



strata
geoscience and environmental

Phase 1 Environmental Site Assessment

77 Gibson Street

Leongatha



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Glossary of Terms

AHD	Australian Height Datum
AMG	Australian Map Grid
AS	Australian Standard
AST	Above Ground Storage Tank
ANZECC	Australian and New Zealand Environment and Conservation Council
BTEX	Benzene, Toulene, Ethylbenzene, Xylenes
COC	Chain of Custody
CUTEP	Cleanup to Extent Practical
DO	Dissolved Oxygen
EC	Electrical Conductivity
EIL	Environmental Investigation Levels
HIL	Health Investigation Levels
mbgs	meters below ground surface
mmbgs	millimetres below ground surface
NAPL	Non-Aequeous Phase Liquid
NATA	National Association of Testing Authorities
NEPM	National Environmental Protection Measure
OCP	Organochlorine Pesticides
OPP	Organophosphorous Pesticides
PAH	Polycyclic Aromatic Hydrocarbons
PID	Photoionistaion Detector
RPD	Relative Percent Difference
SVOC	Semi-Volatile Organic Compounds
SWL	Standing Water Level
TDS	Total Dissolved Salts
TPH	Total Petroleum Hydrocarbons
UST	Underground Storage Tank
VOC	Volatile Organic Compounds

1. Introduction

1.1 Background

Strata Geoscience and Environmental Pty Ltd was engaged by Sharon Murphy (“the client”) to conduct a Phase 1 Environmental Site Assessment (ESA) of 77 Gibson Street Leongatha (“the site”). This assessment has been triggered following recent application to Council for proposed residential redevelopment.

The Phase 1 ESA was carried out in accordance with the scope and limitations presented below.

1.2 Objectives

The objectives of this assessment are to provide the client with preliminary advice on the likely contamination status of the study area and the degree of further assessment potentially required to assess the suitability of the study area for its proposed use. Namely, the objectives are:

1. To assess the potential for past or current activities to have contaminated any areas of the site or neighboring sites.
2. To assess the potential for contamination to pose a risk to the future proposed use of the site.
3. To develop relative risk rankings for the site based on potential contamination indicators in accordance with the Department of Sustainability and Environmental *Potentially Contaminated Land General Practice Note* (2005).
4. To inform further investigation efforts (if required).

1.3 Scope

The following tasks were undertaken in order to satisfy the purpose and objectives of this assessment.

Define the Site:

- Define the property and title information.
- Define the key features, infrastructure and topography of the site.
- Identify the location of nearby sensitive environments and receptors
- Identify the zoning of the site under the local Planning Scheme.

Define Geology, Hydrogeology & Groundwater Use

- Research likely regional surface geology associations
- Review the regional and local hydrogeology including groundwater use.

Research Public Records on Site History

- Review publicly available documents relevant to the site.

Site Inspection & Interviews

Inspect accessible properties within the study area to:

- Conduct interviews with site owners and/or other parties to determine known site history.
- Investigate evidence of chemical or fuel storage, industrial infrastructure or machinery with potential to cause contamination.
- Identify evidence of site fill or existence of waste products or spills.
- Conduct walkby inspections of neighboring properties to elucidate any other sources of contamination.

1.4 Guidelines and Standards Referenced

This investigation is made with reference to, or in general accordance with, the following standards and guidelines:

- NEPM (2013). Assessment of Site Contamination Measure 2013. National Environmental Protection Council.
- The Victorian Department of Sustainability and Environment (DSE), June 2005, General Practice Note Potentially Contaminated Land.

2. Site Details

2.1 Site Location and Planning Context

Details of site location and cadastre are presented in Table 1 and Figure 1 below. The “study area” is defined as the subject site and all neighbouring properties as defined in Table 2.



Figure 1 Exert from www.land.vic.gov.au showing site location

Table 1 Site Details

Address	77 Gibson Street Leongatha
Area	1.2 Sq Km approx.
Municipality	South Gippsland
Planning	Fz/Grz
Overlays	ESO, DPO

2.2 Current Site Use and Infrastructure

The subject site currently exists as grazing land with undulating variable aspect slopes. The site is fenced and hosts some stockyards and two residential dwellings. It is suspected that the site has been historically used as a dairy farm prior to beef production. For further information please see Section 2.1 and Appendix 1.

2.3 Neighbouring Land Uses

Neighbouring land uses are presented in Table 2 below.

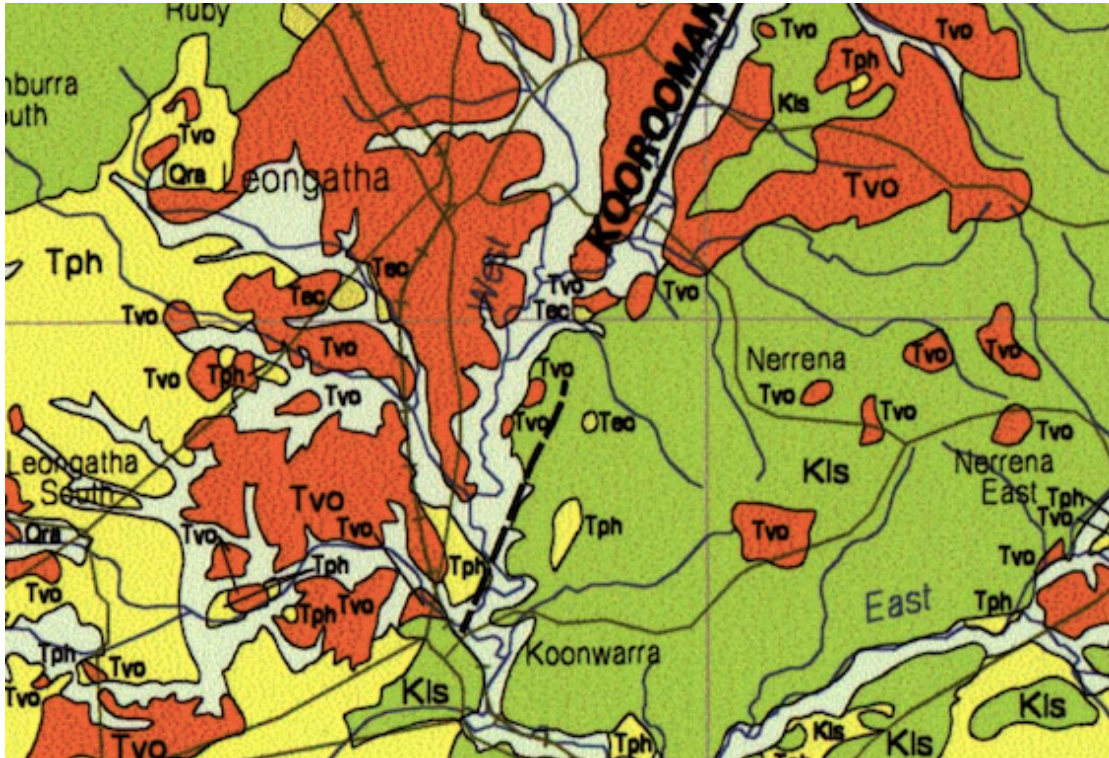
North	100/134/150 Old Korumburra Road. Rural/Residential
South	115 Gibson Street Rural/Residential
East	Gibson Street Various Residential
West	165/Lot 2 Old Korumburra Road. Rural/Residential

2.4 Geographic Setting, Geology, Soils and Hydrogeology

2.4.1 Geographic Setting, Geology and Soils

Referring to the Geoscience Australia 1:250000 Warragul Sheet, the site is situated on undulating slopes underlain by Tertiary-aged Volcanic rocks parting to lower areas associated with Quaternary-aged Alluvium. The proposed site occupies a top-mid slope position within the localised landscape, parting to moderate to steep side slopes terminating in the lower Quaternary alluvial plain.

