

## 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

- Discussed already are OWM strategy updates, SSE, buffer assessment and system sizing
- The appendices:
  - Model site report
  - Model conditions of approval for installation and operation
  - Model OWM strategy
  - 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 (costs, maintenance and 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)
- Additional constraints include:
  - Climate (cold) – depth of installation, modelling
  - Fill or disturbed soil – compaction, flexible couplings
  - Off-grid or solar power only sites – solar budget, passive, DC pumps

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### Guidance resources

- Table 7-2 considers the advantages and limitations of different treatment, passive polishing 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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