

## Rebecca Sommer

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**From:** Chris Dwyer <cbdwyer@lakemac.nsw.gov.au>  
**Sent:** Wednesday, 6 December 2017 11:38 AM  
**To:** Rebecca Sommer  
**Cc:** Symon Walpole  
**Subject:** LMCC comments - draft SEARs for the HWC Temp Desalination project

Dear Rebecca,

Thank you for the opportunity to attend the Planning Focus Meeting yesterday, associated with the proposed temporary desalination plant at Belmont.

As discussed please find following a range of matters that Lake Macquarie City Council would request are addressed in any SEARs issued by the Department.

### Justification and alternatives

Council requests that the SEARs include:

- Detailed analysis on the need for the project and its justification considering social, environmental and economic factors.
- A detailed analysis of alternatives (including alternate technologies and locations) should be included within the assessment.

### Coastal Hazards

The Lake Macquarie Coastal Zone Management Plan (CZMP) and its supporting studies identify that the site is vulnerable to coastal hazards. Council requests that the SEARs for the project require that the project include

- Detailed consideration of coastal hazards including the preparation of a site specific coastal hazards assessment (which includes recession, wave overtopping and coastal inundation) prepared in accordance with the NSW Coastal Management Manual.
- In the event that coastal protection works are required to protect the asset from coastal hazards, the design of these works must be undertaken in a manner consistent with the principles of the Coastal Management Act, and NSW Coastal Management Manual.

### Consideration of other documents and studies

The EIS should consider and address the following relevant plans, documents and studies:

- Lake Macquarie Local Environment Plan
- Lake Macquarie Development Control Plan
- Lake Macquarie Coastal Zone Management plan (and supporting studies)
- NSW Coastal Management Manual
- Marks Point and Belmont South Local Adaptation Plan
- Lake Macquarie Greenhouse Gas Emissions Reduction Targets
- NSW Coastal Design Guidelines
- Lake Macquarie Waterway Flood Study and Plan

### Contamination

- The potential for unexploded ordnances to be impacted by the project needs to be assessed in the EIS.
- The proposed potable water connection easement passes through a location potentially subject to contamination (resulting from concentrate from former sand mining). Detailed assessment of potential impacts (including WHS impacts for construction staff) should be included in the EIS.

### Recreational Usage

- The assessment should consider the potential for conflict with current and future recreational users. Future recreational use include a potential Northern expansion of the Belmont Golf Course facility, and a proposed Southern extension of the Fernleigh Track.

#### Safety and Security

- Consideration of security of the facility including liaison with NSW and Federal Police organisations.
- Consideration of natural disaster management.

#### Permissibility

- Address the approval pathway including consideration of works upon E2 and E3 zoned land.

#### Fuel Storage

- Identification of quantities and methods of fuel storage on the site and if relevant , assessment against the provisions of SEPP 33.

#### Consultation

Consultation should occur with the following:

- Lake Macquarie City Council
- Lake Macquarie Coastal Zone Management Committee
- Belmont Golf Course
- Belmont Wetlands State Park Trust

If you have any queries regarding the above please do not hesitate to contact myself on the numbers below, or alternately Symon Walpole on (02) 49 210 393.

Regards

Chris



**Chris Dwyer**

Principal Development Planner

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OUT17/45994

Ms Rebecca Sommer  
Ports and Water Assessments  
NSW Department of Planning and Environment

Rebecca.sommer@planning.nsw.gov.au

Dear Ms Sommer

**Temporary Desalination Plant (SSI 8896)  
Comment on the Secretary's Environmental Assessment Requirements (SEARs)**

I refer to your email of 15 November 2017 to the Department of Industry in respect to the above matter. Comment has been sought from relevant branches of Crown Lands & Water and Department of Primary Industries.

Any further referrals to Department of Industry can be sent by email to [landuse.enquiries@dpi.nsw.gov.au](mailto:landuse.enquiries@dpi.nsw.gov.au).

Department of Industry recommends the EIS be required to address the following:

- Assessment of any volumetric water supply and licensing requirements (including those for ongoing water take following completion of the project) and a consolidated site water balance.
- Assessment of impacts on surface and groundwater sources (both quality and quantity), including those to, 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.
- Proposed surface and groundwater monitoring activities and methodologies
- Plans showing all waterfront land on site, including wetland communities including proposed vegetated riparian corridors.
- Consideration of how the project will address requirements in accordance with relevant plans, policies and guidelines, including the [Lower Hunter Water Plan \(2014\)](#), [Water Sharing Plan for the Hunter Unregulated and Alluvial Water Sources \(2009\)](#), [Water Sharing Plan for the North Coast Coastal Sands Groundwater Sources \(2016\)](#), [NSW Wetlands Management Policy \(2010\)](#), [Guidelines for controlled activities on waterfront land \(2012\)](#) and [NSW Aquifer Interference Policy \(2012\)](#).

Yours sincerely



Graeme White  
**Manager, Assessment Advice**  
6 December 2017

*Planning Policy and Assessment Advice appreciates your help to improve our advice to you. Please complete this three minute survey about the advice we have provided to you, here:*  
<https://goo.gl/o8TXWz>



29 November 2017

CR2017/004483  
SF2017/266551  
KAP

Department of Planning & Environment  
Ports and Water Assessments  
GPO Box 39  
SYDNEY NSW 2001

Attention: Rebecca Sommer

PROPOSAL – SEARS REQUEST FOR SSD 8896 FOR TEMPORARY DESALINATION PLANT IN BELMONT SOUTH (LOT 1 DP 433549)

Reference is made to Department of Planning and Environment's email dated 15 November 2017 seeking Roads and Maritime Services' (Roads and Maritime) requirements under Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* and including an invitation to a Planning Focus Meeting to be held on 5 December 2017.

Roads and Maritime have reviewed the Preliminary Environmental Assessment ('PEA') prepared by AECOM, and dated 30 June 2017. It is understood that the proposed development involves the construction and operation of a temporary reverse osmosis desalination plant (for use in extreme drought) with the capacity to produce approximately 15 megalitres per day (ML/d) of potable water.

