

Australian/New Zealand Standard™

Methods for sampling and analysis of ambient air

Part 1.1: Guide to siting air monitoring equipment



AS/NZS 3580.1.1:2007

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EV-007, Methods for Examination of Air. It was approved on behalf of the Council of Standards Australia on 25 June 2007 and on behalf of the Council of Standards New Zealand on 13 July 2007.

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The following are represented on Committee EV-007:

Australian Chamber of Commerce and Industry
Australian Aluminium Council
Australian Industry Group
CSIRO Marine and Atmospheric Research
Clean Air Society of Australia & New Zealand
Commonwealth Bureau of Meteorology
Department for Environment and Heritage, SA
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Originated in Australia as AS 2922—1987.
Jointly revised and redesignated as AS/NZS 3580.1.1:2007.

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EV-007, Methods for Examination of Air to supersede AS 2922—1987 *Ambient air—Guide for the siting of sampling units*.

The objective of this Standard is to provide users with a methodology for siting ambient air monitoring equipment. The objective of this revision is to update the Standard according to current practices.

During the preparation of this Standard, the Committee again paid attention to the work of the United States Environment Protection Agency (US E.P.A.), particularly their ‘Guideline Series’ on air monitoring. Some of the material in this Standard is derived from the USA EPA, Title 40, Part 58 of the Code of Federal Regulations (40 CFR Part 58).

The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘informative’ appendix is only for information and guidance.

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard**Methods for sampling and analysis of ambient air****Part 1.1: Guide to siting air monitoring equipment****1 SCOPE**

This Standard sets out general guidelines for the siting of ambient air monitoring equipment and specifies a number of siting parameters for individual air pollutants. In practice, an ideal site satisfying all the criteria is rarely achieved.

This Standard includes sampling protocol for fixed point and open path monitoring equipment.

This Standard is applicable to the siting of an individual monitoring unit for specific purposes or to air monitoring equipment within a network. This Standard does not include the detailed design of a network of monitoring units.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- 2724 Ambient air—Particulate matter
- 2724.5 Part 5: Determination of impinged matter expressed as directional dirtiness, background dirtiness and/or area dirtiness (directional dust gauge method)
- 2800 Ambient air—Determination of particulate lead—High volume sampler gravimetric collection—Flame atomic absorption spectrometric method
- 2923* Ambient air—Guide for measurement of horizontal wind for air quality applications
- 3580 Methods for sampling and analysis of ambient air
- 3580.4.1 Method 4.1: Determination of sulphur dioxide—Direct reading instrumental method
- 3580.5.1 Method 5.1: Determination of oxides of nitrogen—Chemiluminescent method
- 3580.6.1 Method 6.1: Determination of ozone—Direct-reading instrumental method
- 3580.7.1 Method 7.1: Determination of carbon monoxide—Direct-reading instrumental method
- 3580.8.1 Method 8.1: Determination of hydrogen sulphide—Automatic intermittent sampling—Gas chromatographic method
- 3580.9.7* Method 9.7: Determination of suspended particulate matter—PM₁₀ dichotomous sampler—Gravimetric method
- 3580.9.8 Method 9.8: Determination of suspended particulate matter—PM₁₀ continuous direct mass method using a tapered element oscillating microbalance analyser

* Being revised as joint Australian/New Zealand Standards.