



# Fern Bay Seaside Village

## Annexures A to K Volume 2

### Fern Bay Seaside Village



#### *Environmental Assessment*

for Aspen Group Pty Ltd

February 2009

0063154

[www.erm.com](http://www.erm.com)

<b>Project Manager:</b>	<u>Amanda Antcliff</u>
<b>Signed:</b>	<u></u>
<b>Date:</b>	<u>February 2009</u>
<b>Partner:</b>	<u>Paul Douglass</u>
	<u></u>
<b>Date:</b>	<u>February 2009</u>

*Environmental Resources Management Australia Pty Ltd Quality System*

## Fern Bay Seaside Village

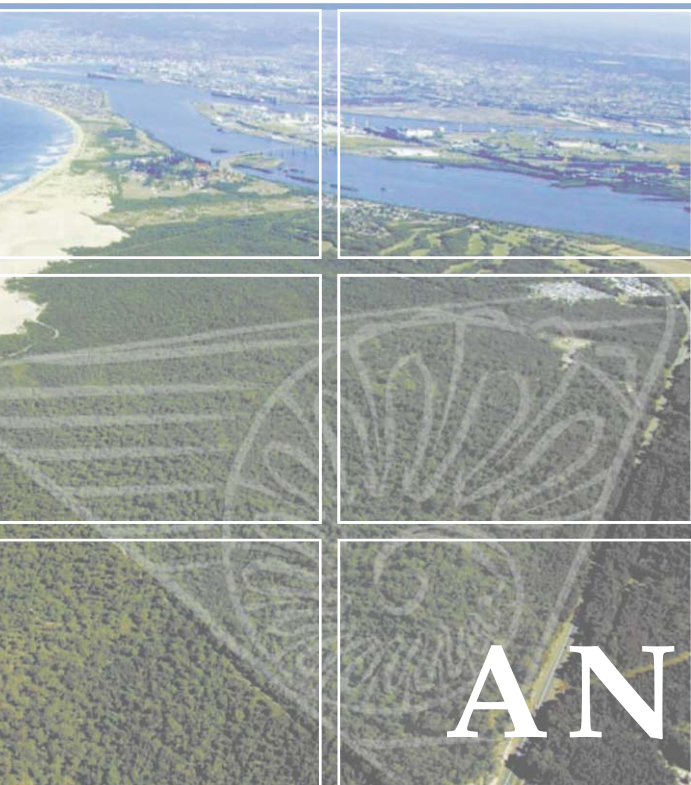
### *Environmental Assessment*

for  
Aspen Group Pty Ltd

February 2009

Project No. 0063154

This report has been prepared in accordance with the scope of services described in the contract or agreement between Environmental Resources Management Australia Pty Ltd ABN 12 002 773 248 (ERM) and the Client. The report relies upon data, surveys, measurements and results taken at or under the particular times and conditions specified herein. Any findings, conclusions or recommendations only apply to the aforementioned circumstances and no greater reliance should be assumed or drawn by the Client. Furthermore, the report has been prepared solely for use by the Client and ERM accepts no responsibility for its use by other parties.



Volume 2		
ANNEXURES		





ANNEX

A

## Director General's Requirements



NSW GOVERNMENT

## Department of Planning

Contact: Paulina Hon  
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Fax: (02) 9228 6540  
Email: paulina.hon@planning.nsw.gov.au

Mr Bill Sarkis  
Winten (20) Pty Ltd  
PO Box 55  
CAMMERAY NSW 2062

Our ref: 06-0250  
Your ref:  
File: G:\MDAU\Urban  
Assessments\Applications\2006\Part  
3A\Coastal\06\_0250 - Residential Subdivision  
Fern Bay Estate\G\_DGEARS - PFM\06\_0250  
DGR\Oct06rev1.doc

Dear Mr Sarkis,

**Subject: Director-General's Environmental Assessment Requirements for Proposed Residential Subdivision at Part Lot 3, Lot 4 & 5 DP 270466, Seaside Boulevard, Fern Bay, MP 06\_0250**

The Department has received your application for the above project (Application Number: 06\_0250).