The PEA anticipates that the project could generate 20 heavy vehicle movements per day during operation and 40 light vehicles movement per day during the height of construction activities. Traffic generated by the proposed development during construction and operational stages will use the existing access off Ocean Park Road via the intersection of Pacific Highway and Beach Road. It is further understood by Roads and Maritime that the proponent will prepare an Environmental Impact Statement ('EIS') including an traffic assessment of the project's impact on the road network to identify mitigation and management measures necessary to accommodate the proposed increase in traffic volumes.

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**Roads and Maritime Services**

### Roads and Maritime response

Following a review of the proponent's PEA, Roads and Maritime advises a Land Use representative will not be attending the Planning Focus meeting. Instead, Roads and Maritime requests that the following requirements be included in the SEARs for the preparation of an EIS:

- The EIS should refer to the following guidelines with regard to the traffic and transport impacts of the proposed development:
  - Road and Related Facilities within the Department of Planning EIS Guidelines, and,
  - Section 2 Traffic Impact Studies of Roads and Maritime's *Guide to Traffic Generating Developments 2002*.

Furthermore, a traffic and transport study shall be prepared in accordance with the Roads and Maritime's *Guide to Traffic Generating Developments 2002* and is to include (but not be limited to) the following:

- Assessment of all relevant vehicular traffic routes and intersections for access to / from the subject properties.
- Current traffic counts for all of the traffic routes and intersections.
- Identification of anticipated additional vehicular traffic generated from both the construction and operational stages of the project and the relevant peak periods for traffic generated by these stages.
- The distribution on the road network of the trips generated by the proposed development. It is requested that the predicted traffic flows are shown diagrammatically to a level of detail sufficient for easy interpretation.
- Consideration of the traffic impacts on existing and proposed intersections, in particular, the first classified road intersection encountered following the local road network from the site, and the capacity of the local and classified road network to safely and efficiently cater for the additional vehicular traffic generated by the proposed development during both the construction and operational stages. The traffic impact shall also include the cumulative traffic impact of other proposed developments in the area.
- Identify the necessary road network infrastructure upgrades that are required to maintain existing levels of service on both the local and classified road network for the development. In this regard, preliminary concept drawings shall be submitted with the EIS for any identified road infrastructure upgrades. However, it should be noted that any identified road infrastructure upgrades will need to be to the satisfaction of Roads and Maritime and Council.
- Traffic analysis of any major / relevant intersections impacted, using SIDRA or similar traffic model, including:
  - Current traffic counts and 10 year traffic growth projections
  - With and without development scenarios

- 95<sup>th</sup> percentile back of queue lengths
- Delays and level of service on all legs for the relevant intersections
- Electronic data for Roads and Maritime review.
- Any other impacts on the regional and state road network including consideration of pedestrian, cyclist and public transport facilities and provision for service vehicles.

On determination of this matter, please forward a copy of the final SEARs for record and / or action purposes. Should you require further information please contact Hunter Land Use on 4924 0688 or by email at [development.hunter@rms.nsw.gov.au](mailto:development.hunter@rms.nsw.gov.au).

Yours sincerely

A handwritten signature in dark ink, appearing to be 'P. Marler', written over a circular stamp or seal.

Peter Marler  
Manager Land Use Assessment  
Hunter Region



DOC17/564481-1

SSI 8896

Rebecca Sommer  
Senior Planner, Ports and Water Assessments  
Department of Planning and Environment  
[rebecca.sommer@planning.nsw.gov.au](mailto:rebecca.sommer@planning.nsw.gov.au)

Dear Rebecca

**Input into Secretary's Environmental Assessment Requirements – Temporary Desalination Plant – Belmont South – Lake Macquarie LGA (SSI 8896)**

I refer to your email dated 15 November 2017 seeking input into the Secretary's Environmental Assessment Requirements (SEARs) for the Temporary Desalination Plant, located off Ocean Beach Road (within Belmont Wastewater Treatment Works site) at Belmont South. The proposed development is within the Lake Macquarie local government area.

The Office of Environment and Heritage (OEH) understands that Hunter Water are seeking to establish a temporary desalination plant. OEH understands that the proposal is a State Significant Infrastructure (SSI 8896) project under the *Environmental Planning and Assessment Act 1979*.

OEH has reviewed the Preliminary Environmental Assessment as prepared by AECOM Australia Pty Limited (dated 30 June 2017) and has prepared Standard SEARs which are presented in **Attachment A**. There are no project-specific SEARs provided for this project.

For biodiversity and threatened species matters, this project is to be assessed in accordance with the Biodiversity Assessment Method (BAM, dated 25 August 2017) and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the *Biodiversity Conservation Act 2016* (s6.12) (BC Act), *Biodiversity Conservation Regulation 2017* (s6.8) and BAM. Under this process, the BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the BC Act.

The proponent will need to ensure that the BDAR is fully consistent with requirements of the BAM. Details of guidance documents to assist with this process are provided in **Attachment C**.

With respect to Aboriginal cultural heritage, OEH acknowledge the previously identified Aboriginal cultural heritage values associated with the project area. OEH notes that any Aboriginal cultural heritage assessment undertaken prior to 2010 is unlikely to meet current OEH Aboriginal cultural heritage guidelines for the assessment of Aboriginal cultural heritage in NSW. The OEH 2011 *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* should be referenced in this instance.

If you have any further questions in relation to this matter, please contact Steve Lewer, Regional Biodiversity Conservation Officer, on 02 4927 3158.

Yours sincerely

A handwritten signature in dark ink, appearing to be 'S. Cox', with a long horizontal stroke extending to the right.

