

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*
 Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

Application Number	SSD-8482905
Project Name	Moama Ethanol Plant
Location	Lot 3 in DP813704, Moama
Applicant	Murray River Energy Pty Ltd
Date of Issue	20 August 2020
General Requirements	<p>The Environmental Impact Statement (EIS) must be prepared in accordance with, and meet the minimum requirements of, clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i> (the EP&A Regulation).</p> <p>In addition, the EIS must include a:</p> <ul style="list-style-type: none"> - detailed description of the site including any existing or approved operations, site history and development consents - detailed description of the development, including: <ul style="list-style-type: none"> o need and justification for the proposed development o alternatives considered o likely staging of the development - including demolition, construction, and operational stage/s o likely interactions between the development and existing, approved and proposed operations in the vicinity of the site, including any grain storage o plans of any proposed building works - consideration of issues identified in Attachment 2 (public authority responses to key issues) - 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: <ul style="list-style-type: none"> o a description of the existing environment, using sufficient baseline data o an assessment of the potential impacts of all stages of the development, including any cumulative impacts of the proposed facility with any approved (but not yet constructed) developments o 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 any significant risks to the environment o a consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS. <p>The EIS must also be accompanied by a report from a qualified quantity surveyor providing:</p> <ul style="list-style-type: none"> - a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the EP&A Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived. The report shall be prepared on company letterhead and indicate applicable GST component of the CIV - an estimate of jobs that will be created during the construction and operational phases of the proposed development - certification that the information provided is accurate at the date of preparation.
Key issues	<p>The EIS must address the following specific matters:</p> <p>1. Statutory and Strategic Context – including:</p> <ul style="list-style-type: none"> - an assessment of the need and justification for the development having regard to its location and impacts, suitability of the site and the public interest - demonstration the proposal is generally consistent with all relevant planning strategies, environmental planning instruments, district plans and justification for any inconsistencies

	<ul style="list-style-type: none"> - addressing the statutory provisions applying to the development contained in all relevant environmental planning instruments, including: <ul style="list-style-type: none"> o State Environmental Planning Policy No. 33 – Hazardous and Offensive Development o State Environmental Planning Policy No.55 – Remediation of Land o State Environmental Planning Policy No.64 – Advertising and Signage o State Environmental Planning Policy (Infrastructure) 2007 o State Environmental Planning Policy (Rural Lands) 2008 o State Environmental Planning Policy (Koala Habitat Protection) 2019 o State Environmental Planning Policy (State and Regional Development) 2011 o Murray Local Environmental Plan 2011 - a Land Use Conflict Risk Assessment (LUCRA) in accordance with the Department of Primary Industries' Land Use Conflict Risk Assessment Guide - consideration of the Murray River Community Strategic Plan 2018-2028. <p>2. Community and Stakeholder Engagement – including:</p> <ul style="list-style-type: none"> - a detailed community and stakeholder participation strategy which identifies who in the community has been consulted and a justification for their selection, other stakeholders consulted and the form(s) of the consultation, including justification for the approach - a description of the form of engagement activities undertaken - a report on the results of the implementation of the strategy including issues raised by the community and the surrounding occupiers and landowners that may be impacted by the proposal - details of how issues raised during community and stakeholder consultation have been addressed and if they have resulted in changes to the proposal - details of the proposed approach to future community and stakeholder engagement based on the results of the consultation. <p>3. Air Quality and Odour – including:</p> <ul style="list-style-type: none"> - a quantitative assessment of the potential air quality, dust and odour impacts of all stages of the development (construction and operation) on surrounding landowners, businesses and sensitive receptors, in accordance with the relevant Environment Protection Authority guidelines - a description of all potential air emissions and odours and their sources, including construction, operational, transport sources and dust generation - details of the receiving environment, including meteorology and climate, topography, surrounding land use, sensitive receptors and ambient air quality - an assessment of cumulative air quality impacts associated with the facility and surrounding developments, including any approved (but not yet constructed) developments - details of all proposed air quality and odour management, mitigation and monitoring measures for both point and fugitive emission sources. <p>4. Noise and Vibration – including:</p> <ul style="list-style-type: none"> - a quantitative assessment of potential construction, operational and transport (road and rail) noise and vibration impacts, including impacts on nearby sensitive receivers, landowners and businesses, in accordance with relevant Environment Protection Authority guidelines - details and justification for the proposed noise management, mitigation and monitoring measures. <p>5. Wastewater – including:</p> <ul style="list-style-type: none"> - 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 - an Irrigation Management Plan that details irrigation practices and includes a detailed soil nutrient and water balance. <p>6. Co-Products and Waste Management – including:</p> <ul style="list-style-type: none"> - a comprehensive waste management plan that provides a description of waste material produced (solid, liquid and gaseous) from the facility, including details of quantities, composition, classification, storage locations and the proposed management and disposal of those waste materials
--	---

