# Director General's Environmental Assessment Requirements

# Section 78A(8A) of the Environmental Planning and Assessment Act 1979

Application Number	SSD 5374
Proposal Name	Barangaroo Central Waterfront Promenade and Interim Public Domain Works
Location	Barangaroo Central, Barangaroo
Applicant	Barangaroo Delivery Authority
Date of Issue	30 July 2012
General Requirements	The Environmental Impact Statement (EIS) must address the Environmental Planning and Assessment Act 1979 and meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 the Environmental Planning and Assessment Regulation 2000.  Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.  Where relevant, the assessment of the key issues below, and any other significant issues identified in the assessment, must include:  • Adequate baseline data.  • Consideration of potential cumulative impacts due to other development in the vicinity.  • Measures to avoid, minimise, and if necessary, offset the predicted
	impacts, including detailed contingency plans for managing any significant risks to the environment.
Key issues	<ul> <li>The EIS must address the following specific matters:</li> <li>1. Relevant EPIs, Policies and Guidelines</li> <li>Demonstrate that the project will comply with the requirements set out in the following provisions: <ul> <li>Clauses 8 and 9 of Part 12 (Barangaroo site) of Schedule 3 to State Environmental Planning Policy (Major Development) 2005.</li> <li>Address the relevant statutory provisions applying to the site contained in the relevant EPIs, including:</li> <li>State Environmental Planning Policy (State and Regional Development) 2011;</li> <li>State Environmental Planning Policy (Major Development) 2005;</li> <li>State Environmental Planning Policy No 55 – Remediation of Land; and</li> <li>Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005.</li> <li>Demonstrate that the project is consistent with NSW 2021, Metropolitan Plan for Sydney 2036 and the draft Sydney City Subregional Strategy.</li> <li>Demonstrate consistency with the terms of approval of Concept Plan MP06_0162 (as modified).</li> </ul> </li> <li>2. Public Domain and Public Access <ul> <li>Provision of a Public Domain Plan identifying all temporary and permanent works within the public domain.</li> </ul> </li> </ul>

- Identify proposed open space, public domain and linkages with other public domain spaces, including the Southern Cove and the Headland Park.
- Details on the interface between the proposed uses and public domain, including activation.
- Address existing and future opportunities for public access to and along the foreshore.
- Provide specific details of design features, including but not limited to:
  - footpaths and pavements;
  - wharves/boardwalks etc:
  - materials and finishes:
- furniture and fixtures;
- street lighting, pedestrian lighting and feature lighting;
- o edges, screens and fences:
- o walls, embankments and mounds;
- o steps, ramps, vehicle crossings, decks and pathways;
- o services where affected, utility poles, and service pits;
- o civil and stormwater infrastructure;
- o tree planting, location and species;
- mass planting beds, planter boxes and individual plantings; and
- extent of temporary and permanent features to be clearly shown, including bicycle parking, furnishing or footings, finished surfaces, service and planting.
- Provide a Signage Strategy which details cycle routes, public transport options and emergency contact points.

#### 3. Transport and Accessibility Impacts

- Prepare a Traffic Impact Assessment (TIA) that:
  - evaluates daily and peak traffic movements likely to be generated by the development (construction & operation), including peak traffic movements during special events;
  - o provides network modelling that captures dynamic and co-ordinated traffic light operations to assess the impact on the surrounding road network. This modelling should include the interaction between pedestrian and vehicular traffic:
  - identifies upgrades to roads/intersections required to facilitate the proposal;
  - identifies pedestrian/cycle connections required to service the precinct, taking into consideration connections to external networks;
  - identifies the cumulative impacts associated with other construction and operational activities on the Barangaroo site;
  - details access arrangements for workers to/from the site, emergency vehicles and service vehicle movements.

#### 4. Water Transport

- Outline how the navigable waters created by the application will be managed, including consideration to Roads and Maritime Services (RMS) role.
- Identify the proposed use of waters abutting Barangaroo Central, and any infrastructure necessary to accommodate such uses.
- Identify the demand and location for private charter vessel set-down and pick-up, and how these impacts will be managed.