**STEVEN COX**

**Senior Team Leader - Planning  
Hunter Central Coast Branch  
Regional Operations Division**

Enclosure: Attachments A – C

22 November 2017



## Attachment A – Standard Environmental Assessment Requirements

### Biodiversity

1. Biodiversity impacts related to the proposed development (SSD 17\_8795) are to be assessed in accordance with the [Biodiversity Assessment Method](#) and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the *Biodiversity Conservation Act 2016* (s6.12), *Biodiversity Conservation Regulation 2017* (s6.8) and [Biodiversity Assessment Method](#).
2. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the [Biodiversity Assessment Method](#).
3. The BDAR must include details of the measures proposed to address the offset obligation as follows;
  - The total number and classes of biodiversity credits required to be retired for the development/project;
  - The number and classes of like-for-like biodiversity credits proposed to be retired;
  - The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules;
  - Any proposal to fund a biodiversity conservation action;
  - Any proposal to conduct ecological rehabilitation (if a mining project);
  - Any proposal to make a payment to the Biodiversity Conservation Fund.

If seeking approval to use the variation rules, the BDAR must contain details of the [reasonable steps](#) that have been taken to obtain requisite like-for-like biodiversity credits.

4. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the *Biodiversity Conservation Act 2016*.

### Aboriginal cultural heritage

5. The Environmental Impact Assessment (EIS) must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in the Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values should be guided by the [Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW \(DECCW, 2011\)](#) and consultation with OEH regional branch officers.
6. Consultation with Aboriginal people must be undertaken and documented in accordance with the [Aboriginal cultural heritage consultation requirements for proponents 2010 \(DECCW\)](#). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.
7. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.

### Historic heritage

8. The EIS must provide a heritage assessment including but not limited to an assessment of impacts to State and local heritage including conservation areas, natural heritage areas, places of Aboriginal heritage value, buildings, works, relics, gardens, landscapes, views, trees should be assessed. Where impacts to State or locally significant heritage items are identified, the assessment shall:
- outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the NSW Heritage Manual (1996),
  - be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria),
  - include a statement of heritage impact for all heritage items (including significance assessment),
  - consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant), and
  - where potential archaeological impacts have been identified develop an appropriate archaeological assessment methodology, including research design, to guide physical archaeological test excavations (terrestrial and maritime as relevant) and include the results of these test excavations.

### Water and soils

9. The EIS must map the following features relevant to water and soils including:
- Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).
  - Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method).
  - Wetlands as described in s4.2 of the Biodiversity Assessment Method.
  - Groundwater.
  - Groundwater dependent ecosystems.
  - Proposed intake and discharge locations.
10. The EIS must describe background conditions for any water resource likely to be affected by the development, including:
- Existing surface and groundwater.
  - Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.
  - Water Quality Objectives (as endorsed by the NSW Government <http://www.environment.nsw.gov.au/ieo/index.htm>) including groundwater as appropriate that represent the community's uses and values for the receiving waters.
  - Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the [ANZECC \(2000\) Guidelines for Fresh and Marine Water Quality](#) and/or local objectives, criteria or targets endorsed by the NSW Government.

11. The EIS must assess the impacts of the development on water quality, including:

- a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the development protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction.
- b. Identification of proposed monitoring of water quality.

12. The EIS must assess the impact of the development on hydrology, including:

- a. Water balance including quantity, quality and source.
- b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.
- c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.
- d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches).
- e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.
- f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.
- g. Identification of proposed monitoring of hydrological attributes.

#### **Flooding and coastal erosion**

13. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:

- a. Flood prone land.
- b. Flood planning area, the area below the flood planning level.
- c. Hydraulic categorisation (floodways and flood storage areas).

14. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 1 in 10 year, 1 in 100 year flood levels and the probable maximum flood, or an equivalent extreme event.

15. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:

- a. Current flood behaviour for a range of design events as identified in 11 above. This includes the 1 in 200 and 1 in 500 year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.

16. Modelling in the EIS must consider and document:

- a. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood.
- b. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affectation of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazards and hydraulic categories.
- c. Relevant provisions of the NSW Floodplain Development Manual 2005.

17. The EIS must assess the impacts on the proposed development on flood behaviour, including:

- a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
- b. Consistency with Council floodplain risk management plans.
- c. Compatibility with the flood hazard of the land.
- d. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
- e. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.
- f. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.
- g. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council.
- h. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the SES and Council.
- i. Emergency management, evacuation and access, and contingency measures for the development considering the full range of flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the SES.
- j. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

## Attachment B – Project Specific Environmental Assessment Requirements

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<b>Biodiversity</b> - nil
<b>Aboriginal cultural heritage</b> - nil
<b>Historic heritage</b> - nil
<b>Water and soils</b> - nil
<b>Flooding and coastal erosion</b> - nil

## Attachment C – Guidance material

Title	Web address
<b>Relevant Legislation</b>	
<i>Biodiversity Conservation Act 2016</i>	<a href="https://www.legislation.nsw.gov.au/#/view/act/2016/63/full">https://www.legislation.nsw.gov.au/#/view/act/2016/63/full</a>
<i>Coastal Management Act 2016</i>	<a href="https://www.legislation.nsw.gov.au/#/view/act/2016/20/full">https://www.legislation.nsw.gov.au/#/view/act/2016/20/full</a>
<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>	<a href="http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/">http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/</a>
<i>Environmental Planning and Assessment Act 1979</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N</a>
<i>Fisheries Management Act 1994</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N</a>
<i>Marine Parks Act 1997</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N</a>
<i>National Parks and Wildlife Act 1974</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N</a>
<i>Protection of the Environment Operations Act 1997</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N</a>
<i>Water Management Act 2000</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N</a>
<i>Wilderness Act 1987</i>	<a href="http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N">http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N</a>
<b>Biodiversity</b>	
Biodiversity Assessment Method (OEH, 2017)	<a href="http://www.environment.nsw.gov.au/resources/bcact/biodiversity-assessment-method-170206.pdf">http://www.environment.nsw.gov.au/resources/bcact/biodiversity-assessment-method-170206.pdf</a>
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	<a href="http://www.environment.nsw.gov.au/resources/bcact/guidance-decision-makers-determine-serious-irreversible-impact-170204.pdf">http://www.environment.nsw.gov.au/resources/bcact/guidance-decision-makers-determine-serious-irreversible-impact-170204.pdf</a>
<a href="#">NSW Guide to Surveying Threatened Plant</a>	<a href="http://www.environment.nsw.gov.au/resources/threatenedspecies/160129-threatened-plants-survey-guide.pdf">http://www.environment.nsw.gov.au/resources/threatenedspecies/160129-threatened-plants-survey-guide.pdf</a>
Fisheries NSW policies and guidelines	<a href="http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies.-guidelines-and-manuals/fish-habitat-conservation">http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies.-guidelines-and-manuals/fish-habitat-conservation</a>
List of national parks	<a href="http://www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx">http://www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx</a>
Revocation, recategorisation and road adjustment policy (OEH, 2012)	<a href="http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm">http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm</a>
Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010)	<a href="http://www.environment.nsw.gov.au/protectedareas/developmentadjoiningdecc.htm">http://www.environment.nsw.gov.au/protectedareas/developmentadjoiningdecc.htm</a>
<b>Heritage</b>	
The Burra Charter (The Australia ICOMOS charter for places of cultural significance)	<a href="http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf">http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf</a>
Statements of Heritage Impact 2002 (HO & DUAP)	<a href="http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf">http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf</a>
NSW Heritage Manual (DUAP) (scroll through alphabetical list to 'N')	<a href="http://www.environment.nsw.gov.au/Heritage/publications/">http://www.environment.nsw.gov.au/Heritage/publications/</a>