Soils developing from these geological units in temperate climates are likely to weather to produce duplex profiles of SILTS(ML) overlying SILTY (CL/CH) to variable depths up to approximately 10 + mbgs. Clays (when present) will have a moderate to high cation exchange complex (CEC), a slightly acidic trend and low to moderate permeabilities. Inspection of the site did not elucidate site surface geology or pedology.



Qrt Fluvial: alluvial terraces: gravel, sand, silt

Tvo Extrusive: tholeiitic and minor alkaline basalts

OLDER VOLCANICS

Figure 2 Excerpt from Geoscience Australia 1:250000 Warragul Sheet

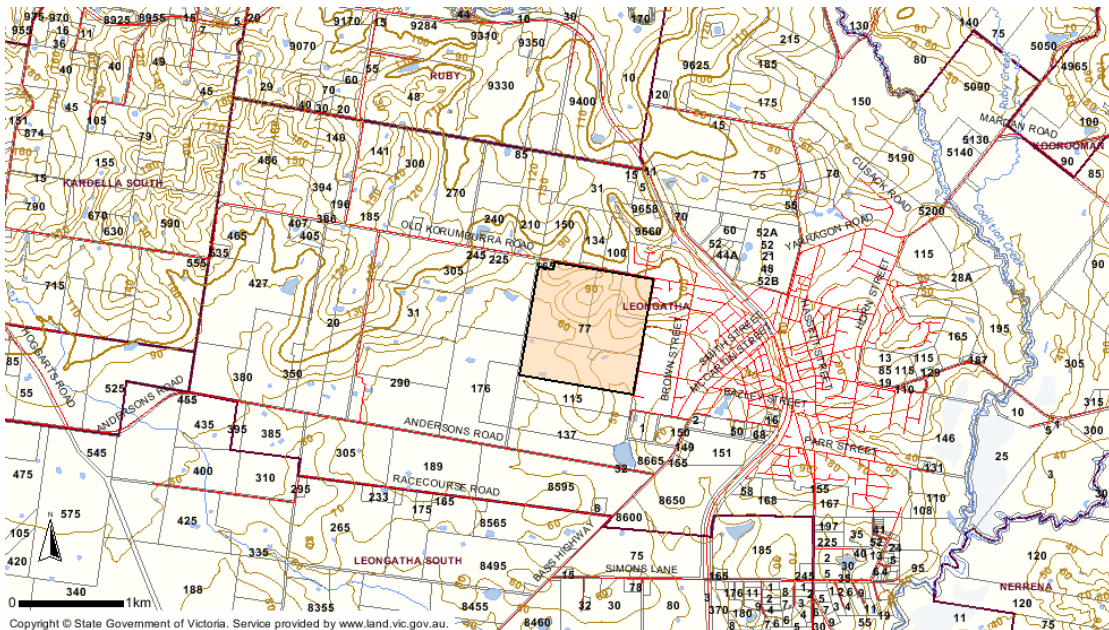


Figure 3 Topographical Map of the Site (Landchannel, 2019)

2.4.2 Conceptual Aquifers

The general hydrogeology of areas proximal to the site is likely to comprise a shallow unconfined aquifer (s) within the soils which locally discharges towards the south. This aquifer is anticipated to be moderately permeable with moderate storage capacity. This aquifer is likely to be impacted by stormwater concentration and diversion.

Permanent groundwater depth onsite is likely to be approximately 5-10m below the existing ground surface and have salinity in the range between 500mg/L to 1000mg/L.

Potential leaching of any contamination from the site could impact upon this the Quaternary Alluvial Aquifer. This could then express into the drainage lines or could impact upon groundwater quality. This is of specific concern where such waters are abstracted for human or animal use. They may also impact upon local flora and fauna and aquatic ecosystems.

2.4.3 Groundwater Bore Search

A search of the VVG groundwater map portal proximal groundwater monitoring bores revealed that there is one monitored observation bore within 500m of the site, namely:

- Bore 75565

Bore details including map location and other registered details are presented in Appendix 6.

2.4.4 Groundwater Quality and Beneficial Uses

Based on the Department of Natural Resources and Environment Groundwater Resources Victoria Map groundwater is likely to have a salinity range of 501-1000 mg/L TDS.

The following beneficial uses are indicated:

- Maintenance of ecosystems
- Stock watering
- Industrial water use
- Primary contact recreation
- Buildings and structures
- Potable water

2.5 Proximal Surface Waters

The nearest surface water are two unnamed drainage lines running in a south/south west direction towards the south-western boundary of the site. There is also a moderately sized dam on the site. Lower lying areas are likely to suffer from site seasonal waterlogging. The water bodies are likely the closest sensitive receiving environment outside of any proximal schools, childcare facilities or residential dwellings.

2.6 Climate

The area receives an average annual rainfall of 847.6 mm (Leongatha Station) and has a mean annual min/max temperature of 6.5 and 26.4 degrees Celsius respectively (BOM, 2019).

2.7 Utility Service Locations

A summary of pertinent services identified via a dial before you dig search is presented below. Complete search results are available upon request.

Table 3 Service Locations

Electricity	Overhead on Gibson Street/Old Korumburra roads
Water	Underground on Gibson Street/Old Korumburra roads
Gas	Unknown
Sewer	Not available
Telecommunications	Underground on Gibson Street/Old Korumburra roads

3. Potential for Site Contamination

3.1 Known Site History and Use

There is a paucity of information on site history and few readily available records.

Searches were conducted from the following sources:

- Royal Historical Society of Victoria
- Melbourne Metropolitan Board of Works
- Sands and Mcdougall and Melways Directories
- Internet Searches

Results of these searches found:

- Sands & McDougall's Directory up until 1969 listed country towns and recorded their residents but, for all except the very largest towns, they only listed the residents in alphabetical order without street addresses. However, for Leongatha after 1965, whilst continuing to record the existence of the town, they did not list its residents.
- The area of Leongatha was first settled by Europeans in 1845. A Post Office was opened as Koorooman in 1887. It was renamed Leongatha in 1891 when a township was established on the arrival of the railway.
- The Victorian Municipal Directory of 1896 lists grazing and dairying as the principal activities of the Leongatha district. This was repeated in the editions of 1915, 1935 and 1955. It was repeated again in the 1974 edition, but in addition the milk processing factory, a bakery and some industrial activities were also mentioned. This was largely unchanged in the 1994 (the last) edition.
- Google Earth indicates that at least in the period since 2010 this site has been open farmland with just the normal associated houses and sheds.

- The Leongatha and District Historical Society did not have further information concerning this site.
- The surrounding areas have likely been used for agriculture with embedded residential development.

From the above evidence, it appears that the site and surrounding areas has been used variously for the following activities:

- Grazing/Agriculture
- Residential

3.2 Search of Public Records

3.2.1 EPA Priority Sites Register

A search of the EPA Priority (Contaminated) Site Register was conducted on 14 June 2019. "Priority sites" are sites for which EPA has issued a Clean-Up Notice or Pollution Abatement Notice and may present a source of contamination to the environment.