The Director General's Environmental Assessment Requirements (DGRs) for the environmental assessment of the project are attached to this correspondence at **Attachment 1**. These requirements have been prepared in consultation with the relevant government agencies including council, and have been based on the information that you have provided to date. Please note that the Director-General may alter these requirements at any time.

**Attachment 2** lists the relevant plans and documents which are likely to be required upon submission of your proposal, however, this should be confirmed with the Department prior to lodgement.

It should be noted that the DGRs have been prepared based on the information provided to date. Under section 75F(3) of the Act, the Director-General may alter or supplement these requirements if necessary and in light of any additional information that may be provided prior to the proponent seeking approval for the project.

It would be appreciated if you would contact the Department at least two weeks before you propose to submit the Environmental Assessment for the project to determine:

- the fees applicable to the application;
- consultation and public exhibition arrangements that will apply; and
- number and format (hard-copy or CD-ROM) of the Environmental Assessment that will be required.

A list of some relevant technical and policy guidelines which may assist in the preparation of this Environmental Assessment are attached at **Attachment 3**.

Prior to exhibiting the Environmental Assessment, the Department will review the document to determine if it adequately addresses the DGRs. The Department may consult with other relevant government agencies in making this decision. If the Director-General considers that the Environmental Assessment does not adequately address the DGRs, the Director-General may require the proponent to revise the Environmental Assessment to address the matters notified to the proponent.

Following this review period the Environmental Assessment will be made publicly available for a minimum period of 30 days.

If your proposal includes any actions that could have a significant impact on matters of National Environmental Significance, it will require an additional approval under the Commonwealth Environment Protection Biodiversity Conservation Act 1999 (EPBC Act). This approval would be in addition to any approvals required under NSW legislation. If you have any questions about the application of the EPBC Act to your proposal, you should contact the Commonwealth Department of Environment and Heritage in Canberra (6274 1111 or <http://www.deh.gov.au>).

If you have any queries regarding these requirements, please contact Paulina Hon on 9228 6106 or email [paulina.hon@planning.nsw.gov.au](mailto:paulina.hon@planning.nsw.gov.au).

Yours sincerely

A handwritten signature in black ink, appearing to be 'Chris Wilson', with a long horizontal line extending to the right.

22.11.06

Chris Wilson  
**Executive Director**  
as delegate for the Director General

# Attachment 1

## Director General's Environmental Assessment Requirements

Section 75F of the *Environmental Planning and Assessment Act 1979*

Application number	06_0250
Project	<p><b>Proposed Residential Subdivision at Seaside Boulevard, Fern Bay</b></p> <p><b>Project application for Fern Bay Estate development comprising:</b></p> <ul style="list-style-type: none"> <li>• Residential subdivision (950 lots)</li> <li>• Recreation/open space</li> <li>• Community facilities and Community title subdivision</li> <li>• Roads, fire trails and pedestrian trails</li> <li>• Conservation areas</li> <li>• Associated stormwater and other infrastructure</li> </ul>
Location	Part Lot 3, Lot 4 & Lot 5 DP 270466 Seaside Boulevard, Fern Bay
Proponent	Winten (20) Pty Ltd
Date issued	November 2006
Expiry date	2 years from date of issue
General requirements	<p>The Environmental Assessment (EA) for the <b>project application</b> must include:</p> <ul style="list-style-type: none"> <li>• An executive summary;</li> <li>• A detailed description of the project including:- <ul style="list-style-type: none"> <li>(i) Any development options;</li> <li>(ii) Justification for the project taking into consideration any environmental impacts of the project, the suitability of the site and whether the project is in the public interest;</li> <li>(iii) Outline of the staged implementation of the project, if applicable;</li> </ul> </li> <li>• A thorough site analysis and description of existing environment;</li> <li>• Consideration of any relevant statutory and non-statutory requirements, in particular relevant provisions of Environmental Planning Instruments, Lower Hunter Regional Strategy and Development Control Plans as well as impacts, if any, on matters of national environmental significance under the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>;</li> <li>• Where relevant, demonstrate compliance with BCA and relevant Australian Standards for proposed building; traffic, road and parking; utilities; noise and flooding;</li> <li>• An environmental risk analysis of the project including consideration of the issues raised during consultation;</li> <li>• An assessment of the potential impacts of the project and a draft Statement of Commitments, outlining environmental management, mitigation and monitoring measures to be implemented to minimise any potential impacts of the project;</li> <li>• The plans and documents outlined in <b>Attachment 2</b>.</li> <li>• A signed statement from the author of the Environmental Assessment certifying that the information contained in the report is neither false nor misleading; and</li> <li>• An assessment of the key issues specified below and a table outlining how these key issues have been addressed.</li> </ul>
Key issues	<p>The Environmental Assessment must address the following key issues:</p> <ol style="list-style-type: none"> <li><b>1. General Consistency with the approved Master Plan</b> <ol style="list-style-type: none"> <li><b>1.1.</b> The project application must be generally consistent with Master Plan No. MP 20-4-2005 for the site, approved by the Minister for Planning on 8 August 2006.</li> </ol> </li> </ol>