Title	Web address
<b>Aboriginal Cultural Heritage</b>	
Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)	<a href="http://www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreq.pdf">http://www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreq.pdf</a>
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)	<a href="http://www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf">http://www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf</a>
Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011)	<a href="http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf">http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf</a>
Aboriginal Site Recording Form	<a href="http://www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf">http://www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf</a>
Aboriginal Site Impact Recording Form	<a href="http://www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf">http://www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf</a>
Aboriginal Heritage Information Management System (AHIMS) Registrar	<a href="http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm">http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm</a>
Care Agreement Application form	<a href="http://www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf">http://www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf</a>
<b>Acid sulphate soils</b>	
Acid Sulfate Soils Planning Maps via Data.NSW	<a href="http://data.nsw.gov.au/data/">http://data.nsw.gov.au/data/</a>
Acid Sulfate Soils Manual (Stone et al. 1998)	<a href="http://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf">http://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf</a>
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	<a href="http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf">http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf</a> This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
<b>Flooding and Coastal Erosion</b>	
Reforms to coastal erosion management	<a href="http://www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm">http://www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm</a>
Floodplain development manual	<a href="http://www.environment.nsw.gov.au/floodplains/manual.htm">http://www.environment.nsw.gov.au/floodplains/manual.htm</a>
Guidelines for Preparing Coastal Zone Management Plans	Guidelines for Preparing Coastal Zone Management Plans <a href="http://www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf">http://www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf</a>
NSW Climate Impact Profile	<a href="http://climatechange.environment.nsw.gov.au/">http://climatechange.environment.nsw.gov.au/</a>
Climate Change Impacts and Risk Management	<a href="#">Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation</a>
<b>Water</b>	
Water Quality Objectives	<a href="http://www.environment.nsw.gov.au/ieo/index.htm">http://www.environment.nsw.gov.au/ieo/index.htm</a>
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	<a href="http://www.environment.gov.au/water/publications/quality/australia-n-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1">www.environment.gov.au/water/publications/quality/australia-n-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1</a>
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	<a href="http://deccnet/water/resources/AWQGuidance7.pdf">http://deccnet/water/resources/AWQGuidance7.pdf</a>

Title	Web address
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	<a href="http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf">http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf</a>





## Subsidence Advisory NSW

117 Bull Street, Newcastle West NSW 2302

Tel 02 4908 4300 | [www.subsidence.nsw.gov.au](http://www.subsidence.nsw.gov.au)

24 Hour Emergency Service: Free Call 1800 248 083

ABN 87 445 348 918

Ms Rebecca Sommer

Department of Planning & Environment

[rebecca.sommer@planning.nsw.gov.au](mailto:rebecca.sommer@planning.nsw.gov.au)

Dear Ms Sommer

### **Proposed Temporary Desalination plant - Lot 1 DP 433549, Belmont NSW.**

Thank you for referring the above proposal to SA NSW for comment. It is understood that the works will be constructed on Lot 1 DP 433549 and will consist of;

- A desalination plant that will be relocatable.
- Permanent infrastructure that will connect to the desalination plant.

According to SA NSW's records, the proposed desalination plant site;

- Is located outside of a proclaimed mine subsidence district.
- It is undermined by abandoned John Darling Colliery mine workings in the Victoria Tunnel Seam at approximately 200m depth and the Borehole Seam at approximately 280m depth.

A brief assessment of SA NSW's records indicates that both the likelihood and consequence of mine subsidence damaging future infrastructure constructed on this site to be very low to low.

However, given the cost and potential impact to the community should mine subsidence damage occur, SA NSW recommends the following prior to undertaking detailed design;

- Carry out a desktop assessment of the abandoned mine workings in order to estimate the likelihood and impact of mine subsidence affecting the site in the future.
- Design any permanent infrastructure to accommodate any identified mine subsidence impact.

If you have any queries in regard to this letter or require any advice in regard to the above, I would be happy to assist.

I can be contacted on 4908 4391 or via email at [kieran.black@finance.nsw.gov.au](mailto:kieran.black@finance.nsw.gov.au).

Yours sincerely

**Kieran Black**  
Technical Manager



DOC17/573528; EF14/498 (SSI 8896)

Department of Planning and Environment  
GPO Box 39  
SYDNEY NSW 2001

Attention: Rebecca Sommer  
By email: [Rebecca.sommer@planning.nsw.gov.au](mailto:Rebecca.sommer@planning.nsw.gov.au)

**TEMPORARY DESALINATION PLANT – BELMONT SOUTH, LAKE MACQUARIE (SSI 8896)  
SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS**

I refer to your email to the Environment Protection Authority (EPA), dated 15 November 2017, seeking the EPA's recommended Secretary Environmental Assessment Requirements (SEARS) for the proposed desalination plant at Belmont South.

