AS/NZS 3580.1.1:2016

Australian/New Zealand Standard™

Methods for sampling and analysis of ambient air

Part 1.1: Guide to siting air monitoring equipment

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 11 April 2016 and by the Standards New Zealand Approval Board on 20 April 2016.
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The following are represented on Committee EV-007:

Australian Aluminium Council
Australian Bureau of Meteorology
Australian Industry Group
Clean Air Society of Australia and New Zealand
CSIRO
Department of Environment Regulation, WA
Department of Science, Information Technology and Innovation, Qld
Environment Canterbury
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This Standard was issued in draft form for comment as DR AS/NZS 3580.1.1:2015.

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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/NZS 3580.1.1:2007 *Guide to siting air monitoring equipment*.

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 EPA), particularly their ‘Guideline Series’ on air monitoring. Some of the material in this Standard is derived from the USA Code of Federal Regulations, Title 40, Part 58, of the Code of Federal Regulations.

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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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, where appropriate, 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		
3580	Methods for sampling and analysis of ambient air	
3580.4.1	Method 4.1:	Determination of sulfur dioxide—Direct reading instrumental method
3580.5.1	Method 5.1:	Determination of oxides of nitrogen—Direct-reading instrumental 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 sulfide—Automatic intermittent sampling—Gas chromatographic method
3580.9.8	Method 9.8:	Determination of suspended particulate matter—PM_{10} continuous direct mass method using a tapered element oscillating microbalance analyser
AS/NZS		
3580	Methods for sampling and analysis of ambient air	
3580.9.3	Method 9.3:	Determination of suspended particulate matter—Total suspended particulate matter (TSP)—High volume sampler gravimetric method
3580.9.6	Method 9.6:	Determination of suspended particulate matter—PM_{10} high volume sampler with size selective inlet—Gravimetric method
3580.9.7	Method 9.7:	Determination of suspended particulate matter—Dichotomous sampler (PM_{10}, coarse PM and $PM_{2.5}$)—Gravimetric method
3580.9.9	Method 9.9:	Determination of suspended particulate matter—PM_{10} low volume sampler—Gravimetric method
3580.9.10	Method 9.10:	Determination of suspended particulate matter—$PM_{2.5}$ low volume sampler—Gravimetric method
3580.9.11	Method 9.11:	Determination of suspended particulate matter—PM_{10} beta attenuation monitors