From the EPA website:

"The Priority Sites Register is not a listing of all contaminated sites in Victoria, nor is it a list of all contaminated sites of which EPA has knowledge.

The Priority Sites Register does not list sites managed by voluntary agreements or sites subject to management by planning controls (for example sites managed in accordance with section 173 agreement under the *Planning and Environment Act 1987*). Land purchasers should be aware of these limitations and make their own enquiries."

The search indicated that the property is not listed on the Priority Site Register at the time of the search and no site within a 1km radius are listed on the register.

3.2.2 EPA Register of Completed Audit Sites

A search of the EPA register of completed Statements and Certificates of Environmental Audit was conducted on 14 June 2019. The results indicate that the subject site has not been the subject of a completed Environmental Audit. Furthermore, no sites have been subject to environmental audits within a 1.0 km radius.

3.2.3 EPA Register of Notified Environmental Audits

A search of the EPA register of notified Environmental Audits was conducted on 14 June 2019. The results indicate that the site is not the subject of an Environmental Audit, and no sites within 1.0 km are currently under audit.

3.3 Worksafe Dangerous Goods Search

An FOI request to Worksafe Victoria on 28 May 2019 failed to find any documents relating to the property.

3.4 Search of Aerial Photo Record

A search of the 1946 Melbourne University aerial photographs of Melbourne did not cover this area.

A CheckSite Historical search is presented in Appendix 2 of this report and details all available historical aerial photographs.

Google Earth Historical Images (2002-2016) were searched for evidence of potentially contaminating activities or site use on and nearby the site. Searches revealed:

- No other discernable site/infrastructure changes over this time on the site.

3.5 Certificates of Title

A search of the current and historic certificates of title was conducted. Information contained in these documents was used to check for evidence of current and former land use based on land ownership. Property reports and associated Title documents are included in Appendix 4.

3.6 Search of Cathodic Protection Systems Database

A search of the Cathodic Systems Database had revealed no registered cathodic system locally. Results are presented in Appendix 3.

3.7 Property and Infrastructure Inspections

A site walkover was conducted on 24 May 2019 (see Appendix 1).

The key findings of this site visit were:

- The site is currently being actively farmed for beef production.
- Stock handling yards were observed onsite.
- No sheep dips were observed.
- Two residential dwellings and associated outbuildings were observed.
- A septic tank sewage system was observed.
- Minor evidence of emplaced fill observed onsite.
- Minor disturbances in the main drainage line was observed
- No Asbestos containing building materials were observed.
- No above/underground fuel storage infrastructure was observed.
- No staining of soil surface indicating previous chemical/fuel storage/spills was observed.
- A moderate sized farm dam and two drainage lines were observed
- No groundwater was observed.
- No groundwater bores were observed.

Walk-by property inspections were carried out to inspect neighbouring properties and determine the risk of current site activities upon the potential for contamination of the subject site. The site is bordered by road reserves and farming land/residential dwellings all of which are considered low risk for potential contamination.

3.8 Potential for Acid Sulphate Soils, Acid Mine Drainage and Mine Tailings

The Department of Primary Industries Coastal Acid Sulphate Soil (CASS) Hazard Mapping series was reviewed to assess the potential for acid sulphate soils to be present at the site. The map shows the site is not located in an area which has the potential for acid sulphate soils.

Large scale mining activities are not known to have been carried out in the area.

3.9 Potential for Contamination by Off Site Fill Sediments

Site inspection did elucidate the existence of minor fill sediments in one discrete area. The origin of these sediments is unknown.

3.10 Risk Rankings for Potential Contamination

3.10.1 Background to Rankings

A risk ranking scheme for potential contamination sources has been developed in accordance with the scheme outlined in General Practice Note Potentially Contaminated Land (DSE, 2005). The DSE practice note classifies potentially contaminating activities as having a high, medium or low potential to cause contamination of land and groundwater. Figure 3 presents the full listing of potentially contaminating uses in each category or classification.



Figure 4 Exerpt from DSE (2005)

The DSE ranking scheme also identifies the “contamination assessment response” required by the responsible planning authority when considering an application for development or rezoning of land for either a “sensitive” or “non-sensitive” land use. An extract from the DSE guideline illustrating this scheme is presented in Figure 4.

PROPOSED LAND-USE	POTENTIAL FOR CONTAMINATION		
	(as indicated in Table 1)		
	<i>High</i>	<i>Medium</i>	<i>Low</i>
<i>Sensitive Uses</i>			
<i>Child care centre, pre-school or primary school</i>	<i>A</i>	<i>B</i>	<i>C</i>
<i>Dwellings, residential buildings etc.</i>	<i>A</i>	<i>B</i>	<i>C</i>
<i>Other Uses</i>			
<i>Open space</i>	<i>B</i>	<i>C</i>	<i>C</i>
<i>Agriculture</i>	<i>B</i>	<i>C</i>	<i>C</i>
<i>Retail or office</i>	<i>B</i>	<i>C</i>	<i>C</i>
<i>Industry or warehouse</i>	<i>B</i>	<i>C</i>	<i>C</i>

- A: Require an environmental audit as required by Ministerial Direction No. 1 or the Environmental Audit Overlay when a planning scheme amendment or planning permit application would allow a sensitive use to establish on potentially contaminated land.
An environmental audit is also strongly recommended by the SEPP where a planning permit application would allow a sensitive use to be established on land with 'high potential' for contamination.*
- B: Require a site assessment from a suitably qualified environmental professional if insufficient information is available to determine if an audit is appropriate. If advised that an audit is not required, default to C.*
- C: General duty under Section 12(2)(b) and Section 60(1)(a)(iii) of the Planning and Environment Act 1987.*

Figure 5 Exerpt from DSE (2005)

Within the context of site usage as “Dwellings” with a MEDIUM potential for contamination “FILING/CHEMICAL STORAGE (FARM CHEMICALS)” and then Assessment Level B is appropriate.

3.10.2 Results

Table 4 summarises the potentially contaminating land use activities identified within the study area. Possible Contaminants of Potential Concern (COPC) that are typically associated with each of these activities are also identified for completeness.

Table 4 Results of Potentially Contaminating Site Activities			
DSE Risk Ranking	DSE Assessment Level	Land Use/Activity	Possible COPC
Medium	B	Proposed residential	NEPM (2013) OC/OP PESTICIDES, ACID HERBICIDES

4. Conclusions and Recommendations

This Phase 1 Environmental Site Assessment has found:

- **The site has a DSE risk ranking of “Medium” and given the sites proposed use as residential, further assessment is warranted with reference to these guidelines.**

Given the above finding the following recommendations are made:

- **Preliminary shallow (0-500mm) soil sampling in areas of highest risk proceed, namely:**
 - **In/surrounding stockyards/former stockyards.**
 - **Areas showing ground surface disturbance in drainage line.**
 - **In/surrounding out buildings/sheds.**
 - **The fill located on eastern boundary near driveway.**
- **Please refer to Figure 6 overleaf for a site plan with further details. Results of this soil sampling and analysis event will inform future sampling efforts (if required).**
- **Minimum analysis suite should include the following:**
 - **NEPM (2013) Suite Table 1(A)1 Residential A**
 - **TRH/TEX**
 - **Acid Herbicides**
 - **OC/OP Pesticides**

Any questions or comments about this report should be directed to the author via the contact below.



