

Australian Standard™

**Wastes, sediments and
contaminated soils**

**Part 1: Preparation of leachates—
Preliminary assessment**

This Australian Standard was prepared by Committee CH/35, Examination of Wastes. It was approved on behalf of the Council of Standards Australia on 11 December 1998 and published on 5 March 1999.

The following interests are represented on Committee CH/35:

Australian Aluminium Council
Department of Environment, Heritage and Aboriginal Affairs, S.A.
Environment Protection Authority of N.S.W.
Environment Protection Authority of Victoria
Griffith University
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AS 4439.1—1999

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PREFACE

This Standard was prepared by the Standards Australia Committee CH/35, Examination of Wastes.

This Standard is part of a series as follows:

AS

4439 Waste, sediments and contaminated soils

4439.1 Part 1: Preparation of leachates—Preliminary assessment (this Standard)

4439.2 Part 2: Preparation of leachates—Zero headspace procedure

4439.3 Part 3: Preparation of leachates—Bottle leaching procedures

Where appropriate regulatory authorities have prescribed documentation for assessment of wastes, it should be used in conjunction with this set of Standards.

The objective of this Standard is to provide an outline for the preliminary assessment of the potential for liquid or solid waste, sediments, sludges and soils to contaminate groundwater.

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

CONTENTS

	<i>Page</i>
1 SCOPE	3
2 REFERENCED DOCUMENTS	3
3 PRINCIPLE	3
4 DEFINITIONS	3
5 SAMPLING AND SAMPLE PREPARATION	3
6 PROCEDURE	3
APPENDIX A PROCEDURE FLOWSHEET	5

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STANDARDS AUSTRALIA

Australian Standard

Wastes, sediments and contaminated soils

Part 1: Preparation of leachates—Preliminary assessment

1 SCOPE This Standard provides an outline for preliminary assessment of the potential for liquid or solid waste, sediments, sludges and soils to contaminate groundwater. It deals with the preliminary procedure to determine whether the preparation of leachates, as set out in AS 4439.2 and AS 4439.3, is necessary. This Standard must be used in conjunction with these two Standards.

This procedure is not applicable to encapsulated wastes which cannot be reduced in particle size without breaking the integrity of encapsulation.

These Standards should only be used in consultation with appropriate regulatory authorities responsible for the assessment for disposal of wastes and soils.

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

4439 Waste, sediments and contaminated soils

4439.2 Part 2: Preparation of leachates—Zero head space procedure

4439.3 Part 3: Preparation of leachates—Bottle leaching procedure

3 PRINCIPLE A test portion is analysed by appropriate test methods for total concentration of analytes, as determined in consultation with appropriate regulatory authorities, to determine whether preparation of leachates may be required.

A flowsheet outlining the procedure is shown in Appendix A.

4 DEFINITIONS For the purposes of this Standard, the definitions in AS 4439.2 and AS 4439.3 apply.

5 SAMPLING AND SAMPLE PREPARATION All sampling and sample preparation requirements as set out in AS 4439.2 and AS 4439.3 shall be followed.

6 PROCEDURE

6.1 General Wastes may comprise both solid and liquid phases, either or both of which may contain contaminants. The distribution of contaminants between phases may be relevant in determining treatment or disposal options. If so, analysts may elect to separate the phases using pressure filtration as described in AS 4439.2 or AS 4439.3 followed by analysis of total contaminants in each phase. Otherwise, wastes as received should be analysed for total contaminants.

6.2 Analysis The laboratory sample, or the solids and liquid(s) obtained after pressure filtration, shall be analysed for the analytes of interest. The analysis procedure(s) used shall be appropriate for each of the analytes and phases.