The EPA has considered the proposal and has identified in **Attachment A** the information it requires to assess the project. In carrying out the assessment, the proponent should refer to the relevant guidelines listed in **Attachment B** and any relevant industry codes of practice and best practice management guidelines. The main issues of interest to the EPA are:

- Potential impacts on water quality from the proposed discharge of brine, pre-treatment wastes and residual chemicals from reverse osmosis and other water treatment;
- Potential noise impacts from construction activities and operations;
- Impacts on air quality;
- Chemical handling and storage; and
- Waste management and waste disposal

The proponent should also be aware that any commitments made in the Environmental Impact Statement may be formalised as approval conditions and subsequently environment protection licence conditions. Pollution control measures should not be proposed if they are impractical, unrealistic or beyond the financial viability of the development. It is important that all conclusions are supported by adequate data.

If you require any further information regarding this matter, please contact me on 4908 6821 or by email to [hunter.region@epa.nsw.gov.au](mailto:hunter.region@epa.nsw.gov.au).

Yours sincerely

A handwritten signature in dark ink, appearing to be 'Bill George', followed by the date '21.11.17' written in a similar cursive style.

**BILL GEORGE**  
**Senior Regional Operations Officer - Hunter**  
**Environment Protection Authority**

Encl:    **Attachment A** – EPA's Recommended Secretary's Environmental Assessment Requirements – Temporary Desalination Plant – Belmont South, Lake Macquarie (SSI 8896)

**Attachment B** – Guidance Material

## **ATTACHMENT A**

### **EPA's Recommended Secretary's Environmental Assessment Requirements -- Temporary Desalination Plant – Belmont South, Lake Macquarie (SSI 8896)**

#### **1 Environmental impacts of the project**

Impacts related to the following environmental issues need to be assessed, quantified and reported on:

- Air Quality
- Noise and Vibration
- Water and Soil Quality and Management
- Waste Management
- Dangerous Goods, Chemical Storage and Bunding

The Environmental Impact Statement (EIS) should address the specific requirements outlined under each heading below and assess impacts in accordance with the relevant guidelines mentioned. A full list of guidelines is at Attachment B.

#### **2 Licensing requirements**

The EPA understands that the proponent intends to construct and operate the desalination plant within the Belmont Waste Water Treatment Works (WWTW) and discharge brine and pre-treatment waste to the ocean outfall.

Should the project be approved and located within the Belmont WWTW, the proponent will need to make a separate application to the EPA to vary Environment Protection Licence No. 1771. In support of this application, the proponent will also need to assess all potential direct and cumulative environmental impacts on the receiving environment. This would include potential impacts from proposed waste discharges to the ocean outfall, such as brine, pre-treatment wastes and residual chemicals from reverse osmosis and other treatments.

General information on licence requirements can also be obtained from EPA's Environment Line on 131 555 during office hours, or can be found at the EPA web site at:  
<http://www.epa.nsw.gov.au/licensing/>

#### **3 The Proposal and Premises**

The objectives of the proposal should be clearly stated and refer to:

- The size and type of the operation;
- The nature of the processes and the products, by-products and wastes produced;
- The types and quantities of any chemicals to be used and stored onsite;
- Proposed operational hours; and
- Proposed staging and timing of the proposal.

The EIS will need to fully identify all the processes and activities intended for the site over the life of the development. This will include details of:

- The location of the proposed facility and details of the surrounding environment;
- The proposed layout of the site;
- Appropriate land use zoning;
- Ownership details of any residence and/or land likely to be affected by the proposed operations;
- Maps/diagrams showing the location of residences and properties likely to be affected and other industrial developments, conservation areas, wetlands, etc. in the locality that may be affected by the facility;
- All equipment proposed for use at the site;

- All chemicals, including fuel, used on the site and proposed methods for their transportation, storage, use and emergency management;
- Clearly detail the boundary of the premises; and
- Methods to mitigate any expected environmental impacts of the development.

## 4 Air Issues

### 4.1 Air quality

The EIS should include an air quality impact assessment (AQIA) in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW, including, as a minimum the following components:

#### Assessment Objective

1. Demonstrate the proposed project will incorporate and apply best management practice emission controls; and
2. Demonstrate that the project will not cause violation of the project adopted air quality impact assessment criteria at any residential dwelling or other sensitive receptor.

#### Assessment Criteria

- Define applicable assessment criteria for the proposed development referencing the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW, including appendices and updates
- Demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations (POEO) Act (1997)* and the POEO (Clean Air) Regulation (2010).

#### Existing Environment

- Provide a detailed description of the existing environment within the assessment domain, including:
  - geophysical form and land-uses;
  - location of all sensitive receptors;
  - existing air quality; and
  - local and regional prevailing meteorology.
- Justify all data used in the assessment, specifically including analysis of inter-annual trends (preferably five consecutive years of data), availability of monitoring data, and local topographical features.
- Meteorological modelling must be verified against monitored data. Verification should involve comparative analysis of wind speed, wind direction and temperature, at a minimum.
- A review of all existing, recently approved and planned developments likely to contribute to cumulative air quality impacts must be completed.

#### Emissions Inventory

- Provide a detailed description of the project and identify the key stages with regards to the potential for air emissions and impacts on the surrounding environment.
- Identify all sources of air emissions, including mechanically generated, combustion and transport related emissions likely to be associated with the proposed development.
- Estimate emissions of TSP, PM10, PM2.5, NOx, (tonnes per year), at a minimum, for all identified sources during each key development stage. The emissions inventory should:

- utilise USEPA (1995) (and updates) emission estimation techniques, direct measurement or other method approved in writing by EPA;
- calculate uncontrolled emissions (with no particulate matter controls in place); and
- calculate controlled emissions (with proposed particulate matter controls in place).
- The emissions inventory must be explicitly coupled with the project description.
- Provide a detailed summary and justification of all parameters adopted within all emission estimation calculations, including site specific measurements, proponent recommended values or published literature.
- Document, including quantification and justification, all air quality emission control techniques/practices proposed for implementation during the project. As a minimum, consideration must be given to source control techniques, emission control through mine planning and reactive/predictive management techniques.
- Demonstrate that the proposed control techniques/practices are consistent with best management practice.