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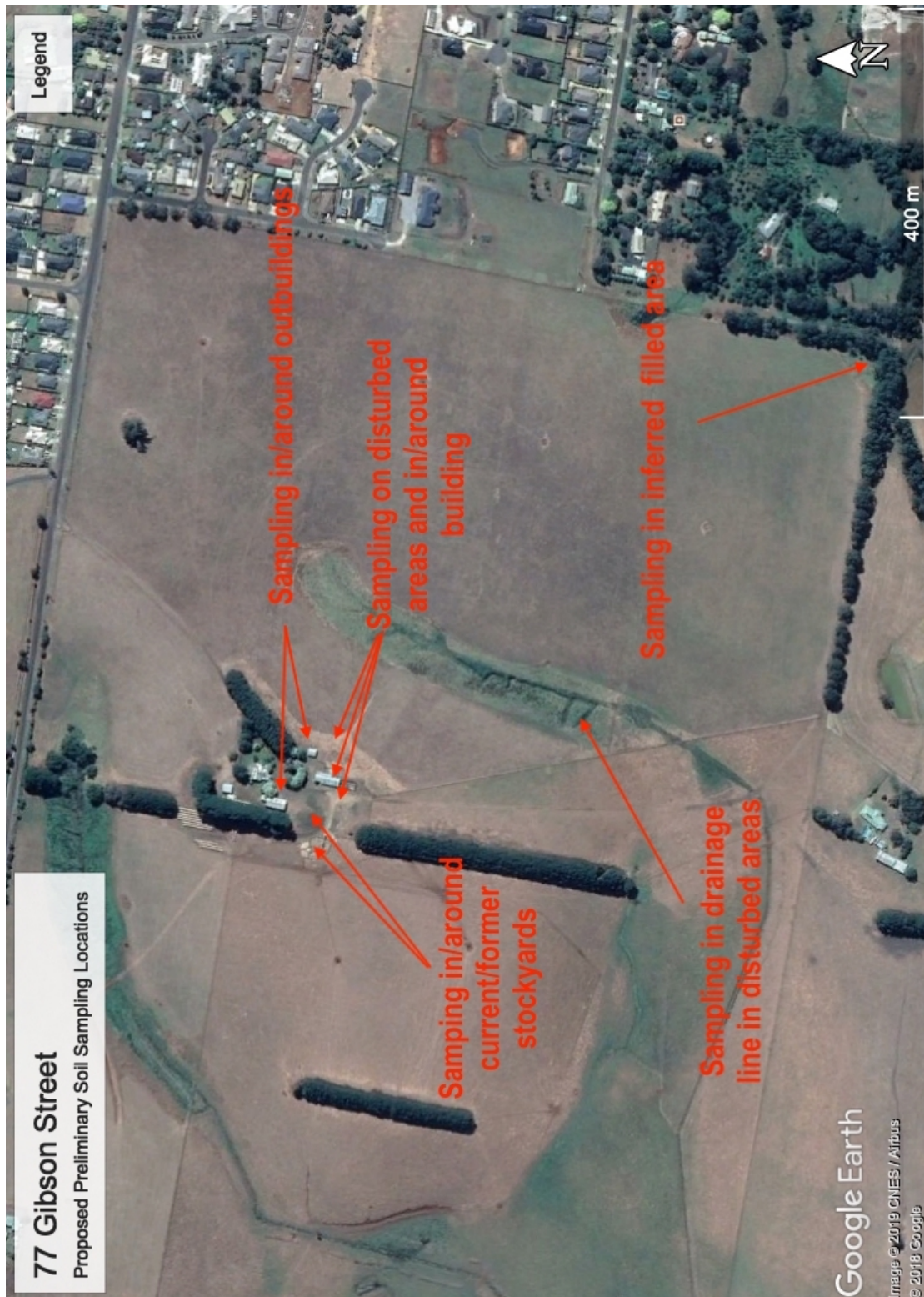


Figure 6 Proposed preliminary sampling locations

5. References

- NEPM (2013). Assessment of Site Contamination Measure 2013. National Environmental Protection Council.
- The Victorian Department of Sustainability and Environment (DSE), June 2005, General Practice Note Potentially Contaminated Land.
- A Sutherland (Date Unknown), *Victoria and its Metropolis: Past and Present*, Vol IIB, p. 442.
- Department of Sustainability and Environment (2009) Best Practice Guidelines for Assessing and Managing CASS
- Department of Natural Resources and Environment; Groundwater Resources Victoria Map

6. Appendices

This report contains the following appendices:

- **Appendix 1 Contemporary Site Photographs**
- **Appendix 2 Historical Imagery**
- **Appendix 3 Cathodic System Search**
- **Appendix 4 Property Reports and Title Documents**
- **Appendix 5 EPA Priority Sites extract**
- **Appendix 6 Groundwater Bore Search Results**
- **Appendix 7 Extract from EPA Information Bulletin 860.1 (2007) Environmental Auditing of Contaminated Land**
- **Appendix 8 Terms and Conditions**

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Appendix 1 Contemporary Site Photographs



Plate 1 (Above) and Plate 2 (below) Stockyards (28/5/19)



Plate 3 (Above) and Plate 4 (below) Inferred uncontrolled fill (28/5/19)

Appendix 2 Historical Aerial Imagery – Spatial Vision Innovations, 2019



CheckSite
Historical

Gibson Road, Leongatha, 3953

CS00280



Report Date: 13/05/2015
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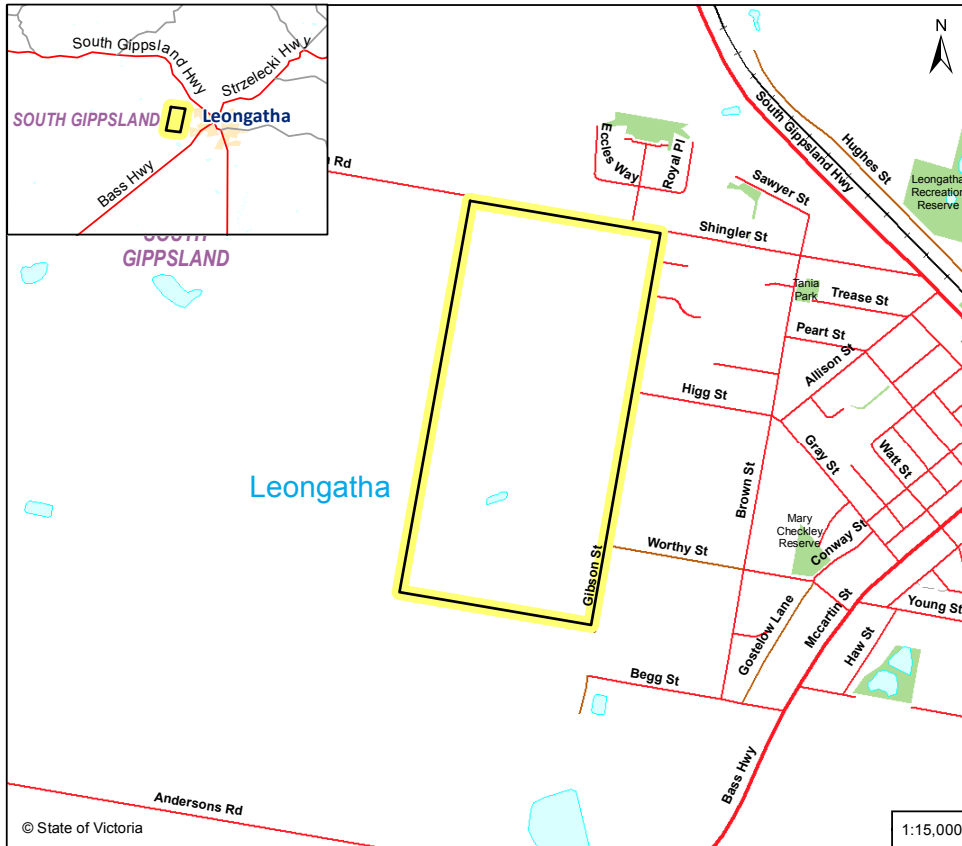
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The following searches have been undertaken for this report.

