AS ISO 18504:2022 ISO 18504:2017





## Soil quality — Sustainable remediation

This is a preview. Click here to purchase the full publication.



#### AS ISO 18504:2022

This Australian Standard ® was prepared by EV-009, Sampling and Analysis of Soil. It was approved on behalf of the Council of Standards Australia on 21 April 2022.

This Standard was published on 29 April 2022.

The following are represented on Committee EV-009:

Australasian Land and Groundwater Association

Australian Contaminated Land Consultants Association

Chem Centre

Department of Environment and Science (Qld)

Department of Jobs, Precincts and Regions

Department of Planning, Industry and Environment (NSW)

**Environmental Laboratory Industry Group** 

Environment Protection Authority (Victoria)

National Association of Testing Authorities Australia

National Measurement Institute

Soil Science Australia

The University of Sydney

University of South Australia

This is a preview. Click here to purchase the full publication.

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

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting: <a href="https://www.standards.org.au">www.standards.org.au</a>

# Soil quality — Sustainable remediation

This is a preview. Click here to purchase the full publication.

First published as AS ISO 18504:2022.

### **COPYRIGHT**

- © ISO 2022 All rights reserved
- © Standards Australia Limited 2022

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, unless otherwise permitted under the Copyright Act 1968 (Cth).

### **Preface**

This Standard was prepared by the Standards Australia Committee EV-009, Sampling and Analysis of Soil.

The objective of this document is to provide procedures on sustainable remediation. In particular, it provides —

- (a) standard methodology, terminology and information about the key components and aspects of sustainable remediation assessment; and
- (b) informative advice on the assessment of the relative sustainability of alternative remediation strategies.

This document is intended to inform consideration of the concept of sustainable remediation in a local legal, policy, socio-economic and environmental context. It is not intended to prescribe which methods of assessment, indicators or weights to use.

The scope of this document is restricted to sustainable remediation that demonstrably breaks the source-pathway-recentor linkages in a manner that has been shown to be sustainable on a site-specific basis under This is a preview. Click here to purchase the full publication.

The concepts of "green remediation" and "green and sustainable remediation" (GSR), which in some parts of the world are conflated with sustainable remediation, are neither endorsed nor discussed in this document.

This document is identical with, and has been reproduced from, ISO 18504:2017, *Soil quality — Sustainable remediation*.

As this document has been reproduced from an International document, a full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms "normative" and "informative" are used in Standards to define the application of the appendices or annexes to which they apply. A "normative" appendix or annex is an integral part of a Standard, whereas an "informative" appendix or annex is only for information and guidance.

### Contents

Pre	eface	11
For	reword	v
Int	roduction	vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Abbreviations	3
5	Sustainable remediation, (re)development and regeneration	3
6	Risk-based contaminated land management	4
7	Integrated assessments, metrics and evaluations	4
	7.1 General	4
	7.2 Tiered assessments	
	This is a preview. Click here to purchase the full publication.	5
	7.4.1 General	J
	7.4.3 Semiquantitative	
	7.4.4 Quantitative	7
0		
8	<b>Decision making</b> 8.1 General	
	8.2 Project framing	8
	8.3 How to identify a sustainable remediation approach	
	8.4.1 Principles	
	8.4.2 Stakeholder engagement	10
	8.4.3 Selection of relevant indicators	
	8.4.4 Assessment of agreed indicators 8.4.5 Selection and implementation	
9	Economic dimension	
	9.1 General	11
	9.2 Economic indicators	11
10		
	10.1 General 10.2 Social indicators	
11		
	11.1 General	13
	11.2 Environmental indicators	13
12		
	12.1 General	
	12.3 Quantification and qualification	
	12.4 Options for indicator and metric selection	17
13		
	<ul><li>13.1 Sustainable remediation assessment</li><li>13.2 Intended objectives addressed by tools</li></ul>	
	13.3 Pre-determined indicators and metrics	
	13.4 Geographic and process specific information	