

# Environmental Assessment Requirements

## State Significant Infrastructure

Section 115Y of the *Environmental Planning and Assessment Act 1979*

<b>Application Number</b>	SSI 8896
<b>Project</b>	Temporary Desalination Plant
<b>Location</b>	Belmont Wastewater Treatment Works (Belmont WWTW) Off Ocean Park Road, Belmont Lot 1 DP 433549
<b>Applicant</b>	Lake Macquarie City Council
<b>Date issued</b>	12 December 2017
<b>General requirements</b>	<p>The Environmental Impact Statement (EIS) must comply with the minimum form and content requirements in Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>.</p> <p>In particular, the EIS must include:</p> <ul style="list-style-type: none"><li>• a stand-alone executive summary</li><li>• a full description of the proposed development, including:<ul style="list-style-type: none"><li>○ the preferred site of the desalination units</li><li>○ all infrastructure and facilities required during both construction and operation, including construction laydown areas, stockpiles, above ground structures, access roads, and road upgrades (including any infrastructures that would be required for the proposed development, but the subject of a separate approvals process)</li><li>○ details of construction and operation, including any staging of the proposed development and any associated modifications/upgrades required to the existing Belmont WWTW</li><li>○ site plans and maps at an adequate scale with dimensions showing:<ul style="list-style-type: none"><li>▪ the locations and dimensions of all proposed components including details of construction laydown areas and above ground structures</li><li>▪ existing infrastructure, sensitive land uses and environmental features in the vicinity of the proposed development (including any other existing, approval or proposed infrastructure in the region)</li><li>▪ required infrastructure and identification of any land use and/or environmental constraints that have been considered in the design of the proposed development</li></ul></li><li>○ details of any rehabilitation along the servicing routes during and following construction</li><li>○ the likely interactions with the proposed development and any other existing, approved or proposed projects</li></ul></li><li>• detail of the triggers for construction and operation of the proposed development, with reference to the current <i>Lower Hunter Water Plan</i> or subsequent versions</li><li>• a description of the need for the proposed development and why it is preferred over other alternatives</li><li>• a list of any approvals that must be obtained prior to the commencement of the proposed development</li><li>• an assessment of the likely impacts of the proposed development on the environment, focusing on the specific issues identified below, including:</li></ul>

	<ul style="list-style-type: none"> <li>○ a description of the existing environment likely to be affected by the proposed development</li> <li>○ an assessment of the likely impacts of all stages of the proposed development, including any cumulative impacts, taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice</li> <li>○ a description of the measures that would be implemented to avoid, mitigate and/or offset residual impacts of the proposed development, if it is approved (with a focus on performance-based measures to reduce the reliance on environmental management plans).</li> </ul> <ul style="list-style-type: none"> <li>• a consolidated summary of all of the proposed environmental management and monitoring measures, identifying all commitments in the EIS</li> <li>• consideration of the proposed development against all relevant environmental planning instruments</li> <li>• the reasons why the proposed development should be approved having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable development.</li> </ul> <p>The EIS must be accompanied by a signed report from a qualified quantity surveyor that includes:</p> <ul style="list-style-type: none"> <li>• a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Environmental Planning and Assessment Regulation 2000) of the proposal, including details of all assumptions and components from which the CIV calculation is derived;</li> <li>• an estimate of the jobs that will be created by the future 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 issues with the level of assessment of likely impacts proportionate to the significance of, or degree, of impact on the issue, within the context of the project location and the surrounding environment:</p> <p><b>Strategic Justification</b> – including:</p> <ul style="list-style-type: none"> <li>• a detailed justification for the proposed development and suitability of the site for the development</li> <li>• a demonstration that the development is consistent with all relevant planning strategies, environmental planning instruments, development control plans (DCPs), or justification for any inconsistencies</li> <li>• a list of any approvals that must be obtained under any other Act or law before the development may lawfully be carried out</li> <li>• a description of how the new facility integrates with existing on-site operations (both permanent and temporary)</li> <li>• a description of any additional licence(s) or approval(s) required to carry out the proposed development</li> <li>• addressing statutory provisions within all relevant planning strategies, environmental planning instruments, development control plans (DCPs), or justification for any inconsistencies, including: <ul style="list-style-type: none"> <li>○ <i>Biodiversity Conservation Act 2016</i></li> <li>○ State Environmental Planning Policy (State &amp; Regional Development) 2011</li> <li>○ State Environmental Planning Policy (Infrastructure) 2007</li> </ul> </li> </ul>

- State Environmental Planning Policy no. 55 – Remediation of Land
- Hunter Regional Plan 2036
- Lake Macquarie Local Environmental Plan 2014
- NSW Premiers Priorities
- NSW State Priorities
- Hunter Regional Plan 2036.