CONTENT	SOURCES	SEARCH UNDERTAKEN	INFO. PROVIDED	DETAILS
Melway	AUSWAY Publishing	<input checked="" type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input checked="" type="radio"/> No	No Melway Ed1 1966 coverage available No Melway Ed 11 1978 coverage available
Historic Aerial Images	Department of Sustainability & Environment	<input checked="" type="radio"/> Yes <input type="radio"/> No	<input checked="" type="radio"/> Yes <input type="radio"/> No	Aerial Imagery from 1973, 1975 & 1985
Parish Plans	Public Records Office Victoria	<input checked="" type="radio"/> Yes <input type="radio"/> No	<input checked="" type="radio"/> Yes <input type="radio"/> No	Refer to map
Historic Planning Schemes	Department of Planning & Community Development	<input checked="" type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input checked="" type="radio"/> No	
MMBW Detail Plan	State Library of Victoria	<input checked="" type="radio"/> Yes <input type="radio"/> No	<input type="radio"/> Yes <input checked="" type="radio"/> No	No MMBW Plan available

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Historical Aerial Imagery

Image Date: January 1973

Scale of Original Photograph: 1:30,000

Photo ID: 2727_160_05_16um_19011973.jp2



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Historical Aerial Imagery

Image Date: November 1979

Scale of Original Photograph: 1:25,000

Photo ID: 3459_077_14_16um_14121979.jp2



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Historical Aerial Imagery

Image Date: September 1985

Scale of Original Photograph: 1:25,000

Photo ID: 3968_090_014_15um_03101985.jp2



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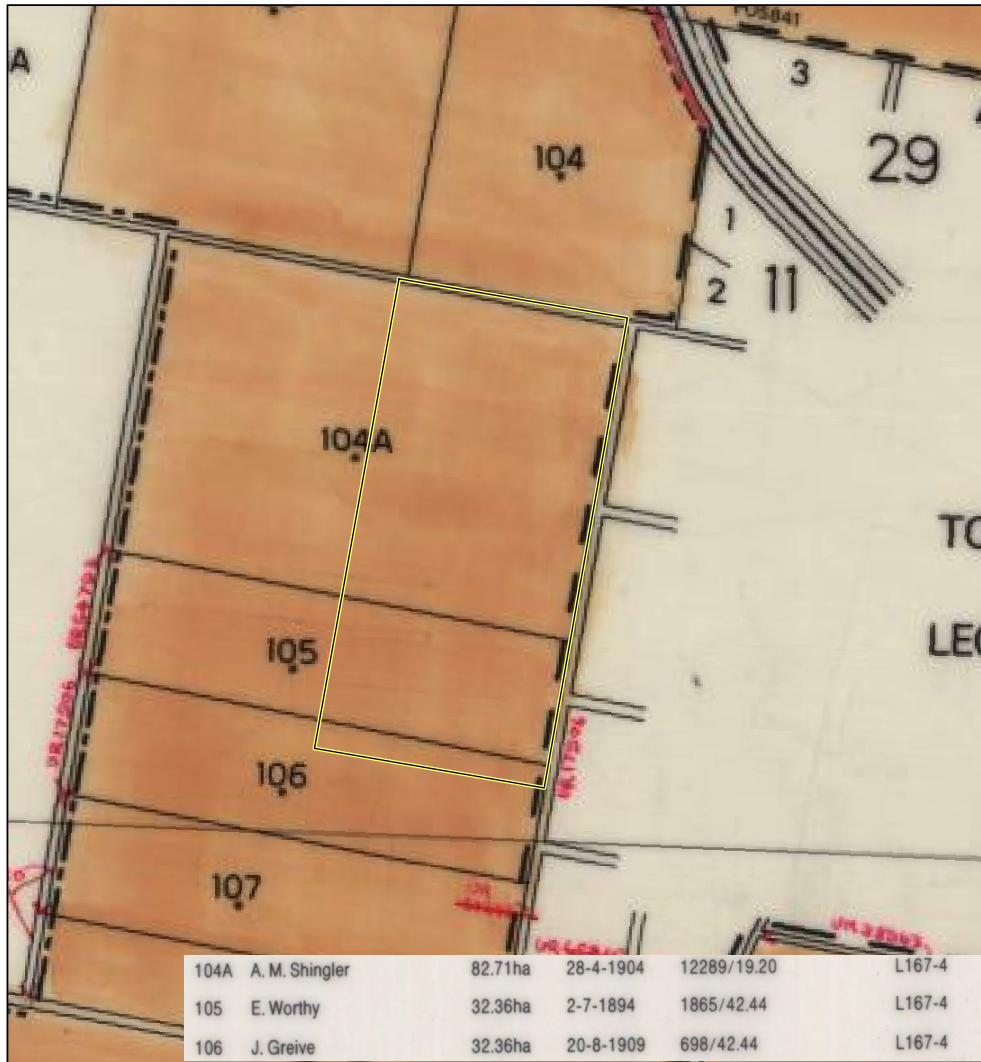


Parish Plan

Parish: Leongatha

Section: N/A

Allotment: Part of 104A, 105 and 106



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Appendix 3 Cathodic Systems Database Search

28 May 2019



Creating a
safer state with
electricity and gas

To: Sven Nielsen
Strata Geoscience

T: 0413 545 358

SEARCH FOR CATHODIC PROTECTION SYSTEMS

With reference to your email of 27/05/2019, a search of the CP database has failed to identify any cathodic protection systems that have been registered at the following locations:

- **77 Gibson Street Leongatha**
- **230 Lilloco Road Warragul**
- **234 Lilloco Road Warragul**

Yours sincerely

A handwritten signature in black ink, appearing to read "Peter Wade".

Peter Wade

MANAGER ELECTROLYSIS MITIGATION

Disclaimer

Energy Safe Victoria provides this information in good faith, but cannot guarantee the accuracy or validate the information provided. The Cathodic Protection (CP) database is a register of currently operating Cathodic Protection systems in Victoria and was established in 1970. The CP database is administered under the Electricity Safety Act 1998 and the Electricity Safety (Cathodic Protection) Regulations 2009. Some underground fuel tanks may not be listed in the CP database including: if the tank is not metallic (therefore not requiring CP); the tank is metallic but CP was not installed; the CP system was not registered, or the CP system has been de-commissioned. If you believe underground tanks may be present and not shown on ESV's database you should conduct your own tests and investigations.