	<ul style="list-style-type: none"> - details of the proposed management of co-products of the ethanol production process including estimated quantities produced and proposed treatment, storage and handling methods - details of contingencies for the disposal of co- and/or by-products in the event there is insufficient demand in the market for these products. <p>7. Water – including:</p> <ul style="list-style-type: none"> - a description of existing baseline conditions for soil, water, groundwater resources, topography, hydrology, drainage lines, watercourses and riparian lands on or nearby to the site - an assessment of impacts on surface and groundwater sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts - a MUSIC model to assess the effectiveness of the proposed treatment devices to meet pollutant reduction targets - details of any groundwater extraction and any works with the potential to intercept the groundwater table - proposed surface and groundwater monitoring activities and methodologies - details of any licensing requirements under the <i>Water Management Act 2000</i> or the <i>Water Act 1912</i> - a stormwater management strategy that provides details of stormwater and wastewater management systems including water sensitive urban design measures, discharge locations and measures to treat or reuse water - a detailed and consolidated site water balance - a flood impact assessment, including an assessment of overland flow paths and flood risk associated with the development both on and off the site <p>8. Soils and Contamination – including:</p> <ul style="list-style-type: none"> - details of construction works and spoil disposal, including a description of erosion and sediment controls, bulk earthworks, stockpile management and contingency plans for potential construction incidents - details of spill management measures - characterisation of the nature and extent of any contamination on the site, in accordance with SEPP 55 - a dated mineral, coal and petroleum titles and applications search through the MEG MinView application, with results shown on a map(s) including the location and extent of the project site. <p>9. Traffic and Transport – including:</p> <ul style="list-style-type: none"> - a quantitative traffic impact assessment for construction and operational traffic prepared in accordance with relevant Transport for NSW guidelines - daily and peak traffic movements likely to be generated by the proposed development during construction and operation and a description of proposed haul routes - an assessment of impacts on the road and rail networks, details of any works required to the existing road and rail infrastructure (e.g. rail siding), measures to be implemented to maintain the standard and safety of the existing road and rail networks and details of any proposed monitoring and management measures - consideration of Travelling Stock Reserves (TSR) and the movement of livestock or farm vehicles along / across the affected roads - an assessment of cumulative traffic impacts at key intersections using SIDRA or similar traffic model and the need (and associated funding) for any road improvement works - details of the proposed site access / egress and parking provisions, including compliance with the requirements of the relevant Australian Standards (i.e. turn paths, sight distance requirements, aisle widths, etc.) - detailed plans of the proposed layout of the internal road network, heavy and light vehicle traffic movements - details of impacts on any Crown Roads. <p>10. Agricultural Resources – including:</p> <ul style="list-style-type: none"> - a description of the current agricultural status and productivity of the proposed development site and surrounding locality
--	--

