



Land Capability Assessment for On-site Wastewater Management

19 – 21 November 2019

Melbourne, VIC



Competency based training in site and soil assessment for design and management of domestic on-site wastewater systems

The leading Australasian On-site Wastewater Management Training Course covering the revised EPA Code of Practice 891.4 AS/NZS1547:2012 and the Victorian Land Capability Assessment Framework

More rigorous requirements for Land Capability Assessment have been incorporated into the most recent version of the EPA Victoria *Code of Practice - Onsite Wastewater Management 891.4* and also a number of updated Council Domestic Wastewater Management Plans. Many of these documents refer to the approach outlined in the *Victorian Land Capability Assessment Framework*. This course brings you up to date with recent changes to these documents. The course covers all aspects of land capability (site and soil) assessment and design and management of on-site and decentralised wastewater management systems to comply with current legislation. The course follows the methodology presented in the revised *Code of Practice*, the approach of the Australian Standard AS/NZS1547:2012 *On-site Domestic Wastewater Management* and the detail described in the *Victorian Land Capability Assessment Framework*.

The course is designed for those involved in land capability assessment, planning, design, installation, regulation, management and performance supervision of domestic on-site and decentralised wastewater management systems. It is particularly relevant to Land Capability Assessors, Environmental Health Officers, Building Inspectors, Plumbing Inspectors, Environmental Managers, Planners, Surveyors, Catchment Managers, Geotechnical, Environmental and Engineering Consultants as well as on-site systems designers, manufacturers and installation and maintenance technicians.

Councils should encourage attendance by site and soil assessors preparing Land Capability Assessment (LCA) reports to support development applications. It is equally important that Council officers assessing Land Capability Assessment (LCA) reports are appropriately skilled.

The course comprises lecture presentations, practical demonstrations, hands-on practical and workshop sessions and a field based land capability assessment and design workshop. There is ample opportunity for discussion, information exchange and networking amongst participants.

Participants are asked to bring a calculator and suitable attire for the field based site assessment.

The course has been developed in conjunction with regulatory agencies and relevant professional bodies throughout Australia and New Zealand, and is widely recognised for Continuing Professional Development.

The course will be held at:

**Quality Hotel Melbourne Airport
265 Mickleham Road
Tullamarine, VIC 3043**

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Technical sessions include:

- The Regulatory Environment
- Wastewater Quantification and Characterisation
- Primary Treatment; Septic Systems
- Primary Treatment; Composting Systems and Greywater Diversion
- Secondary Treatment; Sand Filters and Mounds
- Secondary Treatment; Wetlands and Reed Beds
- Secondary Treatment; Aerated Wastewater Treatment Systems
- Tertiary Treatment; Disinfection and Advanced Processes
- Soil Assessment for On-site Wastewater Management
- Soils; Hydraulic Conductivity and Dispersion
- Soil Properties, Classification and Testing
- Soil Absorption Systems; Trenches and Beds
- Passive Dosing Systems; Siphons, Flouts and LPED
- Evapotranspiration Systems
- Water Balance Analysis
- Nutrient Removal and Land Application Systems
- Irrigation Systems
- Land Capability Assessment
- Field Based Site and Soil Assessment
- Soil Permeability Testing by Constant Head Permeameter
- Site Evaluation and Design Exercise
- Failing Systems; Auditing and Troubleshooting
- Tracing Failing Systems

Land Capability Assessment

Course Presenters

Phillip Geary, BSc, MSc, PhD, Conjoint Associate Professor in Environmental Science, School of Environmental and Life Sciences, University of Newcastle. Phillip has served on the AS/NZS 1547 Standard Committee and was the inaugural Chair of NOSSIG, the National On-site Systems Interest Group in Australia. Phillip has researched and designed many alternative systems and solutions to on-site wastewater management problems in Australia, New Zealand and the USA and has had numerous research papers published. His recent research has investigated the impact of on-site wastewater systems on sensitive shellfisheries and the use of tracers to define the impacts of failing systems.