## **2. Design and Visual Impacts**

- 2.1. Demonstrate suitability of the proposal with the surrounding area in relation to potential character, bulk, scale and visual amenity of development resulting from the subdivision having regard to the *Coastal Design Guidelines of NSW (2003)*, *NSW Coastal Policy (1997)*, *State Environmental Planning Policy No. 71 – Coastal Considerations* (specifically Clauses 2 and 8), *Port Stephens Local Environmental Plan 2000* and other relevant Development Control Plans. Confirm that the proposal is consistent with the Lower Hunter Regional Strategy.
- 2.2. Identify the extent of potential development footprints, building envelopes and built form controls and any significant trees to be removed.
- 2.3. Address safety; provision of public reserves; potential perimeter road layouts; pedestrian and bicycle movement to, within and through the site.
- 2.4. Provide details of the formalisation of dune/beach access from site, generally consistent with the Master Plan.

## **3. Social and Community**

- 3.1. Address the social and economic context of the development in terms of infrastructure requirements, access, public transport, community services and facilities, having regard to the Council's *Section 94 Contributions Plan- Plan District No.8 Fern Bay*.

## **4. Traffic and Access**

- 4.1. Provide a Traffic Impact Study in accordance with the *RTA Guide to Traffic Generating Developments* and in consideration of SEPP 11.
- 4.2. Identify all relevant vehicular traffic routes and intersection for access to/ from the subject areas.
- 4.3. Provide current traffic counts for all of the above traffic routes and intersections and anticipated vehicular traffic generated from the proposed lots.
- 4.4. Provide a traffic analysis, using SIDRA or similar traffic model, for the relevant intersections including: current and traffic growth projections for the life of the project; 95<sup>th</sup> percentile back of queue lengths; and delays and level of service on all legs.
- 4.5. Consider traffic impact on the existing intersections and the capacity of MR108 (Nelson Bay Road) to safely and efficiently cater for the additional vehicular traffic generated.

## **5. Infrastructure Provision**

- 5.1. Address existing capacity and requirements of the proposal for effluent disposal, water supply, electricity, and telecommunications services. Identify staging, if any, of infrastructure works. Consider the feasibility of implementing a greywater reuse system within the development.

## **6. Flora and Fauna**

- 6.1. Outline measures for the conservation of flora and fauna and their habitats within the meaning of the *Threatened Species Conservation Act 1995*, having regard to the *Draft Guidelines for Threatened Species Assessment (DEC & DPI July 2005)*. Measures should generally be in accordance with the approved Master Plan No. MP 20-4-2005.
- 6.2. Address the requirements of *State Environmental Planning Policy No 44 – Koala Habitat Protection* and the *Port Stephens Comprehensive Koala Plan of Management*.
- 6.3. Assess the impact of the proposal on groundwater dependent ecosystems (swamp forest and wet heath), and assess the need for appropriate buffer zone(s) to be placed around groundwater dependent ecosystems.

## **7. Impact on Adjoining Lands**

- 7.1. Describe mitigation and management options that will be used to



prevent, control, abate or minimise identified impacts on Department of Environment and Conservation (DEC) estate. Asset Protection Zones proposed for the development should not impact on adjacent lands managed by the DEC.

- 7.2. Address impacts of dense residential development on neighbouring sand extraction operations. Address impacts of the neighbouring sand extraction operations on the proposed residential development.

