

# Secretary's Environmental Assessment Requirements

## Section 78A(8A) of the *Environmental Planning and Assessment Act* Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*

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| <b>Application Number</b>   | SSD 8294   |
| <b>Development</b>          | Construction and operation of a refuse derived fuel waste to energy plant at the Mt Piper Power Station  |
| <b>Location</b>             | 363 Boulder Road, Blackman's Flat  |
| <b>Applicant</b>            | EnergyAustralia NSW Pty Ltd and Re.Group Pty Ltd   |
| <b>Date of Issue</b>        | April 2017   |
| <b>General Requirements</b> | <p>The Environmental Impact Statement (EIS) for the development must meet the form and content requirements in clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>. In addition, the EIS must include:</p> <ul style="list-style-type: none"> <li>a detailed description of the development, including: <ul style="list-style-type: none"> <li>the need for the proposed development;</li> <li>justification for the proposed development;</li> <li>alternatives considered including a description of feasible options within the development which may include a layout options analysis;</li> <li>likely staging of the development;</li> <li>likely interactions between the development and existing, approved and proposed operations in the vicinity of the site; and</li> <li>plans of any proposed building works.</li> </ul> </li> <li>a risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment;</li> <li>a 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"> <li>a description of the existing environment, using sufficient baseline data;</li> <li>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</li> <li>a description of the measures that would be implemented to avoid, minimise, mitigate 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.</li> </ul> </li> <li>a consolidated summary of all proposed environmental management and monitoring measures, highlighting commitments included in the EIS; and</li> <li>an assessment demonstrating the proposal is consistent with the conditions, requirements, development standards and environmental impact envelope of any Concept Proposal applying to the site.</li> </ul> <p>The EIS must also be accompanied by a report from a qualified quantity surveyor providing:</p> <ul style="list-style-type: none"> <li>a detailed calculation of the capital investment value (as defined in clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>) of the proposal, including details of all assumptions and components from which the CIV calculation is derived;</li> <li>a close estimate of the jobs that will be created by the development during the construction and operational phases of the development; and</li> <li>certification that the information provided is accurate at the date of preparation.</li> </ul> |
| <b>Key issues</b>           | <p>The EIS must address the following specific matters:</p> <ul style="list-style-type: none"> <li><b>Strategic and Statutory Context</b> – including: <ul style="list-style-type: none"> <li>need and justification for the development having regard to its location and impacts, the suitability of the site and public interest;</li> </ul> </li> </ul>  |

- consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments; and
- an assessment demonstrating the proposal is consistent with the requirements of the *NSW Energy from Waste Policy Statement* (Environment Protection Authority, 2015).
- **Air Quality and Odour** - 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, including 'worst case' emission scenarios;
  - a description of construction and operational impacts, including air emissions from the transport of materials;
  - 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 and mitigate toxic air emissions with consideration of the European Union's *Waste Incineration Directive 2000* and the Environment Protection Authority's *NSW Energy from Waste Policy* (2015); and
  - details of the proposed technology and a demonstration that it is technically fit-for-purpose.
- **Human Health Risk** – including:
  - a human health risk assessment in accordance with the *Environmental Health Risk Assessment: Guidelines for assessing human health risks from environmental hazards* (enHealth, 2012) covering the inhalation of criteria pollutants and exposure (from all pathways, i.e., inhalation, ingestion and dermal) to specific air toxics, including impacts from the transport of waste material by road and/or rail.
- **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 and *NSW Energy from Waste Policy Statement* (2015);
  - 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 produced (e.g. ash) 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*.
- **Soils and Water** - including:
  - description of the water demands, a breakdown of water supplies and the measures to minimise water use;
  - a detailed water balance;
  - description of the construction erosion and sediment controls;
  - a description of the operational 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 reference to relevant ambient water quality outcomes, and the details of impact mitigation, management and monitoring measures;
- consideration of the requirements of *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011*;
- an assessment of the risks and impacts associated with the disposal of waste ash, including leaching potential and potential impacts on groundwater, Neubecks Creek and the Upper Cocks River sub-catchment; and
- an assessment of any potential existing soil contamination.
- **Traffic and Transport** – including:
  - a traffic impact study prepared in accordance with relevant Roads and Maritime guidelines;
  - 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;
  - materials to be transported and vehicle types used for transport;
  - details of key transport routes, site access, internal roadways, infrastructure works and parking;
  - assess risks and impacts associated with the transport of refuse derived fuel material by road and/or rail through the Sydney Drinking Water Catchment; and
  - detailed plans of the proposed layout of the internal road network and parking on site in accordance with the relevant Australian standards.
- **Noise and vibration** – including:
  - description of all potential noise and vibration sources such as construction, operational on and off-site traffic noise;
  - a quantitative noise and vibration impact assessment including a cumulative noise impact assessment in accordance with relevant Environment Protection Authority guidelines; and
  - details of noise and vibration mitigation, management and monitoring measures.
- **Biosecurity** – including:
  - a biosecurity risk assessment for both animal and plant disease and a pest risk analysis in accordance with relevant Department of Primary Industry guidelines.
- **Hazards and Risk** – including:
  - a Preliminary Hazard Analysis 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
  - detailed contingency plans for any potential incidents or equipment failure during the operation of the project.
- **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; and
  - a detailed photo-montage based analysis of the visual impacts of the development and emissions stacks.
- **Greenhouse Gas and Energy Efficiency** - 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 measures that would be implemented on site to ensure that the project is energy efficient.