**Water** – including:

- a site water balance including a description of water demand, a breakdown of water supplies and the measures to minimise water use
- an assessment of the impacts of the proposed development on the quantity and/or quality of surface and groundwater resources
- an assessment of the proposed development on the water quality at the outfall, including detail of dispersion in various flow scenarios and during varied tides
- a description of the measures to minimise surface and groundwater impacts, including how works on steep gradient land or erodible soil types would be managed and any contingency requirements to address residual impacts.

**Contamination** including:

- assessment of the abandoned mine works beneath the development site and identification of likelihood and impact of mine subsidence affecting the site
- identification of contamination and the risk of acid sulfate soils (Class 1, 2, 3, or 4 on the Acid Sulfate Soil Risk Map) associated with the proposed development and an assessment of the impacts of the proposed development for contamination and acid sulfate soils (including impacts of acidic runoff offsite) in accordance with current guidelines including *Managing Land Contamination: Planning Guidelines – SEPP 55 Remediation of Land*
- identification, handling, transport and disposal of any asbestos containing material and other contamination encountered during the construction of the proposed development, having regard to ecological and human health risks posed by contamination in the context of the past, existing and likely (or potential) future land uses surrounding the proposed development. Where assessment and/or remediation is required, document how the assessment and/or remediation would be undertaken in accordance with current guidelines
- identification of any unexploded ordnance and management measures to avoid the impacts of these materials
- an assessment of the impacts on soil and land resources (including erosion risk or hazard) with attention to soil erosion and sediment transport consistent with the practices and principles in current guidelines including *Managing Urban Stormwater – Soils and Construction Volume 1* (Landcom, 2004).

**Coastal Processes** including:

- detailed assessment and consideration of coastal hazards including the preparation of a site specific coastal hazards assessment (which includes assessment of recession, wave overtopping and coastal inundation) prepared in accordance with the draft *NSW Coastal Management Manual*

- detailed design of all coastal protection works required to protect the proposed development from coastal hazards. These design works must be undertaken in a manner consistent with the principles of the *Coastal Management Act 2016*, *NSW Coastal Management Manual* and the *Lake Macquarie Coastal Zone Management Plan*.

**Biodiversity** including:

- an assessment of the biodiversity values and the likely biodiversity impacts of the proposed development, in accordance with the *Biodiversity Conservation Act 2016*
- a detailed description of the proposed regime for minimising, management and reporting on the biodiversity impacts of the proposed development over time
- a strategy to offset any residual impacts of the proposed development in accordance with the *Biodiversity Conservation Act 2016*.

**Aquatic Ecology** including:

- a description of the aquatic and riparian habitats adjacent to the development site;
- an analysis of any interactions of the proposed development with aquatic and riparian environments and predictions of any impacts upon these environments;
- details of proposed buffer distances between the development and adjacent aquatic and riparian habitats; and
- details of the mitigation measures for potential impacts to key fish habitats, including water quality impacts, to be implemented during the construction and operation of the proposed development.

**Social Impacts** including:

- a detailed social impact assessment, considering the Department of Planning and Environment's *Social impact assessment guideline* (September 2017), undertaken by a suitably qualified person that includes:
  - identification and prediction of impacts of the proposed development and the relative significance of these impacts (duration, extent, sensitivity and level of concern)
  - a profile of the surrounding community including identification of key stakeholders and community members and groups (this is to include detail of the community's perception of the development, both tangible and intangible; positive and negative)
  - details of genuine engagement undertaken with identified key stakeholders and community members and groups and how this input will inform design and operation of the proposed development
  - methods for ongoing genuine engagement (procedures and mechanisms) with identified key stakeholders and community members and groups and how this input will inform operation of the proposed development.

**Infrastructure** including:

- a detailed written and/or geographical description of the infrastructure required for the proposed development
- identification of any infrastructure upgrades required off-site to facilitate the proposed development and description of any arrangements to ensure the

upgrades are implemented in a timely manner to facilitate the proposed development

- a description of how infrastructure will be co-ordinated and funded to ensure it is in place to facilitate the proposed development.

**Flooding and Drainage** including:

- an assessment of any flood risk to the proposed development (detailing the most recent flood studies for the project area) and consideration of any relevant provisions of the *NSW Floodplain Development Manual* (2005), including the potential effects of climate change, sea level rise and an increase in rainfall intensity
- detail drainage associated with the proposed development including stormwater and drainage infrastructure including consideration of *Guidelines for development adjoining land and water management by DECCW* (OEH, 2013).

**Sustainability** including:

- a detailed assessment of the proposed development against current targets and strategies to improved Government efficiency in use of water, energy and transport
- detail of how ESD principles (as defined in clause 7(4) of Schedule 2 of the Environmental Planning and Assessment Regulation 2000) will be incorporated in the construction and operation of the proposed development.