	<ul style="list-style-type: none"> - details of how all significant impacts on current and potential agricultural developments and resources can be reasonably avoided or adequately mitigated, including consideration of strategies to manage the impact of agricultural aerial spraying in the area - an assessment of cumulative effects to agricultural enterprises and landholders - a biosecurity risk assessment and a biosecurity response plan for pests, weeds and disease. <p>11. Hazard and Risk – including:</p> <ul style="list-style-type: none"> - a Preliminary Hazard Analysis (PHA) prepared in accordance with the Department’s Hazardous Industry Planning Advisory Paper No. 6, ‘Hazard Analysis’ and Multi-Level Risk Assessment (DoP 2011) with details of fire / emergency measures and procedures - details of the proposed type, quantity and location of chemicals to be stored on the site - detailed contingency measures for any potential incidents or equipment failure during the operation of the facility. <p>12. Social and Economic – including:</p> <ul style="list-style-type: none"> - a social impact assessment, which: <ul style="list-style-type: none"> o identifies and analyses the potential social impacts of the proposal from the points of view of the affected community/ies and other stakeholders o assesses the significance of positive, negative, and cumulative social impacts considering likelihood, extent, duration, severity / scale, sensitivity / importance, and level of concern/interest o includes mitigation measures for likely negative social impacts, and any proposed enhancement measures o details how social impacts will be adaptively monitored and managed o details community benefits of the facility - an analysis of any potential economic impacts of the development, including a discussion of any potential economic benefits to the community. <p>13. Visual – including:</p> <ul style="list-style-type: none"> - a landscape character and visual impact assessment that includes a description of the visual catchment and considers the potential visual and lighting impacts of the development on the amenity of the surrounding area particularly from nearby public receivers and significant vantage points of the public domain - details of landscape works that will complement and screen the development showing the use of high-quality landscaping material. <p>14. Heritage – including:</p> <ul style="list-style-type: none"> - an Aboriginal cultural heritage assessment report (ACHAR) prepared in accordance with relevant the ‘Code of Practice for Archaeological Investigation in NSW’ (DECCW 2010), guided by the ‘Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales’ (DECCW 2011) and in consultation with Heritage NSW. This may include the need for surface survey and test excavation - consultation with Aboriginal people must be undertaken and documented in accordance with the ‘Aboriginal cultural heritage consultation requirements for proponents’ (DECCW 2010). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR <p>15. Utilities and Services – including:</p> <ul style="list-style-type: none"> - details of existing capacity and requirements of the development for sewerage, water, wastewater, electricity, waste disposal, telecommunications and gas in consultation with the relevant service providers - a description of the staging, if any, of infrastructure works or any infrastructure upgrades that are required off-site to facilitate the orderly and economic development of the site <p>16. Bush Fire – including consideration of the requirements for hazardous industry detailed in ‘Planning for Bush Fire Protection 2019’.</p> <p>17. Greenhouse Gas and Energy Efficiency – including a quantitative analysis of potential Scope 1, 2 and 3 greenhouse gas emissions from the development and an assessment of potential impacts on the environment in accordance with relevant guidelines</p>
--	--

	<p>18. Biodiversity – including an assessment of biodiversity impacts in accordance with the <i>Biodiversity Conservation Act 2016</i> and documented in a Biodiversity Development Assessment Report, unless DPIE determines the proposed development is not likely to have a significant impact on biodiversity values.</p> <p>19. Planning Agreement/Contributions – including consideration of Council’s Section 7.11 Contribution Plan and/or details of any Voluntary Planning Agreement.</p>
Plans and Documents	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Regulation. Provide these as part of the EIS rather than as separate documents. The EIS must include high quality files of maps and figures of the subject site and proposal.
Consultation	<p>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners.</p> <p>In particular you must consult with:</p> <ul style="list-style-type: none"> - Murray River Council - Environment Protection Authority - Department of Planning, Industry and Environment (DPIE) - Department of Primary Industries, DPIE - Natural Resources Access Regulator, DPIE - Water Group, DPIE - Environment, Energy and Science, DPIE - Transport for NSW (including Roads and Maritime Services) - NSW Health - Fire and Rescue NSW - Rural Fire Service - SafeWork NSW - Heritage NSW, Department of Premier and Cabinet - WaterNSW - Essential Energy - VicTrack - V/Line - Public Transport Victoria - QUBE Logistics - all affected mineral and energy title holders - nearby landowners, businesses and occupiers that may be affected by the proposal. <p>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.</p>
Further consultation after 2 years	If you do not lodge a Development Application and EIS for the development within two years of the issue date of these SEARs, you must consult further with the Secretary 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.