## 8. Water Cycle Management

- 8.1. Demonstrate the development will not exacerbate local flooding and is designed in expectation of flooding. Demonstrate compatibility with Port Stephens Council Flood Policy and in accordance with the guidelines contained in the *NSW Floodplain Development Manual* (2005). Implications of climate change on flooding should be considered.
- 8.2. Address drainage issues associated with changes in the hydrological regime of the catchment. Provide a stormwater plan for the subdivision layout (based on best practice management of stormwater and incorporating Water Sensitive Urban Design principles).
- 8.3. Address potential impacts on the water quality of surface and groundwater (during construction and occupation of the site), into adjoining lands and downstream, having regard to the *Groundwater Assessment Standard Requirements for State Significant Developments/Major Developments within a Municipal Water Supply Catchment* (DNR, 2006) and the principles of the *NSW State Groundwater Policy Framework*. Provide a Groundwater Study, which includes a Geotechnical site assessment as per Australian Standard (AS 2870).

## 9. Coastal Zone Management

- 9.1. Address potential landward movement of transgressive dunes towards the development, having regard for coastal and mobile Dune Hazard Lines outlined in Figure 7.3, Part D of the *Stockton Bight Environmental Study and Management Plan* prepared by HLA Envirosciences Pty Ltd (August 1995). Ensure the development is setback behind the 1 in 100 year hazard line. Mitigation or dune restoration/stabilisation measures should also be considered.
- 9.2. Address the predicted increases in water level as a result of sea level rise.

## 10. Bushfire

- 10.1. Address the requirements of *Planning for Bush Fire Protection 2001* (RFS), in particular asset protection zones, adequacy of water supply for bushfire suppression operations and future management of any areas of hazard remaining, including natural areas and buffers zones.

## 11. Cultural Heritage

- 11.1. Address and document information contained in *Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (DEC 2005). Demonstrate that effective consultation with Aboriginal communities has been undertaken in determining and assessing impacts, developing options and making final recommendations.

## 12. Acid Sulfate Soils and Contaminated Land

- 12.1. Identify the presence and extent of acid sulfate soils on the site and outline appropriate mitigation measures. Identify areas of contamination on site and appropriate mitigation measures. The level of assessment shall be consistent with the *Acid Sulfate Soil Manual* by ASSMAC.

<b>Consultation</b>	<p>You should undertake an appropriate and justified level of consultation with the following agencies during the preparation of the environmental assessment:</p> <p>(a) <i>Agencies or other authorities:</i></p> <ul style="list-style-type: none"> <li>• Port Stephens Council</li> <li>• NSW Department of Planning – Hunter Region</li> <li>• NSW Department of Environment and Conservation</li> <li>• NSW Department of Natural Resources</li> <li>• NSW Department of Education</li> <li>• NSW Department of Health</li> <li>• NSW Department of Primary Industries</li> <li>• NSW Police Service</li> <li>• NSW Rural Fire Service</li> <li>• NSW Roads and Traffic Authority</li> <li>• NSW Department of Defence</li> <li>• Hunter Water Corporation</li> <li>• relevant Aboriginal Land Council.</li> </ul> <p>(b) <i>Public:</i></p> <p>Document all community consultation undertaken to date or discuss the proposed strategy for undertaking community consultation. This should include any contingencies for addressing any issues arising from the community consultation and an effective communications strategy.</p> <p>The consultation process and the issues raised should be described in the Environmental Assessment.</p>
<b>Deemed refusal period</b>	60 days
<b>Electronic Documents</b>	<p>Electronic documents presented to the NSW Department of Planning for publication via the Internet must satisfy the criteria:-</p> <ul style="list-style-type: none"> <li>• Adobe Acrobat PDF files and Microsoft Word documents must be no bigger than 1.5 Mb. Large files of more than 1.5 Mb will need to be broken down and supplied as different files.</li> <li>• File names will need to be logical so that the Department can publish them in the correct order. Avoid sending documents that are broken down in more than 10 files.</li> <li>• Image files should not be bigger than 2Mb. The file names will need to be clear and logical so the Department can publish them in the correct order.</li> <li>• Graphic images will need to be provided as [.gif] files.</li> <li>• Photographic images should be provided as [.jpg] files.</li> <li>• Large maps will need to be presented as individual files and will need to be calibrated to be no more than 2Mb each.</li> <li>• Images inserted into the document will need to be calibrated to produce files smaller than 1.5Mb. Large images will need to be presented as individual files and will need to be calibrated to be no more than 2Mb each. The file names will need to be clear and logical so the Department can publish them in the correct order.</li> </ul> <p>Alternatively, these electronic documents may be placed on your own web site with a link to the Department of Planning's website.</p>

