NSW Onsite Wastewater Management Guidelines, 2025

Training for Regulators and Designers

Practical resources in the Guidelines For designers and regulators

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Practical resources in the Guidelines

- The Guidelines contain many practical resources that can be used by designers and regulators. These include some that we have discussed already OWM strategy updates, SSE, buffer assessment and system sizing
- The appendices also contain an updated model site report, model conditions of approval for installation and operation, a model OWM strategy and worked examples for system sizing

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Guidance - system selection

- · Section 7 provides two tables to assist designers and regulators in answering key questions of any system design:
 - · Does the EAA align with the identified SSE constraints and the predicted wastewater load?
 - Does the effluent quality align with the SSE and EAA?
 - · Does the proposed treatment achieve the required effluent quality and the objectives for the site?
 - Is the proposed design suitable for current/ future users (install and ongoing costs, hands on maintenance and access to suitable service providers)

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Guidance resources

- Table 7-1 considers particular constraints and provides possible mitigation measures to use (discussed in Session 4 Buffers)
- Table 7-2 considers the advantages and limitations of different treatment and EAA systems and how these impact their effectiveness in certain situations
- Appendix 4 provides OWM installation guidance for pipes, tanks and EAA systems

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Guidance resources

- Appendix 5 OWMS operation and maintenance:
 - Table A5-1 treatment system operation (inspections and maintenance)
 - · Desludging and compost removal advice
 - · STS, AWTS and GTS servicing
 - Table A5-3 EAA system operation (inspections and maintenance)
 - · General OWMS management suggestions

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Emergency management

- Table A5-4 provides recommended mitigation measures for OWMS in various emergency situations (heavy rainfall, flooding, bushfire, electrical outages):
 - Preparation recovery plans, sealing, reducing ground levels or flammable items, signage
 - During the event stopping use, avoid contact with wastewater
 - Recovery pump out, safety checks and recommissioning

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Emergency management

 Table 7-1 provides recommended mitigation measures to be taken in areas where flooding or bushfire are likely, prior to emergency situations (see Session 4 Buffers)

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Model conditions of approval

- These have been updated and split into conditions for installation/ alteration and for operation
- Both include general conditions and also conditions suitable for specific treatment and EAA systems
- The conditions are provided as a guide and are to be either modified or deleted as needed to suit the approval

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Worked examples and case studies

- · Appendix 6 includes worked examples for:
 - Aerobic sand and media filter system (ASMFS)
 - · Constructed wetland
 - · Water and nutrient balance modelling
 - · Linear loading rate
 - · Buffer reduction including viral die-off modelling
 - · Case studies troubleshooting failed OWMS

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Checklists

- · Checklists standardise processes
- · Provide reminders of all steps
- Improve efficiency by using tick boxes of common results
- Can use electronic checklists, which can include photo and video capture and report outputs
- · Checklists can be shared between councils

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Checklists - Appendix 7

- · OWM treatment system installation inspection
- OWM passive technology system installation inspection
- · OWM EAA system installation inspection
- OWM treatment and EAA system operational inspection
- · Inspection equipment list

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