Energy Safe Victoria
ABN 27 462 247 657

Level 5 Building 2
4 Riverside Quay
Southbank VIC 3006

PO Box 262
Collins St West VIC 8007
DX 212569 Melbourne VIC

T (03) 9203 9700
F (03) 9686 2197
www.esv.vic.gov.au



Appendix 4 Property Reports/Title Documents



Property Report from www.land.vic.gov.au on 15 June 2019 05:03 PM

Address: 77 GIBSON STREET LEONGATHA 3953

Lot and Plan Number: This property has 5 parcels. See table below.

Standard Parcel Identifier (SPI): See table below.

Local Government (Council): SOUTH GIPPSLAND **Council Property Number:** 199797

Directory Reference: VicRoads 96 G9

This property is in a designated bushfire prone area. Special bushfire construction requirements apply. Planning provisions may apply.

Further information about the building control system and building in bushfire prone areas can be found in the Building Commission section of the Victorian Building Authority website www.vba.vic.gov.au

Address Details

These addresses have been found for this property

Address
77 GIBSON STREET LEONGATHA 3953
77 GIBSON STREET LEONGATHA 3953
77 GIBSON STREET LEONGATHA 3953

Parcel Details

Lot/Plan or Crown Description	SPI
Lot 1 LP212865	1\LP212865
Lot 1 PS330446	1\PS330446
Lot 2 PS330446	2\PS330446
Lot 1 PS404151	1\PS404151
Lot 2 PS404151	2\PS404151

State Electorates

Legislative Council: EASTERN VICTORIA

Legislative Assembly: GIPPSLAND SOUTH

Utilities

Rural Water Corporation: Southern Rural Water

Urban Water Corporation: South Gippsland Water

Melbourne Water: outside drainage boundary

Power Distributor: AUSNET (Information about [choosing an electricity retailer](#))

Planning information continued on next page

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77-GIBSON-STREET-LEONGATHA-BASIC-PROPERTY-REPORT

Page 1 of 2



Planning Zone Summary

Planning Zones: [FARMING ZONE \(FZ\)](#)
[SCHEDULE TO THE FARMING ZONE \(FZ\)](#)
[GENERAL RESIDENTIAL ZONE \(GRZ\)](#)
[GENERAL RESIDENTIAL ZONE - SCHEDULE 1 \(GRZ1\)](#)

Planning Overlays: [DEVELOPMENT PLAN OVERLAY \(DPO\)](#)
[DEVELOPMENT PLAN OVERLAY - SCHEDULE 9 \(DPO9\)](#)
[ENVIRONMENTAL SIGNIFICANCE OVERLAY \(ESO\)](#)
[ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 2 \(ESO2\)](#)
[ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 4 \(ESO4\)](#)
[ENVIRONMENTAL SIGNIFICANCE OVERLAY - SCHEDULE 5 \(ESO5\)](#)

Planning scheme data last updated on 12 June 2019.

A **planning scheme** sets out policies and requirements for the use, development and protection of land. This report provides information about the zone and overlay provisions that apply to the selected land. Information about the State and local policy, particular, general and operational provisions of the local planning scheme that may affect the use of this land can be obtained by contacting the local council or by visiting [Planning Schemes Online](#)

This report is NOT a **Planning Certificate** issued pursuant to Section 199 of the *Planning and Environment Act 1987*. It does not include information about exhibited planning scheme amendments, or zonings that may affect the land. To obtain a Planning Certificate go to [Titles and Property Certificates](#)

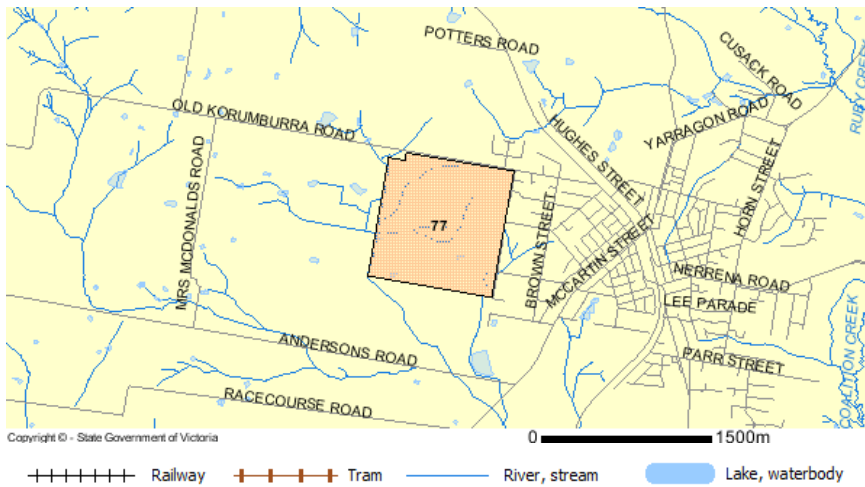
The Planning Property Report includes separate maps of zones and overlays

For details of surrounding properties, use this service to get the Reports for properties of interest

To view planning zones, overlay and heritage information in an interactive format visit [Planning Maps Online](#)

For other information about planning in Victoria visit www.planning.vic.gov.au

Area Map



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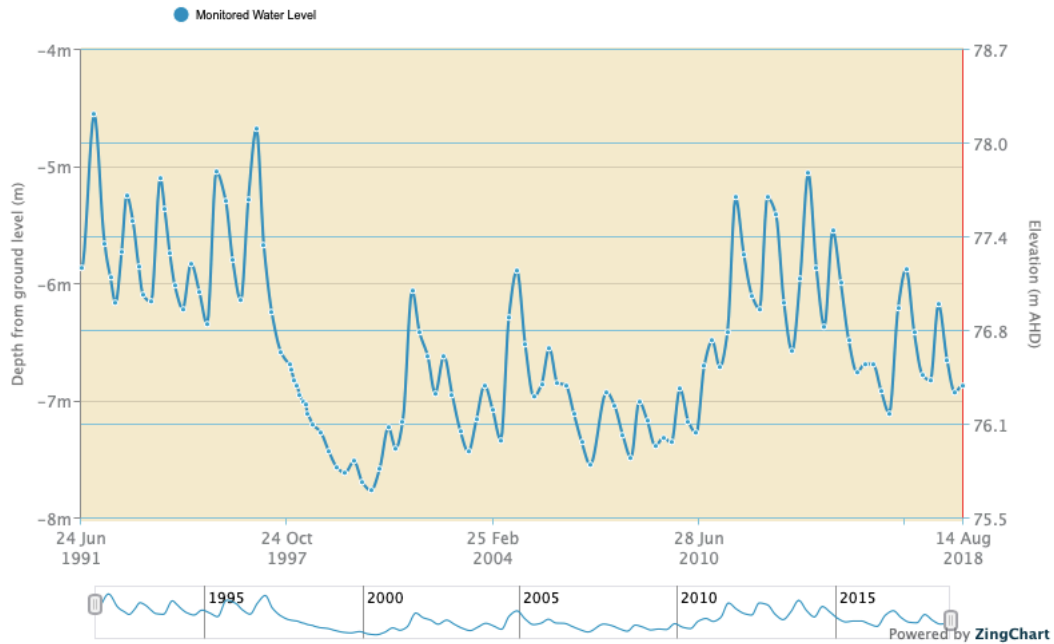
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Appendix 5 EPA Priority Sites Extract

South Gippsland Shire Council	AGNES	614 BARRY RD	Industrial waste has been dumped at the site. Requires assessment and/or clean up.	0090009029
South Gippsland Shire Council	FOSTER	4090 SOUTH GIPPSLAND HWY	Former Landfill. Requires ongoing management.	0090003533
South Gippsland Shire Council	LEONGATHA SOUTH	630 ROUGHEADS RD	Former Landfill. Requires ongoing management.	0090006475
Strathbogie Shire Council	VIOLET TOWN	190 Mcdiarmids RD	Former Landfill. Requires ongoing management.	0090008902