## Attachment 2

### Plans and Documents to accompany the Application

#### Plans of the development

The following plans, architectural drawings and diagrams of your proposal as well as the relevant documents will be required to be submitted for the **Project Application**:

1. The **existing site survey plan** is to be drawn to 1:500 scale (or other appropriate scale) and show:
  - the location of the land, the measurements of the boundaries of the land, the size of the land and north point;
  - the existing levels of the land in relation to buildings and roads;
  - location and height of existing structures on the site; and
  - location and height of adjacent buildings and private open space.
2. An **aerial photograph** outlining the subject site and surrounding area (at an appropriate scale).
3. A **Site Analysis Plan** must be provided which identifies existing natural elements of the site (including all hazards and constraints), existing vegetation, property dimensions, footpath crossing levels and alignments, existing pedestrian and vehicular access points and other facilities, slope and topography, natural features such as watercourses, rock outcrops, utility services, boundaries, orientation, view corridors and all structures on neighbouring properties where relevant to the application (including windows, driveways etc).
4. A **locality/context plan** drawn to 1:500 scale (or other appropriate scale) should be submitted indicating:
  - significant local features such as parks, community facilities and open space, water courses and heritage items;
  - the location and uses of existing buildings, shopping and employment areas; and
  - traffic and road patterns, pedestrian routes and public transport nodes.

The existing site plan and locality plan should be supported by a written explanation of the local and site constraints and opportunities revealed through the above documentation.
5. The **Environmental Assessment** in accordance with the Director-General's Environmental Assessment Requirements as outlined in Attachment 1.
6. Detailed **Subdivision layout plans** to illustrate the following:-
  - All measurements of proposed and existing allotments;
  - Location of all structures both proposed and retained on site;
  - North point;
  - Name of the road fronting the site and other surrounding major roads;
  - Title showing the description of the land with lot and DP numbers etc;
  - Vegetation retention;
  - Access points;
  - Any easements, covenants or other restrictions either existing or proposed on the site;
  - Type of subdivision proposed (Torrens, strata and/or community title).
7. **Other Plans** including (where relevant):
  - Infrastructure Plans** – conceptual drawings indicating proposed infrastructure including roads, drainage, water, sewerage and earthworks
  - Stormwater Plan** - illustrating the plan for stormwater management of the site and must include details of any drainage lines and major overland flow paths through the site, stormwater treatment measures and any discharge

	<p>points to existing drainage systems.</p> <p><b>Erosion and Sediment Control Plan</b> – plan or drawing that shows the nature and location of all erosion and sedimentation control measures to be utilised on the site;</p> <p><b>Landscape Plan</b> – plan or drawing that shows the basic detail of planting design and plant species to be used, listing botanical and common names, mature height and spread, number of plants to be utilised and surface treatments (i.e. pavers, lawn etc);</p> <p><b>Construction Management Plan</b> – a plan which outlines traffic and pedestrian management during construction</p>
<b>Specialist advice</b>	Specialist advice, where required to support your Environmental Assessment, must be prepared by suitably qualified and practising consultants.
<b>Documents to be submitted</b>	<ul style="list-style-type: none"> <li>• 10 hard copies of the Environmental Assessment;</li> <li>• 10 sets of architectural and landscape plans to scale, including set one (1) set at A3 size (to scale); and</li> <li>• 1 copy of the Environmental Assessment and plans on CD-ROM (PDF format), not exceeding 5Mb in size.</li> </ul>

## Attachment 3 Technical and Policy Guidelines

The majority of these documents can be found on the relevant Departmental Websites, on the NSW Government's on-line bookshop at <http://www.bookshop.nsw.gov.au> or on the Commonwealth Government's publications website at <http://www.publications.gov.au>.