Attachment 1 - Policies, Guidelines & Plans

Plans and Documents

The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the *Environmental Planning and 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 (m²) 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
 - all levels to be to Australian Height Datum (AHD).

2. A locality/context plan drawn at an appropriate scale should be submitted indicating:
 - watercourses including nearby rivers and creeks, and dams
 - significant local features such as heritage items
 - the location and uses of nearby buildings, shopping and employment areas, hospitals and schools
 - traffic and road patterns, pedestrian routes and public transport nodes.

3. An indication of the location of the site with respect to the relevant Land Zoning Map within the Blacktown Local Environmental Plan 2015.

4. Drawings at an appropriate scale illustrating:
 - detailed plans, sections and elevations of the existing and proposed buildings and structures, which clearly show all proposed internal and external infrastructure.

Documents to be submitted

Documents to submit include:

- one electronic copy of all the documents and plans for review prior to exhibition
- other copies as determined by the Department once the development application is lodged.

Technical Guidelines and Policies

The following guidelines may assist in the preparation of the Environmental Impact Statement. This list is not exhaustive and not all 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>

Aspect	Policy / Methodology
Air Quality and Odour	
	Waste Avoidance and Resource Recovery Strategy 2014-2021 (EPA 2014)
	Waste Classification Guidelines (DECC)
	Environmental Guidelines: Assessment Classification and Management of Non-Liquid and Liquid Waste (EPA)
	Environmental guidelines: Composting and Related Organics Processing Facilities (DEC)
	Environmental guidelines: Use and Disposal of Biosolids Products (EPA)
	Composts, soil conditioners and mulches (Standards Australia, AS 4454)
Human Health Risk	
	Environmental Health Risk Assessment: Guidelines for assessing human health risks from environmental hazards (enHealth, 2012)
	PFAS National Environmental Management Plan Version 2.0 (Heads of EPA Australia and New Zealand 2020)
Waste	
	Waste Avoidance and Resource Recovery Strategy 2007 (DECC)
	NSW Energy from Waste Policy Statement (EPA, 2015)
	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)
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)
	State Environmental Planning Policy No. 55 – Remediation of Land
	Managing Land Contamination – Planning Guidelines SEPP 55 – Remediation of Land (DOP)
	Contaminated Sites – Guidelines for Consultants Reporting on Contaminated Sites (OEH 2011)
<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)
	NSW State Rivers and Estuaries Policy (1993)
	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)	

