NSW Onsite Wastewater Management Guidelines, 2025

Training for Regulators and Designers

Introduction to the new Guidelines

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It's been a while...

- The Environment & Health Protection Guidelines: On-site Sewage Management for Single Households (Department of Local Government) was published in 1998 (27 years ago)
- A few things have changed in Onsite Wastewater Management (OWM) since that time
- · The new Guidelines aren't silver!

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Why did we need a new Guideline?

- Councils hold the main regulatory function for OWM in NSW
- Councils interpret and implement the legislation and guidelines individually
- The performance of OWMS is more variable than centralised sewerage systems because:
 - They are operated by individual owners, occupants and service agents
 - Performance and accountability requirements are less clearly understood

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Why did we need a new Guideline?

- Until the new Guidelines were released, councils have been working with a mixed collection of guidance documents that don't always align
- The previous Guidelines (1998)
- AS/NZS 1547:2012
- · AS1546 1-4 Treatment systems
- · WaterNSW Current Recommended Practice
- NSW Health accreditation guidelines and ad notes
- · Interstate and international guidelines

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What is the same?

- The new Guidelines are guidance for regulators, designers and users
- The performance standards, as set out in the LG Act and Regulation, are the backbone of the Guidelines
- The Guidelines provide resources for regulators and designers
- The aim is to protect human health and the environment by improving OWM

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What is different?

- The new Guidelines are a best practice guide
- They aren't compulsory or called up in the Local Government (General) Regulation 2021 s.29 (3)
- Councils must consider the information and either adopt or adapt it to suit their requirements
- This Guideline consolidates and concentrates information into one document
- It is a large document, but easily navigated using the bookmarks and search ("Find") functions (PDF)

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What the new Guidelines are

- "The Guidelines are management guidelines, not a design and operations manual. They provide guidance on the interpretation of regulatory standards and on practical ways for councils to manage safe and sustainable OWM for their local communities using best practice techniques.
- The Guidelines sit beside the relevant Australian Standards and should be used to update council strategies regarding onsite wastewater management."

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When they don't apply

- Where relevant, Drinking Water Catchment and Priority Oyster Aquaculture Area requirements take precedence over this Guideline
- Variation from the Guidelines is allowed based on the performance standards as set out in the LG Act and Regulation and based on risk-based assessment and design
- This allows for flexibility in designs and approvals, provided they are supported by evidence and meet the requirements of statutory authorities

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What is different? Larger flows

- Daily flows up to 5,000L/day:
 - To align with Australian Standard 1546.3: 2017 Secondary Treatment Systems
 - To cover a larger proportion of OWMS designs and approvals undertaken by regulators and designers

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What is different? Risk management

- Assessments and designs are based on assessing the constraints on a site and managing or mitigating the risks that OWM poses to human health and the environment
- That means less prescriptive information and more ranges of figures to be used, dependent on the conditions on the site
- For example, buffer distances vary depending on effluent treatment level and application technique, soils, slopes, climate, etc.

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What is different? Terms

- OWMS Onsite wastewater management to incorporate more than just sewage
- SMF Sewage management facility to align with the LG Regulation
- EAA Effluent application area to align with the LG Regulation
- Tertiary treatment processes processes including disinfection and nutrient reduction

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What is different? Terms

- PPS Passive Polishing System soil based effluent application systems that receive primary treated effluent (or more advanced) and provide a degree of treatment prior to percolation directly into the natural soil
 - PPS aren't SMF, so aren't accredited, but they must follow AS/NZS1547:2012 and NSW Health Advisory Note 6 (passive disposal systems)
 - Includes mounds, amended soil mounds, bottomless sand filters and proprietary PPS

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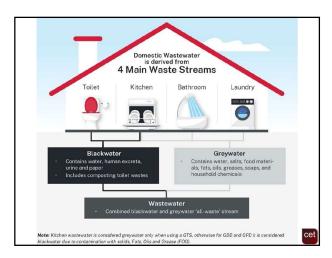
What is different? Terms

 Domestic wastewater – (p11) "Domestic wastewaters are those originating from households or personal activities including water closets, urinals, kitchens, bathrooms and laundries.

Domestic wastewater can include wastewater flows from facilities serving staff, employees, residents or guests in institutional, industrial, commercial or recreational establishments, but excludes trade wastes from industrial, commercial or home business sources."

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Kitchen wastewater

- Kitchen wastewater is considered greywater when treated in a greywater treatment system (GTS), but blackwater when in a greywater diversion device (GDD) or greywater processing device (GPD)
- Kitchen wastewater has a lot of contamination with solids (food particles), fats, oils and grease
- The exemption for GDD (s. 75 of Local Government (General) Regulation 2021) doesn't include kitchen wastewater, or OWMS

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Commercial and non-domestic OWM

- The Guidelines don't cover commercial size systems >5,000L/day or non-domestic OWMS
- They do cover domestic wastewater from commercial facilities
- Domestic wastewater doesn't include trade waste (non-domestic development and home businesses)
- Industrial and commercial wastewater varies widely in character, and often requires specialised treatment processes to counteract contaminants

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Commercial and non-domestic OWM

- The Guidelines recommend the use of experienced designers for commercial systems and those generating liquid trade waste
- The Guidelines recommend consulting the Liquid Trade Waste Management Guidelines (DPIE 2021) for suitable pre-treatments for various activities
- The LTW Guidelines aim to protect the receiving sewage treatment plants from contaminants, including septage from OWMS
- OWMS design can impact STP performance

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