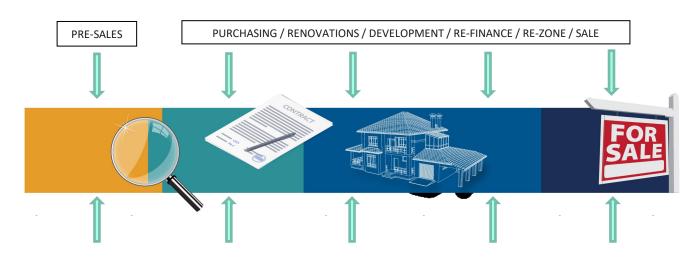
Infrastructure & Utility Projects





Summary

Property & Development Lifecycle



Advisors, Auditors, Architects, Asset Managers, Banks, Compliance, Contractors, Conveyancers, Councils, Developers, Energy, Environment Managers and Consultants, Insurers, Lawyers, Lenders, Planners, Property Groups, Real Estate Agents, Trades, Utilities, Valuers.

Lotsearch reports can be used throughout the lifecyle to identify potential hazards and risk

Summary

- 2014 Lotsearch Founded
- 2015–2018 Lotsearch launch Enviro Pro Report
 (contains known, potential and site characteristics)
- 2018 Lotsearch launch the Contaminated Land Screening Report.
 (contains known, potential and assessment)
- 2019 Lotsearch launch the Contaminated Land Search.
 (contains known contamination from public registers)

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, linear alignments, 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



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Q&A