Aspect	Policy / Methodology
<i>Groundwater</i>	Technical Guidelines: Bunding & Spill Management (DECC)
	Guidelines for Controlled Activities on Waterfront Land (2018)
	National Water Quality Management Strategy: Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	NSW State Groundwater Policy Framework Document 1997 (DLWC)
	NSW State Groundwater Quality Protection Policy 1998 (DLWC)
	NSW State Groundwater Quantity Management Policy 2002 (DLWC)
	The NSW State Groundwater Dependent Ecosystem Policy (DLWC)
	Guidelines for the Assessment and Management of Groundwater Contamination (DECC)
	NSW Aquifer Interference Policy (NOW 2012)
	MDBC Guidelines on Groundwater Flow Modelling 2000
Australian Groundwater Modelling Guidelines 2012	
<i>Wastewater</i>	Environmental Guidelines: Use of Effluent by Irrigation (DECC)
	National Water Quality Management Strategy - Guidelines For Water Recycling: Managing Health And Environmental Risks (Phase1) 2006 (EPHC, NRMCC & AHMC)
	National Water Quality Management Strategy – Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 2): Augmentation of Drinking Water Supplies 2008 (EPHC, NRMCC & AHMC)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems - Effluent Management (ARMCANZ/ANZECC)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems - Use of Reclaimed Water (ARMCANZ/ANZECC)
	Recycled Water Guidance Document: Recycled Water Management Systems (DPI, 2015)
Traffic and Transport	
	Guide to Traffic Generating Development (RTA)
	Guide to Traffic Management Part 12: Traffic Impacts of Developments (Austroads 2016)
	NSW Long Term Transport Master Plan (TfNSW 2012)
	Road Design Guide (RTA)
	Traffic Modelling Guidelines (RMS, 2013)
	Future Transport 2056
	NSW Freight and Ports Plans 2018-2023
Noise and Vibration	
<i>Noise</i>	NSW Noise Policy for Industry (EPA 2017)
	NSW Road Noise Policy (EPA 2011)
	Environmental Criteria for Road Traffic Noise (EPA 1999)
	Interim Construction Noise Guideline (DECC 2009)
<i>Vibration</i>	Assessing Vibration: A Technical Guideline (DEC 2006)
Hazards and Risk	
	State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
	Applying SEPP 33 – Hazardous and Offensive Development Application Guidelines (DUAP)
	AS/NZS 4360:2004 Risk Management
	HB 203:2006 Environmental Risk Management – Principles and Process
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis
	Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning (DUAP)
	Contaminated Sites – Guidelines on Significant Risk of Harm from Contaminated Land and the Duty to Report (EPA 2003)
	Fire Safety in Waste Facilities (FRNSW, 2020)
Visual	
	Control of Obtrusive Effects of Outdoor Lighting (Standards Australia, AS 4282)
	State Environmental Planning Policy No 64 - Advertising and Signage
Greenhouse Gas	
	National Greenhouse Accounts (NGA) Factors (Department of Environment)
	The Greenhouse Gas Protocol: Corporate Standard, World Council for Sustainable Business Development and World Resources Institute
	National Greenhouse and Energy Reporting System, Technical Guidelines

Aspect	Policy / Methodology
	<u>Australian Greenhouse Emissions Information System (AGEIS)</u> <u>National Greenhouse Accounts (NGA) Factors (Department of Environment)</u> <u>Guidelines for Energy Savings Action Plans (DEUS, 2005)</u> <u>AGO Factors and Methods Workbook (AGO)</u>
Aircraft Safety	<u>National Airports Safeguarding Framework (DIRDC, 2012)</u> <u>Draft Western Sydney Aerotropolis Plan</u> <u>Western Sydney Aerotropolis Discussion Paper on the Proposed State Environmental Planning Policy (Western Sydney Planning Partnership, 2019)</u> <u>Draft Guidelines for plume rise assessments (CASA, 2003)</u> <u>Advisory Circular AC 139-05 v 3.0 Plume Rise Assessments (CASA, 2019)</u> <u>Guideline C, Managing the Risk of Wildlife Strikes in the Vicinity of Airports</u>
Biodiversity	<u>NSW Biodiversity Offsets Policy for Major Projects (OEH, 2014) and the Framework for Biodiversity Assessment (OEH, 2018)</u> <u>State Environmental Planning Policy (Koala Habitat Protection) 2019</u> <u>State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017</u> <u>The NSW State Groundwater Dependant Ecosystem Policy (DWLC)</u>
Heritage	<u>NSW Heritage Manual (NSW Heritage Office and DUAP)</u> <i>Non-Aboriginal</i> <u>Statements of Heritage Impact 2002 (HO & DUAP)</u> <u>The Burra Charter (The Australia ICOMOS charter for places of cultural significance)</u> <i>Aboriginal</i> <u>Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)</u> <u>Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)</u> <u>Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH, 2011)</u> <u>The Burra Charter (The Australia ICOMOS charter for places of cultural significance)</u>
Social	<u>Social impact assessment guideline (Department of Planning and Environment, 2017)</u>
Ecologically Sustainable Development	<u>NSW and ACT Government Regional Climate Modelling (NAECliM) climate change projections are used to inform the building design</u> <u>Urban Green Cover in NSW Technical Guidelines (OEH 2015)</u>

Attachment 2 – Government Authority Responses