Appendix 6 Groundwater Bore Search Results

Monitoring for bore: 75565



- [Bore details](#)
- [Aquifer](#)
- [Monitoring](#)
- [Chemistry](#)
- [Lithology](#)
- [Stratigraphy](#)
- [Attachments](#)

Location					
Datum	Longitude	Latitude	MGA zone	Easting(m)	Northing(m)
GDA 1994	145.923438	-38.469331	55	406085.0	5741560.7

Surveyed Elevation (m AHD)	Digitised Elevation (m AHD)	Location Accuracy	Total Depth	Completion date
82.91			93.00	1991-06-04

Ownership and usage				
Bore Authority	Bore type	Bore use 1	Bore use 2	Bore use 3
	Groundwater	Groundwater Investigation	Observation	State Observation Network

Monitoring status	Monitoring frequency	Parish	Old Bore ID	Local Bore name
Currently monitored	Quarterly	LEONGATHA	15044	

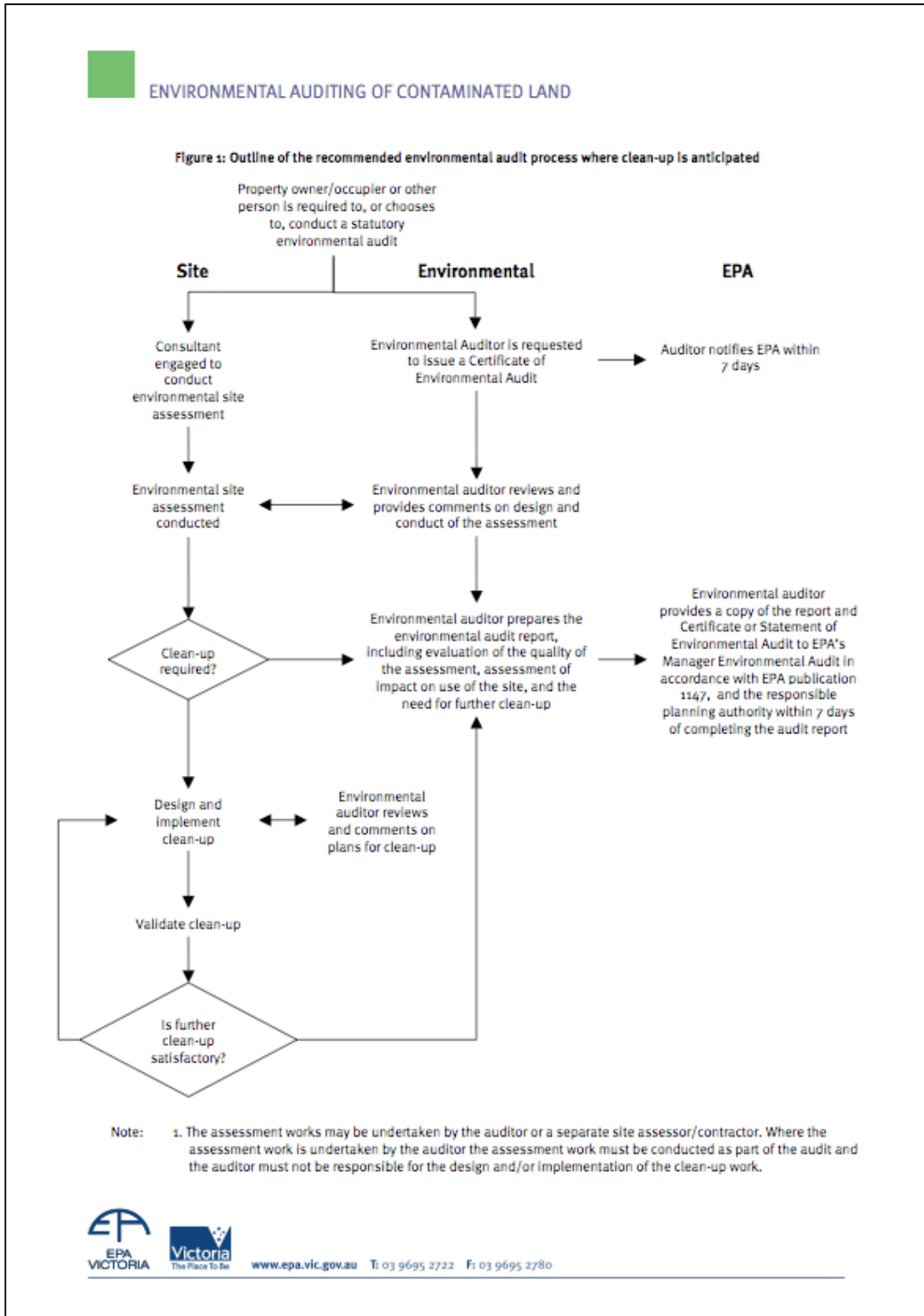
The screenshot displays a web-based GIS application interface. At the top, there is a search bar with the text "Search Bore ID / address". Below the search bar, there are navigation and tool icons including a home button, a "I want to..." dropdown, a legend, and various tool icons like a printer and a refresh button. The main map area shows an aerial view of a rural area with several bore locations marked with colored dots and labels: 75502 (blue), 75565 (purple), 75359 (blue), and 75362 (blue). A scale bar in the bottom right of the map indicates 200m and 1000ft. On the right side of the map, there are style selection buttons for "Google Streets", "VICMAP", "VICMAP IMAGERY", "ESRI IMAGERY", and "3D Scene".

Below the map, there is a "Search" section with a "Search filters (WMIS)" button and a "Query mode" section with tabs for "Bores", "Drill Virtual Bore", "EPA Sites", and "Active Layer". The "Bores" tab is selected. A message states "Bores query mode is active. To perform a quick bore lookup, single-click anywhere on the map. Note: if you want all bores within an area use the analysis tools". A "Search radius" input field is set to 500 m. An "Export" button is visible.

At the bottom, a table titled "WMIS Bores" displays the following data:

Bore ID	Status	Year constructed	Depth
75565	■	1991	93

Appendix 7 Extract from EPA Information Bulletin 860.1 (2007) Environmental Auditing of Contaminated Land





Appendix 8 Terms and Conditions Potentially Contaminated Sites

Scope of Work

These Terms and Conditions apply to any services provided to you ("the Client") by Strata Geoscience and Environmental Pty Ltd ("Strata"). By continuing to instruct Strata to act after receiving the Terms and Conditions or by using this report and its findings for design and/or permit application processes, or as a submission to any regulatory body and not objecting to any of the Terms and Conditions the Client agrees to be bound by these Terms and Conditions, and any other terms and conditions supplied by Strata from time to time at Strata's sole and absolute discretion. The scope of the services provided to the Client by Strata is limited to the services and specified purpose agreed between Strata and the Client and set out in the correspondence to which this document is enclosed or annexed ("the Services"). Strata does not purport to advise beyond the Services.

Third Parties

The Services are supplied to the Client, the EPA and the Auditor for the sole benefit of the Client, the EPA and the Auditor and must not be relied upon by any person or entity other than the Client, the EPA and the Auditor. Strata is not responsible or liable to any third party. All parties other than the Client, the EPA and the Auditor are advised to seek their own advice before proceeding with any course of action.