### 5. Water, Drainage, Stormwater and Groundwater

- Undertake an assessment on surface and groundwater, including:
  - o a water balance for the site;
  - erosion and sediment control plan for the works and operations;
  - stormwater management plan for the site, including any bunding of dangerous goods or fuel depots;

- groundwater management, including measures for preventing groundwater pollution;
- consider Environmentally Friendly Seawalls A Guide to Improving the Environmental Value of Seawalls and Seawall-lined Foreshores in Estuaries (DECC, 2009); and
- o details on any wastewater disposal.

#### 6. Earthworks

- Provide a detailed survey showing existing and proposed levels and proposed quantities of cut and fill necessary for the proposed works.
- Details of the fill, including types and materials and their source.
- Details of the location for the disposal of excess cut and the methodology of transportation to this location.

#### 7. Air and Odour

- The application must include an Air Quality Impact Assessment, including:
  - the identification of the pollutants of concern, including individual toxic air pollutants, dust and odours;
  - the identification and assessment of all relevant fugitive and point source emissions, including cumulative impacts of the operation of the plant in relation to other construction activities; and
  - proposed air quality management and monitoring procedures during construction.

#### 8. Noise

- The application must include an assessment of noise and vibration impacts, including construction, operation, traffic and cumulative noise.
   The assessment must also outline proposed noise mitigation and monitoring procedures.
- Identify noise generating special events and prepare a 'worst case' noise impact assessment on residential development nearby.

#### 9. Remediation and Contamination

The EIS must include a Remedial Action Plan (RAP). The RAP must be prepared in accordance with the contaminated land planning guidelines under section 145C of the *Environmental Planning and Assessment Act 1979* and relevant guidelines produced or approved under section 105 of the *Contaminated Land Management Act 1997*.

Note: The current guidelines under section 145C of the Environmental Planning and Assessment Act 1979 are the guidelines "Managing Land Contamination, Planning Guidelines, SEPP 55 – Remediation of Land" 1998

#### 10. Event Management

For events that are outside the scope of those permitted to be undertaken as exempt or complying development in State Environmental Planning Policy (Temporary Structures) 2007, outline the type of events, their scale and frequency, and prepare the following management plans and policies:

- Structural drawings of temporary structures.
- Security Management Plan.
- Sound Management Plan.
- Emergency Management and Incident Response Plan.
- Security Risk Assessment Plan.
- Alcohol Management Plan.
- Waste Management Plan.
- Occupational Health and Safety Policy Manual.
- Water Based Traffic and Infrastructure Management Plan.

Note: Consideration and preparation of an Exempt and Complying Event

Code could form part of the application to establish the types of events that can be undertaken as exempt and complying development in addition to those permitted under State Environmental Planning Policy (Temporary Structures) 2007.

#### 11. Climate Change and Sea Level Rise

 Prepare an assessment of the risks associated with sea level rise on the proposal as set out in the NSW Coastal Planning Guideline: Adapting to Sea Level Rise.

#### 12. Heritage

- Prepare an archaeological assessment of the likely impacts of the proposal on any Aboriginal cultural heritage, European cultural heritage and other archaeological items and outline proposed mitigation and conservation measures.
- Prepare an interpretation strategy that includes the provision for interpretation of any archaeological resources uncovered during the works.

#### 13. Infrastructure Provision

- Detail the existing infrastructure on site and identify possible impacts on any such infrastructure from the proposal, including the Railcorp 33Kv underground cable located in Hickson Road.
- Detail the proposed infrastructure that will service the development.
- Detail measures to mitigate the impacts of the proposal on any infrastructure items, including proposed relocation.

#### 14. Ecologically Sustainable Development (ESD)

- Identify how the development will incorporate ESD principles in the design, construction and ongoing operation phases of the development.
- Address water quality management for the site including an "Integrated Water Management Plan" to include any proposed alternative water supply, proposed end uses of potable and non-potable water, demonstration of water sensitive urban design and any water conservation measures.
- Provide details of operational waste management and reduction measures.

