

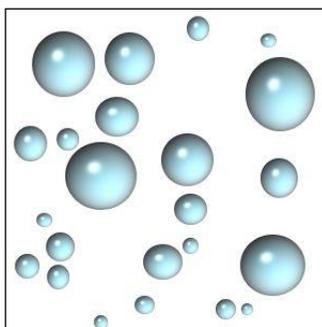


Centre for Environmental Training

Package Wastewater Treatment Plant Operation and Management

8-9 June 2021

Cessnock, NSW



An informative short course with up-to-date information to give you the necessary skills to effectively select, review, permit, operate, manage and audit package sewage treatment plants for mid-scale developments and commercial facilities

Package Wastewater Treatment Plants *Package Wastewater Treatment Plant Operation and Management*

Package treatment plants are an integral component of the sewage management infrastructure in areas not serviced by traditional reticulated sewage networks. Operators of package treatment plants may include caravan parks, tourist facilities, resorts, wineries, rural subdivisions, retirement villages, campgrounds, national park facilities, mining operations, golf courses and isolated commercial enterprises.

Regulatory control of the most commonly encountered package treatment plants resides with Local Government Authorities who may, or may not, have the resources or experience to deal confidently with these larger and sometimes more complex systems.

Unlike domestic wastewater treatment systems (<10EP), no contemporary guidance is available for practitioners regarding the assessment, approval, operation, monitoring and maintenance of package treatment plants in NSW. In many cases, owners, operators and regulators of these sewage management systems may rely on outdated or inappropriate information. This presents a significant risk to public health and the environment resulting from underperforming systems and inadequate management practices.

This two-day course comprises lecture presentations, practical demonstrations, workshop sessions and practical field examples. The course will include visits to several operational plants in the local area and will feature on-site discussion with system owners, operators and regulators.

The course covers a range of topics including regulatory issues, public health and environmental risk, available technologies, treatment processes, performance objectives, disinfection, storage and land application requirements. Considerable time is devoted to examining the operational and maintenance requirements for various types of treatment technologies and the development of appropriate monitoring protocols.

There is ample opportunity for discussion, information exchange and networking with fellow practitioners.

Package Wastewater Treatment Plant Operation and Management

The course will be held at:

Cessnock Leagues Club
1 Darwin Street
Cessnock NSW

8-9 June 2021

This course has been developed and updated in response to concerns expressed by Local Government, State Government Agencies and owners/operators of package wastewater treatment plants over the lack of awareness and understanding of the maintenance and management requirements of these types of systems and the selection of appropriate treatment technologies for varying wastewater streams. Particular concern has also been raised over the consideration of adequate effluent management practices downstream of package plant operations. This course provides guidance on appropriate package treatment plant monitoring, auditing and reporting requirements.

Technical sessions include specific information on:

- Regulatory Controls and Compliance
- Treatment Technologies, Processes and Performance
- System Selection and Design Considerations
- Performance Requirements
- Reviewing and Approving System Applications
- Land Application or Re-use Systems
- Risk Assessment and Risk Management
- Developing Operation and Management Plans
- System Monitoring and Reporting
- Troubleshooting
- Operational Examples

Participants receive comprehensive course notes and on successful completion, will receive a certificate formally documenting the course content.

Course Presenters

Mark Saunders, BEnvSc. (Hons I).

Mark is a Senior Consultant at Whitehead & Associates Environmental Consultants Pty Ltd and a course presenter for the Centre for Environmental Training. 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 designed package wastewater treatment systems for a wide range of residential and commercial operations and has been involved in the design and commissioning of numerous package treatment plant upgrades. Mark has developed audit protocols and tailored operation and management (O&M) plans for a wide variety of package treatment technologies and works closely with both regulators and plant operators to troubleshoot package treatment plant problems to meet operational and regulatory requirements.

Joe Whitehead, BSc, MAppSc, FGS.

Joe is the Director of the Centre for Environmental Training and Principal of Whitehead & Associates Environmental Consultants Pty Ltd, a leading consultancy specialising in on-site and decentralised wastewater management throughout Australia, New Zealand and the Pacific Islands. Joe is an experienced designer of on-site and decentralised wastewater management systems on all scales from single domestic premises to community facilities and villages. He has experience in the design, installation, operation and management and auditing of a wide range of wastewater treatment and reuse systems for a wide variety of commercial operations including wineries, breweries and distilleries. Joe has been involved in the preparation and technical review of a number of regulatory guidelines including the NSW Environment & Health Protection Guidelines and WaterNSW Current Recommended Practice, Designing and Installing On-site Wastewater Systems. Joe has prepared and delivered in excess of 150 professional short courses in wastewater topics at venues throughout Australia, New Zealand and the Pacific.

Package Wastewater Treatment Plants

Course Enrolment Form (2933)

If you would like to enrol in this course please complete your details below and fax / email or post back to us as soon as possible.

Participant Name

Organisation

Billing Address

Postcode

Purchase Order Number

(if required by your organisation for invoicing)

Tel

e-mail

PLEASE REGISTER ME FOR:

**Package Wastewater Treatment Plant
Operation and Management 8-9 June 2021**

The course will be held from 8.30am to 4.30pm at Cessnock Leagues Club, 1 Darwin St, Cessnock NSW 2325.

Course fee: \$1,800.00 + \$180.00 GST = Total \$1,980.00

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

Course fee includes comprehensive course notes, morning tea and lunch. 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

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Package Wastewater Treatment Plant Operation and Management

This course provides a wealth of detailed and helpful information on a wide range of package wastewater treatment plant technologies and associated management issues.

The course has been prepared by leading on-site wastewater practitioners experienced in the design, construction, evaluation, monitoring and regulatory oversight and performance auditing of a wide range of package wastewater treatment and reuse systems for medium to larger scale developments.

The course is delivered by the Centre for Environmental Training, the leading Australasian provider of professional on-site and decentralised wastewater management training and well known for a wide range of wastewater related short courses including the *On-site Wastewater Management Training Course*.

Who should attend?

**Environmental Health Officers
Health and Building Surveyors
Environmental Managers
Treatment Plant Operation and Maintenance Staff
Service Agents and Technicians
Plumbers and Drainlayers
Facilities Managers and Owners
Environmental and Engineering Consultants
Planning Consultants
Architects
Builders**

"This course fills a void in Package Treatment Plant Operation and Maintenance training. All local government OSM officers should attend. The field trip was excellent."
Jim Boyle, Greater Taree City Council

"Gave me a better appreciation for my system requirements."
Pete Le Breton, National Parks and Wildlife Service, NSW

"Particularly useful to local government officers who are not regularly exposed to these systems." Naomi Hing, Ballina Shire Council

"A good guide for providing basic understanding and where to look for more detail." Geoff Cramb, NSW EPA
