### **Director-General's Environmental Assessment Requirements**

# Section 78A(8A) of the *Environmental Planning and Assessment Act 1979*State Significant Development

Application Number	SSD 6236
Proposal	The Eastern Creek Energy from Waste facility, which includes:  the construction and operation of an energy from waste facility;  thermal treatment of up to 1 million tonnes of waste per year;  a boiler house, steam driven turbines and air emissions stacks; and  an electrically powered feed-stock conveyor from the existing Genesis waste management facility.
Location	Honeycomb Drive, Eastern Creek (Lots 2 and 3 DP 1145808)
Proponent	The Next Generation NSW Pty Ltd
Date of Issue	December 2013
General Requirements	The Environmental Impact Statement (EIS) for the development must meet the form and content requirements in Clauses 6 and 7 of Schedule 2 to the Environmental Planning and Assessment Regulation 2000.  In addition, the EIS must include a:  • detailed description of the site, and any existing or approved operations;  • detailed description of the development, including:  – need for the development;  – alternatives considered;  – engineering and/or architectural plans;  – justification for the development taking into consideration its location, any environmental impacts of the development, the suitability of the site and whether the development is in the public interest;  – likely staging of the development; and  • likely interactions between the development and existing, approved and proposed operations in the vicinity of the site;  • consideration of any relevant statutory provisions;  • risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment;  • detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes:  – a description of the existing environment, using sufficient baseline data;  – an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes; and  – a description of the measures that would be implemented to avoid, minimise and if necessary, offset the potential impacts of the development, including proposals for adaptive management and/or contingency plans to manage significant risks to the environment; and  • consolidated summary of all the proposed environmental management, mitigation and monitoring measures, highlighting all commitments included in the EIS.  The EIS must also be accompanied by a report from a qualified quantity surveyor providing:  • a detailed calculation of the capital investment value (CIV) of the development (as defined

# a close estimate of the jobs that will be created by the development during construction and operation; and

verification that the CIV was accurate on the date that it was prepared.

#### **Key Issues**

#### Strategic Planning – including:

- an assessment of the development against State Environmental Planning Policy (Western Sydney Employment Area) 2009; and
- a demonstration that the development is consistent with the Broader Western Sydney Employment Area draft Structure Plan 2013;
- justification that the site is suitable for the proposed development; and
- demonstration that satisfactory arrangements have been or would be made to provide, or contribute to the provision of, the necessary local and regional infrastructure required to support the development.

#### • Waste Management - including:

- a description of the classes and quantities of waste that would be thermally treated at the facility;
- demonstrate that waste used as a feedstock in the waste to energy plant would be the residual from a resource recovery process that maximises the recovery of material in accordance with Environment Protection Authority Guidelines;
- procedures that would be implemented to control the inputs to the waste to energy plant, including contingency measures that would be implemented if inappropriate materials are identified;
- details on the location and size of stockpiles of unprocessed and processed recycled waste at the site;
- demonstrate any waste material (e.g. biochar) produced from the waste to energy facility for land application is fit-for-purpose and poses minimal risk of harm to the environment in order to meet the requirements for consideration of a resource recovery exemption by the EPA under Clause 51A of the *Protection of the Environment Operations* (Waste) Regulation 2005;
- procedures for the management of other solid, liquid and gaseous waste streams;
- describe how waste would be treated, stored, used, disposed and handled on site, and transported to and from the site, and the potential impacts associated with these issues, including current and future offsite waste disposal methods; and
- identify the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the NSW Waste Avoidance and Resource Recovery Strategy 2007.

#### Air Quality and Human Health - including:

- a quantitative assessment of the potential air quality and odour impacts for the development on surrounding landowners and sensitive receptors under the relevant Environment Protection Authority guidelines;
- a description of construction and operational impacts, including air emissions from the transport of materials;
- a human health risk assessment covering the inhalation of criteria pollutants and exposure (from all pathways i.e., inhalation, ingestion and dermal) to specific air toxics;
- details of any pollution control equipment and other impact mitigation measures for fugitive and point source emissions;
- a demonstration of how the waste to energy facility would be operated in accordance with best practice measures to manage toxic air emissions with consideration of the European Union's Waste Incineration Directive 2000 and the Environment Protection Authority's draft policy statement NSW Energy from Waste;
- an examination of best practice management measures for the mitigation of toxic air emissions; and
- details of the proposed technology and a demonstration that it is technically fit for purpose.

#### Noise – including:

- description of all potential noise sources such as construction, operational, on and off-site traffic noise;
- a quantitative noise impact assessment including a cumulative noise impact assessment in accordance with relevant Environment Protection Authority guidelines; and
- details of noise mitigation, management and monitoring measures.

#### • Soils and Water - including:

- description of the water demands and a breakdown of water supplies;
- description of the measures to minimise water use;
- a detailed water balance;
- description of the construction erosion and sediment controls;
- a description of the surface and stormwater management system, including on site detention, and measures to treat or reuse water;
- an assessment of potential surface and groundwater impacts associated with the development including the details of impact mitigation, management and monitoring measures; and
- an assessment of any potential existing soil contamination.

#### • Traffic and Transport – including:

- details of traffic types and volumes likely to be generated during construction and operation;
- an assessment of the predicted impacts of this traffic on the safety and capacity of the surrounding road network and a description of the measures that would be implemented to upgrade and/or maintain this network over time;
- details of key transport routes, site access, internal roadways, infrastructure works and parking; and
- detailed plans of the proposed layout of the internal road network and parking on site in accordance with the relevant Australian standards.

#### Hazards and Risk – including:

- a Preliminary Hazard Analysis (PHA) in accordance with Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis and Multi-Level Risk Assessment and details of fire/emergency measures and procedures; and
- detail contingency plans for any potential incidents or equipment failure during the operation of the project.
- Flora and Fauna including an assessment of the potential impacts to threatened species, populations and communities, and their habitat(s), and if required describe how the principles of "avoid, mitigate, offset" have been used to minimise the impacts of the proposal on biodiversity

#### • **Visual** – including:

- an assessment of the proposed building height, scale, signage and lighting, particularly from nearby public receivers and significant vantage points of the broader public domain;
- details of design measures to ensure the project has a high design quality and is well presented, particularly in the context of the broader Western Sydney Employment Area;
- consideration of any impact on flight paths; and
- a detailed photo-montage based analysis of the visual impacts of development and emissions stacks.

#### • Greenhouse Gas - including:

- a full greenhouse gas assessment (including an assessment of the potential scope 1, 2 and 3 greenhouse gas emissions of the project, and an assessment of the potential impacts of these emissions on the environment; and
- a detailed description of the measure that would be implemented on site to ensure that the project is energy efficient.
- Aboriginal and non-Aboriginal Cultural Heritage.

Plans and Documents	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the <i>Environmental Planning and Assessment Regulation 2000</i> . These documents should be included as part of the EIS rather than as separate documents.
Consultation	During the preparation of the Environmental Impact Statement, you should consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups or affected landowners. In particular you must consult with:  • Environmental Protection Authority;  • Blacktown City Council;  • NSW Health;  • WorkCover NSW;  • Department of Primary Industries including the NSW Office of Water;  • NSW Roads and Maritime Service;  • Office of Environment and Heritage (including the Heritage Branch);  • NSW Fire Brigade;  • Rural Fire Service;  • Transgrid/Endeavour Energy;  • Civil Aviation Safety Authority; and  • local community and other stakeholders.  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 an EIS for the development within 2 years of the issue date of these DGRs, you must consult with the Director-General in relation to the requirements for lodgement.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, Attachment 1 contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this development.

# ATTACHMENT 1 Technical and Policy Guidelines

The following guidelines may assist in the preparation of the Environmental Impact Statement. This list is not exhaustive and not all of these guidelines may be relevant to your proposal.

Many of these documents can be found on the following websites:

http://www.planning.nsw.gov.au,

http://www.bookshop.nsw.gov.au,

http://www.publications.gov.au

### Policies, Guidelines & Plans

Aspect	Policy /Methodology
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Waste	
	Waste Avoidance and Resource Recovery Strategy 2007 (DECC)
	Waste Classification Guidelines (DECC)
	Environmental Guidelines: Assessment Classification and Management of Non-Liquid and Liquid Waste (NSW EPA)
	Environmental guidelines: Composting and Related Organics Processing Facilities (DEC)
	Environmental guidelines: Use and Disposal of Biosolid Products (NSW EPA)
	Composts, soil conditioners and mulches (Standards Australia, AS 4454)
Air Quality	
	Protection of the Environment Operations (Clean Air) Regulation 2002
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)
Odour	
	Technical Framework: Assessment and Management of Odour from Stationary Sources in NSW (DEC)
	Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC)
Flora and Fauna	
	Draft Guidelines for Threatened Species Assessment (DEC & DPI, 2005)
	Draft Threatened Biodiversity Survey and Assessment Guidelines for Developments and Activities
	Commonwealth Environmental Protection and Biodiversity Conservation Act 1999 - Guide to implementation in NSW (DoP)
	Environment Protection and Biodiversity Conservation Regulations 2000 (Schedule 4)
	State Environmental Planning Policy No 14 Coastal Wetlands
	NSW OEH interim policy on assessing and offsetting biodiversity impacts of Part 3A, State significant development (SSD) and State significant infrastructure (SSI) projects
Soil and Water	
Soil	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC & NHMRC)

	National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPC)
	Draft Guidelines for the Assessment & Management if Groundwater Contamination (DECC)
	State Environmental Planning Policy No. 55 – Remediation of Land
	Managing Land Contamination – Planning Guidelines SEPP 55 – Remediation of Land (DOP)
	National Water Quality Management Strategy: Water quality management - an outline of the policies (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Policies and principles - a reference document (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Implementation guidelines (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)
Surface Water	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)
	State Water Management Outcomes Plan
	NSW Government Water Quality and River Flow Environmental Objectives (DECC)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)
	Managing Urban Stormwater: Soils & Construction (Landcom)
	Managing Urban Stormwater: Treatment Techniques (DECC)
	Managing Urban Stormwater: Source Control (DECC)
	Technical Guidelines: Bunding & Spill Management (DECC)
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	NSW State Groundwater Policy Framework Document (DLWC)
Groundwater	NSW State Groundwater Quality Protection Policy (DLWC)
	NSW State Groundwater Quantity Management Policy (DLWC) Draft
	Guidelines for the Assessment and Management of Groundwater Contamination (DECC)
	NSW Water Extraction Monitoring Policy
Noise	
	NSW Industrial Noise Policy (DECC)
	Road Noise Policy (NSW EPA)
	Interim Construction Noise Guideline (EPA)
Risk Assessment	
	AS/NZS 4360:2004 Risk Management (Standards Australia)
	HB 203: 203:2006 Environmental Risk Management – Principles & Process (Standards Australia)
	Planning for Bushfire Protection 2006
	Guideline for Application for Subsidence Management Approvals (Department of Primary Industries);
Transport	
	Guide to Traffic Generating Development (RTA)
	Road Design Guide (RTA)
Visual	
	Control of Obtrusive Effects of Outdoor Lighting (Standards Australia, AS
	4282)

	State Environmental Planning Policy No 64 - Advertising and Signage
Greenhouse Gas	
	AGO Factors and Methods Workbook (AGO)
	Guidelines for Energy Savings Action Plans (DEUS, 2005)
Hazards	
	State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
	Applying SEPP 33 – Hazardous and Offensive Development Application Guidelines (DUAP)
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis
Heritage	
Aboriginal	Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (DEC)
Non- Aboriginal	NSW Heritage Manual (NSW Heritage Office & DUAP)
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)