#### Air Quality Emission Control Measures

- Provide a detailed discussion of all proposed air quality emission control measures, including details of a reactive/predictive management system. The information provided must include:
  - explicit linkage of proposed emission controls to the site specific best practice determination assessment
  - timeframe for implementation of all identified emission controls;
  - key performance indicators for emission controls;
  - monitoring methods (location, frequency, duration);
  - response mechanisms;
  - responsibilities for demonstrating and reporting achievement of KPIs;
  - record keeping and complaints response register; and
  - compliance reporting.

## **5 Noise and Vibration**

The following matters should be addressed in relation to noise and vibration impacts associated with the proposal. This includes identification of the hours of operations, assessment of all activities where proposed, and impacts on sensitive receivers associated with the proposed hours of operation. The following matters should be addressed as part of the EIS.

#### General

- Construction noise associated with the proposed development should be assessed using the Interim Construction Noise Guideline (DECC, 2009).
- Vibration from all activities (including construction and operation) to be undertaken on the premises should be assessed using the guidelines contained in the Assessing Vibration: a technical guideline (DEC, 2006).

#### Industry

- Operational noise from all industrial activities (including private haul roads) to be undertaken on the premises should be assessed using the guidelines contained in the *NSW Noise Policy for Industry* (2017). Note: The provisions of the NSW Industrial Noise Policy may apply under

certain circumstance. Please refer to <http://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/nsw-industrial-noise-policy>

#### Road

- Noise on public roads from increased road traffic generated by land use developments should be assessed using the guidelines contained in the NSW Road Noise Policy (DECCW, 2011).
- Noise from new or upgraded public roads should be assessed using the NSW Road Noise Policy (DECCW, 2011).

#### Monitoring

- Detail monitoring that will be conducted to assess the impacts of the proposal.

## **6 Water and Soils**

### **6.1 Water Quality**

#### Describe Proposal

- Describe the proposal including position of any intakes and discharges, volumes, water quality and frequency of all water discharges.
- Demonstrate that all practical options to avoid discharges have been implemented and environmental impact minimised where discharge is necessary.
- Where relevant include a water balance for the development including water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.

#### Background Conditions

- Describe existing surface and groundwater quality. An assessment needs to be undertaken for any water resource likely to be affected by the proposal. Issues to be discussed should include but are not limited to:
  - a description of any impacts from existing industry or activities on water quality
  - a description of the condition of the local catchment e.g. erosion, soils, vegetation cover, etc.
  - an outline of baseline groundwater information, including, for example, depth to water table, flow direction and gradient, groundwater quality, reliance on groundwater by surrounding users and by the environment
- State the Water Quality Objectives for the receiving waters relevant to the proposal. These refer to the community's agreed environmental values and human uses endorsed by the NSW Government as goals for ambient waters (<http://www.environment.nsw.gov.au/ieo/index.htm>). Where groundwater may be impacted the assessment should identify appropriate groundwater environmental values.
- State the indicators and associated trigger values or criteria for the identified environmental values. This information should be based on the ANZECC (2000) Guidelines for Fresh and Marine Water Quality as a minimum.
- State any locally specific objectives, criteria or targets which have been endorsed by the NSW Government.

### Impact Assessment

- Describe the nature and degree of impact that any proposed discharges will have on the receiving environment, including in and around the outfall, surface water and groundwater.
- Detail contractual and other arrangements that will be put in place to prevent pollution from haul roads and unsealed roads per se, particularly rights of carriageways not owned by the proponent.
- Assess impacts against the relevant ambient water quality outcomes. Demonstrate how the proposal will be designed and operated to:
  - protect the Water Quality Objectives for receiving waters where they are currently being achieved; and
  - contribute towards achievement of the Water Quality Objectives over time where they are not currently being achieved.
- Where a discharge is proposed that includes a mixing zone, the proposal should demonstrate how wastewater discharged to waterways will ensure the ANZECC (2000) water quality criteria for relevant chemical and non-chemical parameters are met at the edge of the initial mixing zone of the discharge, and that any impacts in the initial mixing zone are demonstrated to be reversible.
- Propose water quality limits for any discharge(s) that adequately protects the receiving environment.
- Assess impacts on groundwater and groundwater dependent ecosystems.
- Describe how stormwater will be managed both during and after construction.

### Monitoring

- Describe how predicted impacts will be monitored and assessed over time.

## **6.2 Soil**

The EIS should include:

- An assessment of potential impacts on soil and land resources should be undertaken, being guided by Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000). The nature and extent of any significant impacts should be identified. Particular attention should be given to:
  - Soil erosion and sediment transport - in accordance with Managing urban stormwater: soils and construction, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; B Waste landfills; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC 2008).
  - Mass movement (landslides) – in accordance with Landslide risk management guidelines presented in Australian Geomechanics Society (2007).
  - Urban and regional salinity – guidance given in the Local Government Salinity Initiative booklets which includes Site Investigations for Urban Salinity (DLWC, 2002).
- A description of the mitigation and management options that will be used to prevent, control, abate or minimise identified soil and land resource impacts associated with the project. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.
- Provide details of site history and possible soil contamination, for example if the project site was previously used for activities such as - waste storage, waste disposal, sludge storage and ex-filtration of treated effluent.



## 7 Waste

The EIS should:

