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Soil quality — Sustainable remediation

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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-receptor linkages in a manner that has been shown to be sustainable on a site-specific basis under a specific legal context.

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.

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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.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 190, *Soil quality*, Subcommittee SC 7, *Soil and site assessment*.

Introduction

This document is intended to provide procedures for sustainable remediation. It contains accepted terminology and understanding of the features of sustainable remediation and of means of assessing the relative sustainability of site-specific alternative remediation strategies. Determining what is and is not sustainable remediation at a specific site will be influenced by many local factors and the governance context. Therefore, this document seeks to preserve local flexibility and freedom of action.

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Australian Standard®

Soil quality — Sustainable remediation

1 Scope

This document provides procedures on sustainable remediation. In particular, it provides:

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

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

The scope of this document is restricted to sustainable remediation — that is, demonstrably breaking the source-pathway-receptor linkages — in a manner that has been shown on a site-specific basis under a specific legal context to be sustainable.

The concepts of “green remediation” and “green and sustainable remediation” (so called GSR) that in some parts of the world are conflated with sustainable remediation are neither endorsed nor discussed in this document.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

brownfield sites which

- have been affected by former uses of the site or surrounding land;
- are derelict or underused;
- are mainly in fully or partly developed urban areas;
- require intervention to bring them back to beneficial use;
- may have real or perceived contamination problems

3.2

environmental justice

combination of environmental rights and environmental responsibilities that asserts that everyone has

- a right to healthy places to live, work, play, learn and enjoy themselves;
- a right to a fair share of nature's benefits and ecosystem services, such as food and water;