

Australian/New Zealand Standard™

**On-site domestic wastewater  
management**

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## AS/NZS 1547:2012

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee WS-013, On-set Domestic Wastewater Management. It was approved on behalf of the Council of Standards Australia on 13 February 2012 and on behalf of the Council of Standards New Zealand on 10 February 2012. This Standard was published on 27 February 2012.

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# Australian/New Zealand Standard™

## On-site domestic wastewater management

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## FOREWORD

This 2012 Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee WS-013 On-site Domestic-wastewater Management to supersede AS/NZS 1547:2000 *On-site domestic-wastewater management*.

If on-site domestic wastewater systems are to be effective and sustainable, and to play their part in protecting public health and the environment, a system of management and control needs to be in place. While this will often fall to the regulatory authorities to administer, private management and control will have a part to play. Nevertheless, formulation of a regulatory process is not part of this Standard, and the application of this Standard does not circumvent other approvals, licences, or permits needed from any regulatory authority.

The Committee has adopted an approach that focuses on sustainably managing the risk to public health and the environment. For example, it is stressed that a risk management approach entails looking more at the risk of a particular situation than the numerical values which are put forward in this document as guidance. This Standard, covering as it does a range of climates, soils, and jurisdictions can only provide conservative advice. Local conditions and local experience should be used wherever possible, where they demonstrate that there are no significant risks to public health or to the environment and that the proposed design is more cost-effective than when using this Standard prescriptively. Guidance on collating local knowledge and experience has accordingly been provided. New knowledge or techniques are to be encouraged where there is adequate demonstration that the risk of failure is small.

Readers of the previous Standard will notice that much of the methodology is unchanged, even though the document has been reworked to reflect a risk-management approach. This is deliberate. The previous Standard incorporated much that was already essentially the management of risk. What was felt necessary was that features such as monitoring and feedback should be expressed more clearly. Accordingly, the Standard has been restructured to allow for the integration of the design, construction, installation, and maintenance of on-site domestic wastewater systems into a risk management framework. It follows that in any development, the option of installing full sewerage shall also be considered.

The main purpose of the Standard is to set out the performance objectives, requirements, and criteria, together with the means of not only complying with these criteria but of continually improving the techniques employed by all stakeholders.

To assist users familiar with the structure of AS/NZS 1547:2000, Appendix V provides information on where the equivalent clauses are now located in the 2012 version. For example, Appendix 4.2D of the 2000 version is now Appendix H.

This revision acknowledges the importance of water conservation, however it also maintains that sustainable reuse is beyond the scope of this Standard. For guidance on sustainable reuse, refer to national or state guidelines.

## ACKNOWLEDGEMENT

Standards New Zealand gratefully acknowledges the use of some figures from ARC Environment, Technical Publication No. 58, 2<sup>nd</sup> edition, November 1994, published by the Auckland Regional Council.

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## NOTES

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**Australian/New Zealand Standard**  
**On-site domestic wastewater management**

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**1 GENERAL****1.1 Purpose of Standard**

The purpose of this Standard is to provide the requirements for treatment units and their land application systems to achieve sustainable and effective on-site domestic wastewater management, to protect public health and the environment.

**1.2 Scope**

The Standard identifies the performance statements that cover the overall design and sustainable management of on-site domestic wastewater systems. These performance statements set performance objectives which are followed by performance requirements and then, where possible, with performance criteria.

**1.2.1 Inclusions**

This Standard deals with the systems for treating wastewater originating from household or personal activities including water closets, urinals, kitchens, bathrooms (including showers, washbasins, baths, spa baths but not spa pools or hot tubs) and laundries. Such domestic wastewater includes that from facilities serving staff/employees/residents in institutional, commercial, and industrial establishments.

**1.2.1.1 Systems covered**

The on-site systems covered by this Standard include primary, secondary, and disinfection wastewater treatment systems. The Standard gives specific details for septic tanks, other wastewater treatment units, and land application systems. Specific details are provided for conventional trenches, beds, evapotranspiration areas, mounds, drip and spray irrigation. These commonly used systems, while given as examples, are not intended to preclude the growing number of new or developing technologies in on-site wastewater management.

Likewise, guidelines and design manuals prepared by other agencies may be accepted as equally valid means of implementing the principles set out in this Standard. In particular, the management principles are appropriate for use in conjunction with the technical provisions of other design guidelines.

This Standard does not preclude the use of any material, system, design, or method of implementation provided the completed system and installation meet the performance requirements of this Standard. Details of such systems and installations and methods should be submitted to the relevant authority for approval. Systems not covered by this Standard require advice from a suitably qualified and experienced person.

**1.2.1.2 System size**

The systems covered in this Standard are normally designed for domestic wastewater flows up to 14 000 L/week, from a population equivalent of up to 10 persons.

Where the principles and practices outlined in this Standard are applied to systems exceeding this limit, the design shall be the responsibility of a suitably qualified and experienced person.