LAND CAPABILITY ASSESSMENTS

GroundScience

What is a Land Capability Assessment?

A Land Capability Assessment (LCA) is a detailed report that identifies intrinsic environmental features associated with the site for sustainable on-site wastewater management. The objective is to develop a management regime, minimise environmental impacts and enhance long-term sustainability.

When is an Land Capability Assessment required?

In unsewered areas, an LCA must be undertaken for a site that requires the installation of a wastewater treatment system.

Ground Science can assist you with the preparation of an LCA. The objectives of the LCA are to identify all the relevant land and soil constraints of the site which will be assessed and evaluated with recommendations of a practicable and environmentally sustainable wastewater management solution that satisfies the requirements of Council. Specifically, the LCA will:

- Determine all relevant features of the site
- Identify all relevant land and soil constraints
- Limited intrusive soil investigation, logging and sampling
- Perform water balance modelling
- Perform nutrient balance modelling
- Determine required Land Application Area for effluent disposal
- Discuss treatment and disposal options
- Provide an assessment of the site

Ground Science has built up relationships with Councils across Victoria and has tailored reports to meet the specific requiments of all Shires.

All reports and procedures are in accordance with EPA Victoria guidleines and Australian Standards:

- EPA Publication 891.3 Septic Tanks Code of Practice
- EPA Publication 746.1 Land Capability Assessment for Onsite Domestic Wastewater Management
- AS/NZS 1547: 2000

AS/NZS1547:2000 outlines factors affecting the construction and operation of common land-application systems and a guide to selecting a system to suit the identified site and soil constraints. A range of possible land application systems will be considered on a case by case basis, which include:

- Trenches & Bed Systems
- Evapotranspiration/absorption Systems
- Surface/Sub-surface Irrigation Systems
- Mound Systems

Ground Science can determine which system will be most suitable for your site and guide you through the complete process to obtain a permit.

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The setback distances listed below are an extract from the EPA Code of Practice and are minimum distance required for the separation buffer between the wastewater disposal field and other specific site sensitive features.

Situation	Setback (meters)
Building	
Wastewater field upslope of building	6
Wastewater field down slope of building	3
Allotment boundary	
Wastewater field upslope of adjacent lot	6
Wastewater field down slope of adjacent lot	3
Services	
Water supply pipe	3
Potable supply channel (wastewater field upslope)	300
Potable supply channel (wastewater down slope)	20
Gas	3
Underground water tank	15
Stormwater drain	6
Swimming pool	6
Cutting / escarpment	15
Surface waters (upslope from)	
Dam or reservoir (potable, including food production)*	300
Dam or reservoir (stock & non potable)	60
Stream or channel (continuous or ephemeral, non potable)	60
Stream (potable water supply catchment)	100
* does not apply to dams and reservoirs above ground level	
Groundwater & bore	
Potable or non potable	20

Ground Science can also perform in-situ Percolation Testing in accordance with Talsma Constant Head Method as outlined in AS/NZS 1547:2000, if required by Council. Estimations of the indicative permeability (Ksat m/d) can be determined from key soil properties that include texture, structure, depth colour and mottling.

Please contact our LCA specialist **Mr Jared Hammett**
on ***9464 4617*** for any questions or to organise a quote.

We operate all throughout metro Melbourne and rural Victoria

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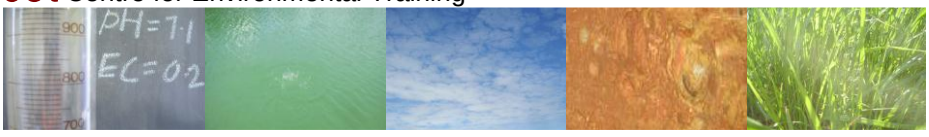

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