**Hazards and Risks** including:

- a preliminary risk screening completed in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development and Applying SEPP 33* (DoP, 2011), with a clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the development
- should preliminary screening indicate that the project is "potentially hazardous", a Preliminary Hazard Analysis (PHA) must be prepared in accordance with *Hazardous Industry Planning Advisory Paper No. 6 - Guidelines for Hazard Analysis* (DoP, 2011) and *Multi-Level Risk Assessment* (DoP, 2011).

**Heritage** including:

- an assessment of the impact of the proposed development on Aboriginal cultural heritage (archaeological and cultural) in accordance with the *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW* (OEH, 2011) and the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (DECCW, 2010)
- adequate consultation with Aboriginal stakeholders having regard to the *Aboriginal Cultural Heritage Consultation requirements for Proponents* (DECCW, 2010)
- an assessment of the impact of the proposed development on environmental heritage, including heritage conservation areas and State and local heritage items as defined under the *Heritage Act 1977*, having regard to the NSW Heritage Manual.

**Traffic and Transport** including

- an assessment of construction and operational traffic and transport impacts in accordance with current guidelines including RMS' *Guide to Traffic Generating Developments 2002* and *Austrroads Guide to Traffic Management Part 12: Traffic Impacts of Development*, including:
  - current and anticipated traffic counts for traffic routes and intersections
  - identification of anticipated vehicular traffic generated during construction and operation and the relevant peak periods for traffic generated in these stages
  - capacity of utilised roads and intersections as well as the anticipated future impacts of other proposed developments in the area
  - traffic analysis using SIDRA or similar traffic model
  - detail of any other impacts upon the regional or state road network, including consideration of pedestrian, cyclist and public transport facilities and service vehicles
  - identification of necessary road network infrastructure upgrades.

**Noise and Vibration** including

- an assessment of the likely construction noise impacts of the proposed development in accordance with *Interim Construction Noise Guideline* (DECC, 2009)
- an assessment of the likely vibration amenity and structure impacts of the project under the *Assessment Vibration: A Technical Guideline* (DECC, 2006) and *German Standard DIN 4150-3 Structural Vibration – Effects of vibration on structures*
- an assessment of the likely operational noise impacts of the proposed development in accordance with the *Noise Policy for Industry* (EPA, 2017)
- measures to be implemented to minimise noise impacts during both construction and operational phases.

**Waste** including

- identification, quantification and classification of the waste streams likely to be generated during construction and operation
- description of measures to be implemented to manage, reuse, recycle and safely dispose of waste
- details of waste handling including, transport, identification, receipt, stockpiling and quality control
- the measures that would be implemented to ensure that the proposed development is consistent with the aims, objectives and guidelines in *NSW Waste Avoidance and Resource Recovery Strategy 2014-21*.

**Visual** including:

- an impact assessment at representative private receptors and public vantage points.

**Air Quality** including:

- a description of all potential sources of air and odour emissions;
- an air quality impact assessment in accordance with relevant Environment Protection Authority Guidelines; and
- a description and appraisal of air quality impact mitigation and monitoring measures.

	<p><b>Human Health</b> – including:</p> <ul style="list-style-type: none"> <li>• identification of any change to the risk to human health, including mitigation measures and management to ensure appropriate standards are met.</li> </ul>
<b>Plans and Documents</b>	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation. Those documents should be included as part of the EIS rather than as separate documents.
<b>Consultation</b>	<p>The EIS must include a Community Consultation Framework which identifies relevant stakeholders, procedures for distributing information and receiving/responding to feedback and procedures for resolving stakeholder and community complaints during construction and operation.</p> <p>Key issues that must be addressed in the Framework include, but are not limited to, traffic management (including property access, pedestrian and bicycle access), construction activities (including out of hours work), and noise and vibration mitigation and management.</p> <p>You must consult the relevant local, State and Commonwealth government authorities, infrastructure and service providers, special interest groups (including Local Aboriginal Land Councils, Aboriginal stakeholders and recreational users of the area), affected landowners, businesses and the local community. In particular, you should consult with:</p> <ul style="list-style-type: none"> <li>• Lake Macquarie City Council</li> <li>• Environment Protection Authority</li> <li>• Office of Environment and Heritage</li> <li>• Department of Primary Industries – Water, Fisheries and Crown Lands</li> <li>• Subsidence Advisory NSW</li> <li>• Roads and Maritime Services</li> <li>• SafeWork NSW</li> <li>• NSW Police</li> <li>• NSW Health</li> <li>• the surrounding landowners and occupiers that are likely to be impacted by the proposed development including Belmont Golf Course and Belmont Wetlands State Park Trust.</li> </ul> <p>The EIS must describe the consultation that was carried out, identify the issues raised during this consultation, and explain how these issues have been addressed in the EIS.</p>
<b>Further Consultation after 2 years</b>	If an EIS for the proposed development is not lodged within 2 years of the issue date of these SEARs, you must consult with the Secretary in relation to any further requirements for lodgement.