- Include a detailed plan for in-situ classification of waste material, including the sampling locations and sampling regime that will be employed to classify the waste, particularly with regards to the identification of contamination hotspots.
- Identify, quantify, characterise and classify all waste that currently exists at the site. Identify the intended end use, for example reuse or disposal, and the end use location(s) for the waste. Also, specify the mechanism under which waste will be reused or disposed, such as a Resource Recovery Exemption. Note: All waste must be classified in accordance with EPA's Classification Guidelines.
- Identify, characterise and classify all waste that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste.  
Note: All waste must be classified in accordance with EPA's Waste Classification Guidelines.
- Identify, characterise and classify all waste that is proposed to be disposed of to an offsite location, including proposed quantities of the waste and the disposal locations for the waste. This includes waste that is intended for re-use or recycling.  
Note: All waste must be classified in accordance with EPA's Classification Guidelines.
- Include a commitment to retaining all sampling and classification results for the life of the project to demonstrate compliance with EPA's Waste Classification Guidelines.
- Provide details of how waste will be handled and managed onsite to minimise pollution, including:
  - a) Stockpile location and management
    - Labelling of stockpiles for identification, ensuring that all waste is clearly identified and stockpiled separately from other types of material (especially the separation of any contaminated and non-contaminated waste).
    - Proposed height limits for all waste to reduce the potential for dust and odour.
    - Procedures for minimising the movement of waste around the site and double handling.
    - Measures to minimise leaching from stockpiles into the surrounding environment, such as sediment fencing, geofabric liners etc.
  - b) Erosion, sediment and leachate control including measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site during works. The EIS should show the location of each measure to be implemented. The Proponent should consider measures such as:
    - Sediment traps
    - Diversion banks
    - Sediment fences
    - Bunds (earth, hay, mulch)
    - Geofabric liners
    - Other control measures as appropriate

The Proponent should also provide details of:

- how leachate from stockpiled waste material will be kept separate from stormwater runoff;
- treatment of leachate through a wastewater treatment plant (if applicable); and
- any proposed transport and disposal of leachate off-site.

- Provide details of how the waste will be handled and managed during transport to a lawful facility. If the waste possesses hazardous characteristics, the Proponent must provide details of how the waste will be treated or immobilised to render it suitable for transport and disposal.
- Include details of all procedures and protocols to be implemented to ensure that any waste leaving the site is transported and disposed of lawfully and does not pose a risk to human health or the environment.
- Include a statement demonstrating that the Proponent is aware of EPA's requirements with respect to notification and tracking of waste.
- Include a statement demonstrating that the Proponent is aware of the relevant legislative requirements for disposal of the waste, including any relevant Resource Recovery Exemptions, as gazetted by EPA from time to time.
- Outline contingency plans for any event that affects operations at the site that may result in environmental harm, including: excessive stockpiling of waste, volume of leachate generated exceeds the storage capacity available on-site etc.

## **8 Dangerous Goods, Chemical storage and Bunding**

- The EIS must outline all details regarding the transport, handling, storage and use of dangerous goods, chemicals and products, including fuel, both on site and with ancillary activities and describe the measures proposed to minimise the potential for leakage or the migration of pollutants into the soil/waters or from the site.
- The EIS should identify any fuel or chemical storage areas proposed for the site.
- The EIS should consider compliance with the following legislation, standards and guidelines where relevant:
  - Australian Standard AS1692:1989 Tanks for Flammable and combustible liquids;
  - The EPA's Bunding and Spill Management Guidance - <http://www.epa.nsw.gov.au/licensing-and-regulation/licensing/environment-protection-licences/authorised-officers/resources-and-training/bunding-and-spill-management>
  - Australian Standard AS 1940:2004 The Storage and Handling of Flammable and Combustible Liquids
  - Australia Standard AS 4452-1997: The Storage and Handling of Toxic Substances;
  - Australian/New Zealand Standard AS/NZS 4452:1997: The Storage and Handling of Mixed Classes of Dangerous Goods in Packages and Intermediate Bulk Containers; and
  - Road and Rail Transport (Dangerous Goods) Act 1997

## **9 Monitoring Programs**

The EIS should include a detailed assessment of any noise, air quality, weather, water or waste monitoring required during the construction and on-going operation of the site to ensure that the development achieves a satisfactory level of environmental performance. The evaluation should include a detailed description of the monitoring locations, sample analysis methods and the level of reporting proposed.

**ATTACHMENT B****Guidance Material**

Title	Web address
<b><u>Relevant Legislation</u></b>	
<i>Environmentally Hazardous Chemicals Act 1985</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+14+1985+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+14+1985+cd+0+N</a>
<i>Environmental Planning and Assessment Act 1979</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N</a>
<i>Protection of the Environment Operations Act 1997</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N</a>
<i>Water Management Act 2000</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N</a>
<b><u>Licensing</u></b>	
Guide to Licensing	<a href="http://www.environment.nsw.gov.au/licensing/licenceguide.htm">www.environment.nsw.gov.au/licensing/licenceguide.htm</a>
<b><u>Air Issues</u></b>	
<b>Air Quality</b>	
Approved methods for the Modelling and Assessment of Air Pollutants in NSW (2016)	<a href="http://www.epa.nsw.gov.au/resources/epa/approved-methods-for-modelling-and-assessment-of-air-pollutants-in-NSW-160666.pdf">http://www.epa.nsw.gov.au/resources/epa/approved-methods-for-modelling-and-assessment-of-air-pollutants-in-NSW-160666.pdf</a>
Approved methods for the Sampling and Analysis of Air Pollutants in NSW (2016)	<a href="http://www.epa.nsw.gov.au/resources/air/07001amsaap.pdf">http://www.epa.nsw.gov.au/resources/air/07001amsaap.pdf</a>
Coal Mine Particulate Matter Control Best Practice – Site specific determination guide	<a href="http://www.epa.nsw.gov.au/resources/air/20110813coalmineparticulate.pdf">www.epa.nsw.gov.au/resources/air/20110813coalmineparticulate.pdf</a>
POEO (Clean Air) Regulation 2010	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+428+2010+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+428+2010+cd+0+N</a>
<b><u>Noise and Vibration</u></b>	
Interim Construction Noise Guideline (DECC, 2009)	<a href="http://www.environment.nsw.gov.au/noise/constructnoise.htm">http://www.environment.nsw.gov.au/noise/constructnoise.htm</a>
Assessing Vibration: a technical guideline (DEC, 2006)	<a href="http://www.environment.nsw.gov.au/noise/vibrationguide.htm">http://www.environment.nsw.gov.au/noise/vibrationguide.htm</a>
Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC, 1990)	<a href="http://www.environment.nsw.gov.au/noise/blasting.htm">http://www.environment.nsw.gov.au/noise/blasting.htm</a>
NSW Industrial Noise Policy Noise Policy for Industry (2017)	<a href="http://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/nsw-industrial-noise-policy">http://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/nsw-industrial-noise-policy</a>
NSW Road Noise Policy (DECCW, 2011)	<a href="http://www.epa.nsw.gov.au/resources/noise/2011236nswroadnoisepolicy.pdf">http://www.epa.nsw.gov.au/resources/noise/2011236nswroadnoisepolicy.pdf</a>