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|   | <ul style="list-style-type: none"> <li>• <b>Flora and Fauna</b> – including: <ul style="list-style-type: none"> <li>– an assessment of biodiversity impacts in accordance with the <i>Framework for Biodiversity Assessment</i> (OEH, 2013) and the <i>NSW Biodiversity Offsets Policy for Major Projects</i> (OEH, 2014).</li> </ul> </li> <li>• <b>Aboriginal and non-Aboriginal Cultural Heritage</b> – including: <ul style="list-style-type: none"> <li>– an assessment of impacts on sites, objects or archaeological deposits.</li> </ul> </li> <li>• <b>Bushfire Risk</b> – including: <ul style="list-style-type: none"> <li>– a bushfire impact assessment prepared in accordance with <i>Planning for Bushfire Protection 2006</i> and associated Fact Sheets and Practice Notes.</li> </ul> </li> <li>• <b>Contributions</b> – including consideration of Council's Section 94/94A Contribution Plan and/or details of any Voluntary Planning Agreement.</li> </ul>  |
| <b>Plans and Documents</b>                | 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.  |
| <b>Consultation</b>                       | <p>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and potentially affected landowners.</p> <p>In particular, you must consult with:</p> <ul style="list-style-type: none"> <li>• Lithgow City Council;</li> <li>• Environment Protection Authority;</li> <li>• Office of Environment and Heritage;</li> <li>• Department of Primary Industries;</li> <li>• WaterNSW;</li> <li>• Roads and Maritime Services;</li> <li>• Nepean Blue Mountains Local Health District;</li> <li>• Forestry NSW;</li> <li>• NSW Rural Fire Service; and</li> <li>• nearby land owners and occupiers that may be affected by the proposal.</li> </ul> <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> |
| <b>Further consultation after 2 years</b> | If you do not lodge an EIS for the development within 2 years of the issue date of these SEAR's, you must consult with the Secretary in relation to the requirements for lodgement.  |
| <b>References</b>                         | 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 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

#### 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 (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:
  - 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; and
  - 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 *Lithgow City Local Environment Plan 2014*.
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:

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

## 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.

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## Policies, Guidelines & Plans

| Aspect                       | Policy /Methodology   |
|------------------------------|---|
| <b>Air Quality and Odour</b> | 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)  |
| <b>Human Health Risk</b>     | Environmental Health Risk Assessment: Guidelines for assessing human health risks from environmental hazards (enHealth, 2012) |
| <b>Waste</b>                 | 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)   |
| <b>Soil and Water</b>        | 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)                                    |
|                              | 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) |
| <b>Surface Water</b>         | 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   |

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|                              | (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)  |
| <i>Groundwater</i>           | 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, NRMMC & 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, NRMMC & 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)  |
| <b>Traffic and Transport</b> |  |
|                              | 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)  |
| <b>Noise and Vibration</b>   |  |
| <i>Noise</i>                 | NSW Industrial Noise Policy (EPA 2000)   |
|                              | 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)  |
| <b>Hazards and Risk</b>      |  |
|                              | 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)   |
| <b>Visual</b>                |  |
|                              | Control of Obtrusive Effects of Outdoor Lighting (Standards Australia, AS 4282)  |
|                              | State Environmental Planning Policy No 64 - Advertising and Signage  |
| <b>Greenhouse Gas</b>        |  |

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|                       | 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   |
|                       | Australian Greenhouse Emissions Information System (AGEIS)  |
|                       | National Greenhouse Accounts (NGA) Factors (Department of Environment)  |
|                       | Guidelines for Energy Savings Action Plans (DEUS, 2005)   |
|                       | AGO Factors and Methods Workbook (AGO)  |
| <b>Biodiversity</b>   |   |
|                       | NSW Biodiversity Offsets Policy for Major Projects (OEH, 2014) and the Framework for Biodiversity Assessment                      |
|                       | State Environmental Planning Policy No 44 – Koala Habitat Protection (SEPP 44)  |
|                       | The NSW State Groundwater Dependant Ecosystem Policy (DWLC)   |
| <b>Heritage</b>       |   |
| <i>Non-Aboriginal</i> | NSW Heritage Manual (NSW Heritage Office and DUAP)  |
|                       | Statements of Heritage Impact 2002 (HO & DUAP)  |
|                       | The Burra Charter (The Australia ICOMOS charter for places of cultural significance)  |
| <i>Aboriginal</i>     | Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)   |
|                       | Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)                      |
|                       | Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH, 2011)                                |
|                       | The Burra Charter (The Australia ICOMOS charter for places of cultural significance)  |



**ATTACHMENT 2**  
**Public Authority Responses to Request for Key Issues**