Aspect	Policy /Methodology
<b>Biodiversity</b>	
Flora and Fauna	Draft Guidelines for Threatened Species Assessment (DEC, 2005)
<b>Bushfire</b>	
	Planning for Bushfire Protection 2001 (NSW Rural Fire Service)
	Australian Standard 3959 – Building in Bushfire Prone Areas
<b>Coastal Planning &amp; Water Bodies</b>	
	NSW Coastal Policy 1997 - A sustainable Future for the New South Wales Coast (Department of Urban Affairs & Planning, 1997)
	Coastal Design Guidelines for NSW, Coastal Council, March 2003
	NSW Wetlands Management Policy (DLWC, March 1996)
	NSW State Rivers and Estuaries Policy (DLWC, 1992)
	NSW Estuary Management Manual (DLWC, 1992)
	Constructed Wetlands Manual (DLWC, 1998)
<b>Heritage</b>	
	Draft guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (DEC, July 2005)
	NPWS Aboriginal Cultural Heritage Standards and Guidelines Kit – Working Draft (NPWS, September 1997)
	Aboriginal cultural heritage: standards and guidelines (DEC 2005)
	Protecting Aboriginal Objects and Places - Interim Guidelines for Community Consultation (DEC 2005)
<b>Soils &amp; Contamination</b>	
	Contaminated Land: Planning Guidelines for Contaminated Land, Department of Urban Affairs and Planning and the NSW EPA, October 1995.
	Managing Land Contamination: Planning Guidelines – SEPP 55 – Remediation of Land (NSW EPA, 1998)
	Contaminated Sites – Guidelines for Consultants Reporting on Contaminated Sites (NSW EPA, 1997)
	Contaminated Sites – Guidelines on Significant Risk of Harm and Duty to Report (NSW EPA, 1999)
<b>Traffic Transport &amp; Pedestrian &amp; Cyclist Facilities</b>	
	Guide to Traffic Generating Developments (RTA, 1993)
	RTA Road Design Guide (RTA, 1996)
	Planning Guidelines for Walking and Cycling (DIPNR & RTA, December 2004)
	Guide to Traffic Engineering and Guide to Geometric Design of Rural Roads (Ausroads, 2003)
	EIS Guidelines for Roads and Related Facilities (DUAP, 1996)



Aspect	Policy /Methodology
<b>Water</b>	
<b>Water Quality</b>	Australian & New Zealand Guidelines for Fresh & Marine Water Quality (Australian & New Zealand Environment & Conservation Council (ANZECC), October 2000)
	National Water Quality Management System - Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC 2000)
	Water Quality and River Flow Objectives (DEC, 2000)
	Healthy Rivers Commission Report into Coastal Lakes and Statement of Joint Intent
	State Water Management Outcomes Plan Order 2002
	NSW Guidelines for Urban & Residential Use of Reclaimed Water (NSW Water Recycling Coordination Committee, 1993)
<b>Wastewater</b>	National Water Quality Management Strategy: Guidelines for Sewerage Systems – Effluent Management (ARMCANZ/ANZECC 1997)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems – Use of Reclaimed Water (ARMCANZ/ANZECC 2000)
	Environmental Guidelines for the Utilisation of Treated Effluent by Irrigation (NSW DEC 2004)
	Environment and Health Protection Guidelines: Onsite Sewage Management for Single Households (1998)
<b>Flooding &amp; the Floodplain</b>	NSW Government Floodplain Development Manual - the Management of Flood Liable Land (DIPNR, 2005)
<b>Groundwater</b>	NSW Groundwater Policy Framework Document – General (DLWC, 1997)
	NSW State Groundwater Quality Protection Policy (DLWC, 1998)
	NSW State Groundwater Dependent Ecosystems Policy (DLWC, 2002)
<b>Stormwater</b>	Managing Urban Stormwater :Soils and Construction (NSW Landcom, 2004)
	Managing Urban Stormwater: Source Control (DEC, 1998)
	Managing Urban Stormwater: Treatment Techniques (DEC, 1998)
	Better Drainage: Guidelines for the Multiple Use of Drainage System (PlanningNSW, 1993)
<b>Noise and Vibration</b>	
	NSW Industrial Noise Policy (NSW EPA, 1999)
	NSW Environmental Criteria for Road Traffic Noise (NSW EPA, 1999)
	Environmental Noise Control Manual (NSW EPA, 1994)