Provision of Information

The Client is responsible for the provision of all legal, survey and other particulars concerning the site on which Strata is providing the Services, including particulars of existing structures and services and features for the site and for adjoining sites and structures. The Client is also responsible for the provision of specialised services not provided by Strata. If Strata obtains these particulars or specialised services on the instruction of the Client, Strata does so as agent of the Client and at the Client's expense. Strata is not obliged to confirm the accuracy and completeness of information supplied by the Client or any third party service provider. The Client is responsible for the accuracy and completeness of all particulars or services provided by the Client or obtained on the Client's behalf. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever suffered by the Client or any other person or entity resulting from the failure of the Client or third party to provide accurate and complete information. In the event additional information becomes available to the Client, the Client must inform Strata in writing of that information as soon as possible. Further advice will be provided at the Client's cost. Any report is prepared on the assumption that the instructions and information supplied to Strata has been provided in good faith and is all of the information relevant to the provision of the Services by Strata. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever if Strata has been supplied with insufficient, incorrect, incomplete, false or misleading information.

Integrity

Any report provided by Strata presents the findings of the site assessment. While all reasonable care is taken when conducting site investigations and reporting to the Client, Strata does not warrant that the information contained in any report is free from errors or omissions. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from errors in a report. Any report should be read in its entirety, inclusive of any summary and annexures. Strata does not accept any responsibility where part of any report is relied upon without reference to the full report.

Project Specific Criteria

Any report provided by Strata is based upon subsurface conditions encountered at the time of the investigation. Conditions can and do change significantly and unexpectedly over a short period of time. For example groundwater levels may fluctuate over time, and ex-situ/insitu fill sediments may be placed/removed from the site. Changes to the subsurface conditions that were not encountered at the time of the investigation may void recommendations made by Strata in any report. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from any change to the subsurface conditions that were encountered at the time of the investigation. In the event of a delay in the commencement of a project or if additional information becomes available to the Client about a change in conditions becomes available to the Client, the Client should engage Strata to make a further investigation to ensure that the conditions initially encountered still exist. Further advice will be provided at the Client's cost. should be reviewed regularly to ensure that it continues to be accurate and further advice requested from Strata where applicable.

Interpretation

Site investigation identifies subsurface conditions only at the discrete points of geotechnical drilling, and at the time of drilling. All data received from the geotechnical drilling is interpreted to report to the Client about overall site conditions as well as their anticipated impact upon the specific project. Actual site conditions may vary from those inferred to exist as it is virtually impossible to provide a definitive subsurface profile which accounts for all the possible variability inherent in earth materials. Strata is not responsible for the interpretation of site data or report findings by other parties, The Client must seek advice from Strata about the interpretation of the site data or report.

Specific Geo-environmental Considerations

These Additional Terms and Conditions for contaminated sites apply together with any other terms and conditions provided to you ("the Client") by Strata Geoscience and Environmental Pty Ltd ("Strata"). By continuing to instruct Strata to act after receiving the Terms and Conditions or not objecting to any of the Terms and Conditions, the Client agrees to be bound by these Additional Terms and Conditions, and any other terms and conditions supplied by Strata.

Strata will conduct work concerning the environmental status of the property (the "Services") in response to specific instructions from the Client. In particular, the Client may select a preliminary investigation design or sampling event, which does not meet all the requirements of the national guidelines. (NEPM (2013)) The instructions from the client, as set out in the attached letter (if any), or contained within this report define the scope of the work conducted by Strata for the Client. The scope of the work is also limited by the time and budgetary requirements of the Client, and the other information provided to Strata by the Client and other external parties.

Phase 1 Environmental Site Assessment 77 Gibson Street Leongatha

This is particularly relevant to the decision by the client to select a reduced scope investigation design, which does not meet all the requirements of the NEPM (2013) guidelines and may not be in accordance with an auditor's requirements for the issue of a Statement or Certificate of Environmental Audit.

The analysis, interpretations, opinions and conclusions presented in any report are based upon the instructions, requirements, data or information supplied by the Client and third parties. The analysis, interpretations, opinions and conclusions are void if the Client's or third party's instructions, data, and information are inaccurate or incomplete. This is particularly pertinent to the selection of contaminants of potential concern (COPC) where Strata is given limited available site history. The selection of analytes by Strata proceeds from these COPC. However, if only limited information on historical site use is available or supplied, Strata accepts no responsibility, and is not liable, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from the omission of specific analytes, or any advice given as a result of the information provided.

Investigations are based upon sampling locations determined in consultation with the Client. Conclusions and recommendations in any report are based upon data from the areas sampled. Strata cannot and does not guarantee that conditions located between sampling points or at depths beyond those sampled do not vary from interpreted conditions. No extrapolations of any data will be made to other areas of the site which have not been sampled. The Client should make Strata aware of any potential areas where contamination may exist. Strata accepts no responsibility, and is not liable, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from a failure to sample contaminated areas.

Further sampling is recommended throughout and after construction phases. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from delays to project construction associated with soil sampling, analysis and reporting. Furthermore where soil or groundwater contamination is found at this time Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever for either site remedial costs or impacts upon project completion or serviceability of completed infrastructure including, but not limited to, occupancy of completed buildings.

Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from the discovery of any undisclosed or previously unknown potentially polluting underground infrastructure, including but not limited to underground petroleum storage infrastructure.

Strata does not account for events occurring after an assessment is conducted. Events can and do occur in a short period of time. Strata is not liable, and accepts no responsibility, for any claim, demand, charge, loss, damage, injury or expense whatsoever resulting from any event that occurs after an assessment. In the event of a delay in the commencement of a project or additional information about an event that becomes available to the Client, the Client should engage Strata to make further investigations. Further advice will be provided at the Client's cost. Without limiting the generality of the above statement, Strata does not accept liability where any report is relied upon after three months from the date of the report, (unless otherwise provided in the report or otherwise regarded by the relevant Australian Standards which the report purports to comply with) or the date when the Client becomes aware of any event that may affect the accuracy of a report. Any report should be reviewed regularly and further advice requested from Strata where applicable.

Copyright and Use of Documents

Copyright in all drawings, reports, specifications, calculations and other documents provided by Strata or its employees in connection with the Services remain vested in Strata. The Client, the EPA and the Auditor have a licence to use the documents for the purpose of completing the project. However, the Client, the EPA and the Auditor must not otherwise use the documents, make copies of the documents or amend the documents unless express approval in writing is given in advance by Strata. The Client, the EPA and the Auditor must not publish or allow to be published, in whole or in part, any document provided by Strata or the name or professional affiliations of Strata, without first obtaining the written consent of Strata as to the form and context in which it is to appear.

If, during the course of providing the Services, Strata develops, discovers or first reduces to practice a concept, product or process which is capable of being patented then such concept, product or process is and remains the property of Strata and:

- (i) the Client, the EPA and the Auditor must not use, infringe or otherwise appropriate the same other than for the purpose of the project without first obtaining the written consent of Strata; and
- (ii) the Client, the EPA and the Auditor is entitled to a royalty free licence to use the same during the life of the works comprising the project.

Digital Copies of Report

If any report is provided to the Client in an electronic copy except directly from Strata, the Client, the EPA and the Auditor should verify the report contents with Strata to ensure they have not been altered or varied from the report provided by Strata.