#### 15. Waste

 Provide details of the scheduled, liquid and non-liquid wastes; and quantities, storage, treatment and disposal or re-use of waste generated.

#### 16. Environmental, Construction and Site Management Plan

The EIS shall provide an Environmental and Construction Management Plan for the proposed works, and is to include:

- Community consultation, notification and complaints handling.
- Impacts of construction on adjoining development and proposed measures to mitigate construction impacts.
- Noise and vibration impacts on and off site.
- Air quality impacts on the neighbourhood.
- Odour impacts.
- Water quality management for the site.
- Waste and chemical management.

#### 17. Staging

Details regarding the staging of the proposed development.

#### 18. Consultation

• Undertake an appropriate and justified level of consultation in accordance

- with the Department's Major Project Community Consultation Guidelines October 2007.
- Undertake an appropriate level of consultation with council and state government agencies regarding the recommendations of the Barangaroo Review.

Aspect	Policy /Guideline/Plan
Air Quality & Hea	alth
	Protection of the Environment Operations (Clean Air) Regulation 2002
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (OEH)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (OEH)
	Protection of the Environment operation (Clear Air) Regulation
	Environmental Health Risk Assessment Guidelines for Assessing Human Health Risks from Environmental Hazards (Department of Health and Ageing and enHealth Council)
	Assessment and Management of Odour from Stationary Sources in NSW Technical Framework 2006
Water	
	Managing Urban Stormwater: Treatment Techniques (OEH)
	Managing Urban Stormwater: Source Control (OEH)
	Managing Urban Stormwater: Soils & Construction (Landcom)
	Technical Guidelines: Bunding & Spill Management (OEH)
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (OEH)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (OEH)
Noise	
	NSW Industrial Noise Policy (OEH)
	Environmental Criteria for Road Traffic Noise (NSW EPA)
	Environmental Noise Control Manual (OEH)
	Development Near Rail Corridors and Busy roads - Interim Guideline 2008.
Waste	
	Waste Avoidance and Resource Recovery Strategy (Resource NSW)
	Waste Classification Guidelines 2008 (OEH)
Transport	
TOTAL STEEDING & STEED SHOWS STEED STEEDS	Guide to Traffic Generating Development (RMS)
,	Road Design Guide (RMS)
Visual	
	Control of Obtrusive Effects of Outdoor Lighting (Standards Australia, AS 4282)

# Plans & Documents The EIS must include all relevant plans, architectural drawings, diagrams and relevant Plans and documentation required under Schedule 1 of the Environmental Planning and **Documents** Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include the following: 1. An existing site survey plan drawn at an appropriate scale illustrating: the location of the land, boundary measurements, area (sq.m) and north point; the existing levels of the land in relation to buildings and roads; location and height of existing structures on the site; location and height of adjacent buildings and private open space; and all levels to be to Australian Height Datum (AHD). 2. A locality/context plan drawn at an appropriate scale should be submitted indicating: significant local features such as parks, community facilities and open space 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. 3. Drawings at an appropriate scale illustrating: the location of any existing building envelopes or structures on the land in relation to the boundaries of the land and any development on adjoining land; detailed plans, sections and elevations of the promenade and parkland, including all temporary and permanent structures; the height (AHD) of the proposed development in relation to the land; and any changes that will be made to the level of the land by excavation, filling or otherwise. **Documents** 1 hard copy and 1 electronic copy of all the documents and plans for review prior to be submitted 12 hard copies and 12 electronic copies of the documents and plans (once the application is considered acceptable); and 1 copy of all the documentation and plans on CD-ROM (PDF format), not exceeding 5Mb in size. Consultation affected landowners.

During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and

In particular you must consult with:

- City of Sydney Council.
- Roads and Maritime Services, with regard to maritime functions in particular the management of new navigable waters.
- Local Aboriginal Land Council and stakeholders.
- Local Heritage Group/s, if relevant.

The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.

# **Further** consultation after 2 years

If you do not lodge a development application and EIS for the development within 2 years of the issue date of these DGRs, you must consult further with the Director General in relation to the preparation of the EIS.

## References

The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal.