

Director-General's Environmental Assessment Requirements

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

State Significant Development

Application Number	SSD 13_9281
Proposal	The Deniliquin Ethanol Plant, which includes: • the construction and operation of an ethanol plant with production capacity of up to 115 mega litres per year of ethanol; • feed-grain silos, storage for ethanol, dried distillers grain, and sludge waste; • an on-site rail siding; • a wastewater treatment facility utilising the existing 170 mega-litre dam; and • an effluent irrigation area.
Location	Barham Road, Deniliquin (Lots 234, 272 and 273 DP 756325)
Proponent	Dongmun Greentec 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 <i>Environmental Planning and Assessment Regulation 2000</i>. 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 including any grain storage and transport development. • 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, <u>using sufficient baseline data</u>; – 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 in clause 3 of the <i>Environmental Planning and</i>

	<i>Assessment Regulation 2000</i>), including details of all assumptions and components from which the CIV calculation is derived; • 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	• 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, the wastewater irrigation and the onsite water storage compounds, including impacts on Groundwater Dependent Ecosystems, and potentially affected groundwater users; - details of impact mitigation, management and monitoring measures; - a technical assessment of the suitability of the soil for use in the construction of the onsite water storage compounds, and to sustain on-going wastewater irrigation; and - an assessment of any potential existing soil contamination. • Wastewater – including: - a clear and detailed description of the wastewater treatment process for the development including details of the volume of wastewater generated, treated, reused/recycled, or stored on site; - details of the key pollutant concentrations of the wastewater before and after treatment with reference to relevant water quality guidelines; - a full evaluation of options to manage any brine stream resulting from wastewater treatment and a detailed assessment of the environmental impacts of each option; and - an Irrigation Management Plan that details irrigation practices and includes a detailed soil nutrient and water balance. • Air Quality and Odour - including: - description of all potential odour sources and predicted odour emissions from the construction and operation of the ethanol plant and its wastewater treatment system; - a comprehensive air quality assessment of all potential air quality and odour impacts from the development, including details of air quality and odour impacts on private properties, in accordance with relevant Environment Protection Authority guidelines; - details of mitigation, management and monitoring measures for preventing and/or minimising both point and fugitive emissions; and - an assessment of the effectiveness of the proposed air quality and odour mitigation measures. • Waste Management – including: - the quantity and type of all liquid and solid waste to be generated on site and how this waste would be handled, processed and, if necessary, disposed; - investigation of appropriate options for sludge disposal; and - details of the measures to dispose/remove distillers grain, and details of contingency arrangements should these disposal measures become unavailable. • Noise – including: - description of all potential noise sources such as construction, operational, on and off-site rail noise and traffic noise; - a comprehensive 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.

	• Traffic and Transport – including: - details of all traffic and transport demands likely to be generated during construction and operation, including a description of haul routes; - details on access to the site from the road network including intersection location, design and sight distance; - an assessment of predicted impacts on road safety and the capacity of the road network to accommodate the project; - plans of any road upgrades, rail and other infrastructure works or new roads required for the development; - an assessment of where far-field road works are required as a result of traffic impacts from the development; - details of any proposed rail siding and associated rail traffic and assessment of the predicted impact of this on the rail network; 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; - 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 height, scale, signage and lighting, particularly from: - nearby public receivers; and - significant vantage points of the broader public domain. • 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; • Deniliquin Shire Council; • Department of Primary Industries including the NSW Office of Water, Agriculture NSW and NSW Trade and Investment; • NSW Roads and Maritime Service; • NSW Transport; • Office of Environment and Heritage (including the Heritage Branch); • Murray Catchment Management Authority; • NSW Fire Brigade; • Rural Fire Service; • Vic Rail; 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
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) Action for Air (DECC)
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)
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)
Soil and Water	
<i>Soil</i>	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 of Groundwater Contamination (DECC) State Environmental Planning Policy No. 55 – Remediation of Land Managing Land Contamination – Planning Guidelines SEPP 55 – Remediation of Land (DOP)
<i>Surface Water</i>	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)
	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)
	Greater Metropolitan Regional Environmental Plan No. 2 – Georges River Catchment
	Managing Urban Stormwater: Soils & Construction (Landcom)
	Managing Urban Stormwater: Treatment Techniques (DECC)
	Managing Urban Stormwater: Source Control (DECC)
	Technical Guidelines: Bunding & Spill Management (DECC)
<i>Groundwater</i>	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	NSW State Groundwater Policy Framework Document (DLWC)
	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)
Transport	
	Guide to Traffic Generating Development (RTA)
	Road Design Guide (RTA)
Noise	
	NSW Industrial Noise Policy (EPA, 2000) and Industrial Noise Policy Application Notes
	NSW Road Noise Policy (EPA, 2011)
	Environmental Noise Control Manual (DECC)
	Interim Construction Noise Guideline (DECC, 2009)
	Assessing Vibration: a Technical Guide (DEC, 2006)
	Interim Guidelines: Assessment of Noise from Rail Infrastructure Projects
	Rail Infrastructure Noise Guideline draft for Consultation
	Other Rail Noise: http://www.environment.nsw.gov.au/noise/railnoise.htm
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
Biodiversity	
	Principles for the use of Biodiversity Offsets in NSW (DECC 2008);
	OEH interim policy on assessing and offsetting biodiversity impacts of Part 3A, State Significant Development (SSD) and State Significant Infrastructure (SSI) projects
	State Environmental Planning Policy No 44 – Koala Habitat Protection (SEPP 44)
	Draft Guidelines for Threatened Species Assessment under Part 3A of the <i>Environmental Planning and Assessment Act 1979</i> (DEC)
	Policy & Guidelines - Aquatic Habitat Management and Fish Conservation

	(NSW Fisheries)
	The NSW State Groundwater Dependent Ecosystem Policy (DLWC)
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)
Heritage	
<i>Aboriginal</i>	Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (DEC)
	NSW Heritage Manual (NSW Heritage Office & DUAP)
<i>Non- Aboriginal</i>	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)