Title	Web address
<b>Waste</b>	
Waste Classification Guidelines (EPA, 2014)	<a href="http://www.epa.nsw.gov.au/wasteregulation/classify-guidelines.htm">http://www.epa.nsw.gov.au/wasteregulation/classify-guidelines.htm</a>
Resource recovery exemption	<a href="http://www.epa.nsw.gov.au/wasteregulation/recovery-exemptions.htm">http://www.epa.nsw.gov.au/wasteregulation/recovery-exemptions.htm</a>
<b>Water and Soils</b>	
<b>Soils – general</b>	
Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000)	<a href="http://www.dnr.nsw.gov.au/care/soil/soil_pubs/pdfs/tech_rep_34_new.pdf">http://www.dnr.nsw.gov.au/care/soil/soil_pubs/pdfs/tech_rep_34_new.pdf</a>
Managing urban stormwater: soils and construction, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; B. Waste landfills; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC 2008)	Vol 1 - Available for purchase at <a href="http://www.landcom.com.au/whats-new/publications-reports/the-blue-book.aspx">http://www.landcom.com.au/whats-new/publications-reports/the-blue-book.aspx</a> Vol 2 - <a href="http://www.environment.nsw.gov.au/stormwater/publications.htm">http://www.environment.nsw.gov.au/stormwater/publications.htm</a>
Landslide risk management guidelines	<a href="http://www.australiangeomechanics.org/resources/downloads/">http://www.australiangeomechanics.org/resources/downloads/</a>
Site Investigations for Urban Salinity (DLWC, 2002)	<a href="http://www.environment.nsw.gov.au/resources/salinity/booklet3siteinvestigationsforurbansalinity.pdf">http://www.environment.nsw.gov.au/resources/salinity/booklet3siteinvestigationsforurbansalinity.pdf</a>
Local Government Salinity Initiative Booklets	<a href="http://www.environment.nsw.gov.au/salinity/solutions/urban.htm">http://www.environment.nsw.gov.au/salinity/solutions/urban.htm</a>
<b>Water</b>	
Water Quality Objectives	<a href="http://www.environment.nsw.gov.au/ieo/index.htm">http://www.environment.nsw.gov.au/ieo/index.htm</a>
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	<a href="http://www.mincos.gov.au/publications/australian_and_new_zealand_guidelines_for_fresh_and_marine_water_quality">http://www.mincos.gov.au/publications/australian_and_new_zealand_guidelines_for_fresh_and_marine_water_quality</a>
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	<a href="http://deccnet/water/resources/AWQGuidance7.pdf">http://deccnet/water/resources/AWQGuidance7.pdf</a>
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	<a href="http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf">http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf</a>

## Rebecca Sommer

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**From:** Corrine Manyweathers  
**Sent:** Tuesday, 12 December 2017 11:07 AM  
**To:** Rebecca Sommer  
**Cc:** Ben Holmes  
**Subject:** Hunter Team response to application for Temporary Desalination Plant

Hi Rebecca,

Please see below the Hunter Offices response to the SSI application for a Temporary Desalination Plant in Belmont.

### SEARs – Temporary Desalination Plant

#### Planning Instruments, Policies

- SEPPs: The proposed Temporary Desalination Plant is subject to SEPP Infrastructure and SEPP SRD, which designate the development as State Significant Infrastructure. It is noted that under the EP&A Act SEPPs, that would ordinarily apply, do not apply to State Significant Development. Notwithstanding, the SEAR should consider the objectives of the following environmental SEPPs:
  - SEPP 71
  - SEPP 14
  - Draft Coastal Management SEPP
- Heritage: National Parks and Wildlife Act 1974 - An AHIMS search revealed that there are up to 8 Aboriginal sites within 1km of the site. The SEAR should address the requirements of the National Parks and Wildlife Act 1974 which covers Aboriginal objects or Aboriginal places.
- Lake Macquarie LEP 2014: The proposed development is permissible in SP2 land and secondary Water Supply System infrastructure is permissible in R2, RE1, RE2 and R2 zoned land, but not in the E2 and E3 zoned land. However, it is noted that Council approval is not required for State Significant Infrastructure under SRD SEPP. Notwithstanding, the SEAR should consider the objectives of the zones.

#### Strategic Focus

- Hunter Regional Plan
    - The subject site is surrounded by E2 Environmental Conservation and E3 Environmental Management zoned land, including the Belmont Wetlands State Park (Crown Land). The PEA notes an impact is likely, especially due to the water outlet. The SEAR should address Direction 14 of the HRP, which relates to protection of the environment.
    - Direction 14 – Protect and connect natural areas
      - 14.1 Identify terrestrial and aquatic biodiversity values and protect areas of high environmental value to sustain the lifestyle, economic success and environmental health of the region.
      - 14.2 Identify and strengthen biodiversity corridors as places for priority biodiversity offsets.
      - 14.3 Improve the quality of, and access to, information relating to high environmental values.
      - 14.4 Protect biodiversity by maintaining and, where possible, enhancing the existing protection of high environmental value areas; implementing appropriate measures to conserve validated high environmental value areas; developing local strategies to avoid and minimise the impacts of development on areas of high environmental value and biodiversity corridors; and identifying offsets or other mitigation measures for unavoidable impacts.
      - 14.5 Secure the long term protection of regionally significant biodiversity corridors.
- The SEAR should also address the following directions:
- Direction 15 – Sustain water quality and security
  - Direction 16 – Increase resilience to hazards and climate change

- Draft Greater Newcastle Metropolitan Plan
  - The DGNMP was placed on exhibition on 29 November 2017 and the SEAR should address the key strategies including:
    - Strategy 2.5 – Improve resilience to natural hazards and climate change.

If you have any questions or would like to discuss further feel free to contact me.

Regards

**Corrine Manyweathers**

Planning Officer, Newcastle Office  
Hunter Region

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