



Centre for Environmental Training

# Inspection and Troubleshooting of On-site Wastewater Management Systems

Penrith, NSW

9 April 2024

Coffs Harbour, NSW

11 April 2024



What to look for and how to interpret what you find

CET is the leading Australasian provider of Professional Short Course Training in On-site and Decentralised Wastewater Management

## Inspection and Troubleshooting

### *Inspection and Troubleshooting of On-site Wastewater Systems*

This one-day workshop covers inspection, auditing, risk assessment, troubleshooting and rectifying problems with on-site wastewater management systems. Illustrated scenarios, photographs and data on actual system investigations are used to provide participants with an opportunity to learn practical strategies and how to effectively implement them.

This course is intended for those involved in design, installation, maintenance, regulation, management and performance supervision of domestic on-site and decentralised wastewater management systems. It is particularly relevant to on-site system designers, manufacturers, plumbers and installation and maintenance technicians, Site and Soil and Land Capability Assessors, Environmental Health Officers, Building Inspectors and Plumbing Inspectors.

Councils should encourage attendance by service agents and designers preparing Site and Soil Assessment or Land Capability Assessment (LCA) reports to support development applications, especially those involved in assessment of existing and older systems requiring upgrades.

Many council officers with a regulatory responsibility for on-site wastewater management do not have a practical background in on-site wastewater system inspection, operation and troubleshooting. This course will broaden their skills and experience and improve their confidence in inspecting on-site treatment and land application systems.

The course comprises lecture presentations, practical demonstrations, checklists and scenario exercises to observe and investigate a range of on-site treatment and land application systems including septic tanks, absorption trenches and beds, aerated wastewater treatment systems (AWTS) and irrigation areas, and other alternative treatment and land application systems.

The course will help participants identify what to look for when inspecting on-site systems and how to interpret what they find to help troubleshoot and rectify on-site system problems.

There will be ample opportunity for discussion, information exchange and networking amongst participants.

### *Inspection and Troubleshooting of On-site Wastewater Systems*

The course will be held at:

**Macquarie Room, Penrith RSL**  
**8 Tindale Street, Penrith NSW**  
**9 April 2024**  
**and**

**CET Training Room**  
**2/13 Industrial Drive, North Boambee Valley NSW**  
**11 April 2024**

#### Technical sessions include:

- Why Inspect?
  - Background and Rationale
- How to Inspect
  - Workplace Health and Safety
  - Risk Assessment, Theory and Documentation
  - What to look for
- Inspection Equipment and Use
  - Testing and Monitoring On-site Systems
- What is Failure?
  - System Assessment and Accurate Diagnosis
  - Problems and Solutions
- Primary Treatment Systems, Trenches and Beds
- Secondary Treatment Systems, Irrigation
- Troubleshooting Scenario Exercises
- Discussion, Questions and Answers



## Course Presenters

**Heather Murphy, BAppSc**, Senior Consultant at Whitehead & Associates Environmental Consultants Pty Ltd. Heather has over five years' experience in Local Government roles with responsibility for on-site wastewater management, followed by nine years consulting in on-site wastewater management and design. During this time, she has coordinated and implemented an extensive program of on-site wastewater management system inspections on behalf of local government. In addition, Heather has undertaken many inspections of on-site wastewater management systems as part of audits and troubleshooting exercises prior to designing upgrades to rectify system problems. Heather routinely undertakes site assessments and designs domestic and commercial on-site wastewater management systems for a wide range of facilities, and provides support to Local Government in regulation and compliance for environmental and on-site wastewater management.

Heather has been principal co-author of the recent revision of the NSW Environment & Health Protection Guidelines Onsite Wastewater Management (The Silver Book).

**Joe Whitehead, BSc, MAppSc, PGCE, 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, management, inspection and troubleshooting of domestic and commercial on-site and decentralised systems on difficult and constrained sites.

Joe has written onsite wastewater guidelines for several State and Territory government agencies, Domestic Wastewater Management Plans for several NSW and Victorian Councils and has coordinated and contributed to the writing of the original *MAV Model Land Capability Assessment* document and the more recent *Victorian Land Capability Assessment Framework*. Joe has been co-author of the EPA VIC Code of Practice Literature Scoping Study and the recent revision of the NSW Environment & Health Protection Guidelines Onsite Wastewater Management (The Silver Book).

## Inspection and Troubleshooting Course Enrolment Form (3679)

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

[Course Schedule – Centre for Environmental Training](#)

Participant Name
Organisation
Billing Address
Postcode
Purchase Order Number
(if required by your organisation for invoicing purposes)
Tel
e-mail

### PLEASE REGISTER ME FOR:

**Inspection and Troubleshooting On-site Wastewater Management Systems**

**Please tick preferred venue**

<b>Macquarie Room</b> <b>Penrith RSL</b> <b>8 Tindale Street,</b> <b>Penrith NSW 2750</b> <b>9 April 2024</b>	<b>CET Training Room</b> <b>2/13 Industrial Drive,</b> <b>North Boambee</b> <b>Valley NSW 2450</b> <b>11 April 2024</b>
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The course will be held from 9.00 am to 4.30 pm.

**Course fee: \$850.00 + \$85.00 GST = Total \$935.00**  
**10% discount for two or more registrations from the same organisation.**

Course fee includes comprehensive course notes, lunch and morning and afternoon tea. Each participant will receive a certificate outlining the detailed content and duration of the course.

**Payment Terms and Conditions:** Payment can be made by EFT or credit card (a 2.6% surcharge applies). Places will be confirmed upon receipt of payment into our account. If you are unable to attend a course, you will need to advise us of cancellation at least 14 days prior to the course otherwise no refund will be provided. A full refund will be given where notice of cancellation is given more than 14 days before the course. 10% administration charge is applicable to all course transfers due to illness/non-attendance.

### The Centre for Environmental Training

**197 Main Road**  
**CARDIFF NSW 2285**

**Telephone: 02 4954 4997**

**E-mail: [mail@environmentaltraining.com.au](mailto:mail@environmentaltraining.com.au)**

**Web: [www.environmentaltraining.com.au](http://www.environmentaltraining.com.au)**

## Inspection and Troubleshooting of On-site Wastewater Systems

Practical coverage of all aspects of inspection and troubleshooting on-site wastewater treatment and land application systems.

Based on the *Environment & Health Protection Guidelines, On-site Sewage Management for Single Households and AS/NZS1547:2012 On-site Domestic Wastewater Management*.

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 attended our on-site wastewater courses.

Participants receive comprehensive course notes and a certificate outlining the detailed content and duration of the course.

### What previous participants have to say:

*"Excellent depth of knowledge and experience. Real world tips and advice."*

Dean Graham, South Gippsland Shire Council, VIC.

*"I thoroughly recommend the course for both regulators and consultants. The course notes are a great reference."*

Helen Tunks, hmc Environmental, Bonora Point, NSW.

*"Comprehensive, challenging; much more useful than I had ever imagined possible. Clear, enthusiastic, professional, knowledgeable, patient and humorous presenters."*

Fiona Pfeil, Gippsland Water, VIC.

*"Informative and presented in a manner which was easy to understand. Very knowledgeable presenters, with a clear agenda to help people improve their processes."*

Robert Clarke, Maroondah City Council, VIC.

*"Extremely helpful. Very relevant to my role. Both presenters delivered their respective presentations with clarity and positive body language."*

Noel Schiller, Hilltops Council, Young NSW.



**Onsite i Site**

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

[www.onsiteisite.com](http://www.onsiteisite.com)