

# Australian/New Zealand Standard™

## On-site domestic wastewater treatment units

### Part 3: Aerated wastewater treatment systems



### **AS/NZS 1546.3:2008**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee WS-013, On-site Domestic Wastewater Management. It was approved on behalf of the Council of Standards Australia on 7 May 2008 and on behalf of the Council of Standards New Zealand on 12 April 2008. This Standard was published on 30 May 2008.

---

The following are represented on Committee WS-013:

Association of Accredited Certification Bodies (Australia)  
Association of Rotational Moulders (Australasia)  
Auckland Regional Council  
Australian and New Zealand Clinical Waste Management Industry Group  
Australian Industry Group  
Australian Water Association, National On-site Systems Special Interest Group  
Business New Zealand  
Commerce Queensland  
Department of Conservation, New Zealand  
Department of Health and Community Services, Northern Territories  
Department of Health, South Australia  
Department of Health, Western Australia  
Department of Human, Services Victoria  
Department of Justice, Tasmania  
Engineers Australia  
Institute of Environmental Science and Research Ltd  
Institution of Professional Engineers New Zealand (IPENZ)  
Local Government New Zealand  
Master Plumbers and Mechanical Services Association of Australia  
Master Plumbers, Gasfitters and Drainlayers New Zealand Inc.  
Master Plumbers, New South Wales  
Ministry of Health, New Zealand  
National Precast Concrete Association of Australia  
New South Wales Health Department  
New Zealand Water and Wastes Association, Small Wastewater and Natural Systems Special Interest Group  
Queensland Department of Infrastructure and Planning  
Queensland Health  
Queensland University of Technology  
The University of Auckland  
Wastewater Practitioners' Association, Queensland

---

### **Keeping Standards up-to-date**

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at [www.standards.com.au](http://www.standards.com.au) or Standards New Zealand web site at [www.standards.co.nz](http://www.standards.co.nz) and looking up the relevant Standard in the on-line catalogue.

Alternatively, both organizations publish an annual printed Catalogue with full details of all current Standards. For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

---

*This Standard was issued in draft form for comment as DR 06929.*

---

AS/NZS 1546.3:2008

Australian/New Zealand Standard™

## **On-site domestic wastewater treatment units**

### **Part 3: Aerated wastewater treatment systems**

Originated in Australia and New Zealand as AS/NZS 1546.3:2001.  
Revised and reissued as AS/NZS 1546.3:2008.

#### **COPYRIGHT**

© Standards Australia/Standards New Zealand

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Jointly published by Standards Australia, GPO Box 476, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 1 8697 5071 3

## FOREWORD

This Standard is one of a series revised by the Joint Standards Australia/Standards New Zealand Committee WS-013 on On-site Domestic Wastewater Management. It supersedes AS/NZS 1546.3:2001 *On-site domestic wastewater treatment units Part 3: Aerated wastewater treatment systems*. The other Standards revised by the committee are:

AS/NZS 1547:2000 On-site domestic-wastewater management;  
AS/NZS 1546.1:1998 On-site domestic wastewater treatment units Part 1: Septic tanks; and  
AS/NZS 1546.2:2001 On-site domestic-wastewater treatment units Part 2: Waterless composting toilets.

This revision has minor wording changes and has included some requirements for the disinfection of effluent by a UV disinfection unit.

Aerated wastewater treatment systems covered by this Standard include processes of aeration, typically followed by clarification to achieve biological treatment of wastewater. The principles of the Standard may be applied to alternative treatment technologies, where approved by the regulatory authority.

The next revision may include testing for response and recovery rates for systems under conditions of contemporary power loss and for no loading when the house is unoccupied.

### COPYRIGHT

© Standards Australia/ Standards New Zealand

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published jointly by Standards Australia Ltd,  
GPO Box 476, Sydney, NSW 2001, Australia, and  
Standards New Zealand,  
Private Bag 2439, Wellington 6140, New Zealand.

**CONTENTS**

FOREWORD.....	2
1 GENERAL.....	4
1.1 Objective.....	4
1.2 Scope and interpretation .....	4
1.3 Referenced documents .....	4
1.4 Application .....	5
1.5 Legislation.....	5
1.6 Definitions.....	6
1.7 Abbreviations.....	7
2 PERFORMANCE CRITERIA AND DESIGN REQUIREMENTS .....	8
2.1 Scope.....	8
2.2 General.....	8
2.3 Performance criteria .....	8
2.4 Design requirements .....	9
2.5 Installation.....	12
2.6 Operation and maintenance .....	12
3 MARKING OF AERATED WASTEWATER TREATMENT SYSTEMS.....	13
3.1 Scope.....	13
3.2 General.....	13
3.3 Requirements .....	13

**APPENDIX**

A Performance evaluation (Normative).....	14
B Disinfection systems (Normative) .....	21
C Installation of aerated wastewater systems (Informative).....	23
D Operation and maintenance (Informative) .....	25

**TABLE**

A1 Raw influent wastewater characteristics.....	14
A2 AWTS testing schedule.....	18
A3 Test period procedure.....	19
A4 Testing outcomes.....	20

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
  - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-