Mark Saunders, BEnvSc. (Hons I), is a consultant at Whitehead & Associates Environmental Consultants Pty Ltd. Mark has wide-ranging experience in on-site wastewater management, including site assessment, system selection and design, project management, risk analysis and auditing. Mark has worked extensively in the public and private sector in both Australia and the USA. Mark has developed audit protocols and tailored operation and management (O&M) plans for a wide variety of package treatment technologies and has extensive experience in troubleshooting wastewater treatment systems to meet operational and regulatory requirements.

Joe Whitehead, BSc, MAppSc, FGS, is Director of the Centre for Environmental Training, Australia and Principal of Whitehead & Associates Environmental Consultants Pty Ltd, a consultancy specialising in on-site wastewater management. Joe is an Environmental and Engineering Geologist with wide and varied experience in geotechnical aspects of site evaluation, waste and wastewater management, in Europe, America and Australasia. Joe has extensive expertise in land capability assessment, design and management of domestic and commercial scale on-site and decentralised systems for difficult and constrained sites in Victoria. Joe has written Domestic Wastewater Management Plans for several Victorian Councils and has coordinated the original MAV *Model Land Capability Assessment* document and the more recently published *Victorian Land Capability Assessment Framework*.

Course Enrolment Form (2451)

If you would like to enrol in this course please complete your details below or on-line at

<http://www.environmentaltraining.com.au/Australian-Course-Schedule>

Participant Name

Organisation

Billing Address

Postcode

Purchase Order Number

(if required by your organisation for invoicing purposes)

Tel

e-mail

PLEASE REGISTER ME FOR:

Land Capability Assessment for On-site Wastewater Management course
19 - 21 November 2019



The course will be held from 8.30 am to 4.30 pm at Quality Hotel, 265 Mickleham Road, Tullamarine, VIC 3043.

Course fee: \$2,135.00 + \$213.50 GST = Total \$2,348.50

10% discount for two or more registrations from the same organisation.

Course fee includes comprehensive course notes, lunch and morning and afternoon tea. Please tell us if you have special dietary requirements.

Payment Terms and Conditions: Once enrolment form is received we will send you a tax invoice outlining payment details. Payment can be made by Electronic Funds Transfer or via cheque payable to The Centre for Environmental Training.

Reservation deadline is one week prior to any workshop.

Cancellations must be notified five working days prior to course start dates or full fees will be payable.

The Centre for Environmental Training

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CARDIFF NSW 2285

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Web: www.environmentaltraining.com.au

Land Capability Assessment for On-site Wastewater Management

Covers all aspects of on-site wastewater management.

Covers the *Code of Practice – Onsite Wastewater Management 891.4*, (EPA VIC), AS/NZS1547:2012 *On-site Domestic Wastewater Management* and *Victorian Land Capability Assessment Framework* (MAV, EPA, DSE).

Provides up-to-date coverage of advances in the science, technology and management of on-site systems and a wide range of options and alternatives for problem sites.

Is prepared and presented by the leading team of on-site wastewater trainers in Australasia.

In excess of 4,000 wastewater professionals from Australia, New Zealand and the Pacific have already completed the course.

Participants receive comprehensive course notes and a certificate formally documenting competencies.

What previous participants have to say:

"Comprehensive, challenging; much more useful than I had ever imagined possible. Clear, enthusiastic, professional, knowledgeable, patient and humorous presenters."
Fiona Pfeil, Gippsland Water, Victoria.

"Course content and all areas of course presentation excellent, the course has provided valuable reference material and a greater understanding of the assessment and installation of on-site systems."
Bruce Mitchell, City of Whittlesea, Victoria.

"I thoroughly recommend the course for both regulators and consultants. The course notes are a great reference."
Helen Tunks, hmc Environmental, Bonora Point, NSW.

"Excellent. There are few opportunities for training courses for practitioners. This course is what is needed in the industry."
John Randles, Gisborne, Victoria.



Onsite i Site

All course participants receive a complimentary one-year subscription to our on-site wastewater information portal

www.onsitesite.com