



## Planning & Environment

### Planning Services

#### Industry Assessments

Contact: Shaun Williams

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Our Ref: SSD 9540

Todd Robinson  
Principal Environmental Planner  
Golder Associates Corporation  
PO Box 676  
Newcastle NSW 2300

Dear Mr Robinson

### Planning Secretary's Environmental Assessment Requirements Brandown Resource Recovery Facility (SSD 9540)

Please find attached a copy of the Planning Secretary's environmental assessment requirements (SEARs) for the preparation of an environmental impact statement (EIS) for the Brandown Resource Recovery Facility at Lot 90 Elizabeth Drive, Kemps Creek in the Liverpool local government area (LGA).

The SEARs have been prepared in consultation with relevant public agencies (see **Attachment 2**) based on the information you have provided to date. Please note that the Planning Secretary may modify these requirements at any time. If you do not submit a Development Application (DA) and EIS for the development within two years, you must consult further with the Planning Secretary in relation to the preparation of the EIS. The Department of Planning and Environment (the Department) will review the EIS for the development carefully before putting it on public exhibition and will require you to submit an amended EIS if it does not adequately address the SEARs.

The Department wishes to emphasise the importance of effective and genuine community consultation where a comprehensive open and transparent community consultation engagement process must be undertaken during the preparation of the EIS. This process must ensure that the community is provided with a good understanding of what is proposed, description of any potential impacts and they are actively engaged in issues of concern to them.

Please contact the Department at least two weeks before you propose to submit your DA and EIS. This will enable the Department to:

- confirm the applicable fee (see Division 1AA, Part 15 of the *Environmental Planning and Assessment Regulation 2000*); and
- determine the number of copies (hard-copy and USB Drives) of the DA and EIS that will be required for reviewing purposes.

If your development is likely to have a significant impact on matters of National Environmental Significance, it will require an approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This approval would be in addition to any approvals required under NSW legislation and it is your responsibility to contact the Commonwealth Department of the Environment to determine if an approval under the EPBC Act is required (<http://www.environment.gov.au> or 6274 1111).

If you have any questions, please contact Shaun Williams on the details listed above.

Yours sincerely

Chris Ritchie  
Director

Industry Assessments

As delegate of the Planning Secretary

13/2/19

# Planning Secretary's Environmental Assessment Requirements

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

<b>Application Number</b>	SSD 9540
<b>Project Name</b>	Brandown Resource Recovery Facility
<b>Development</b>	<p>The proposed development includes the construction of new resource recovery infrastructure and alterations to the existing quarry, landfill and resource recovery facility including:</p> <ul style="list-style-type: none"> <li>• Alterations, re-siting and continued use of an existing Crushing and Screening Facility, Construction and Demolition (C&amp;D) Recycling Facility, Composting Facility and Soil Processing Facility;</li> <li>• Construction of a Refuse Derived Fuel (RDF) Production Facility with capacity to process up to 250,000 tpa of waste;</li> <li>• Construction of a Mechanical Biological Treatment (MBT) Facility with capacity to process 250,000 tpa of waste;</li> <li>• Construction of a Cement Stabilisation Facility with capacity to process up to 50,000 tpa of road base and sand;</li> <li>• Alterations to existing weighbridges and amenities buildings; and</li> <li>• Extended hours of recycling operations.</li> </ul>
<b>Location</b>	Lot 90 Elizabeth Drive, Kemps Creek
<b>Applicant</b>	Brandown Pty Ltd
<b>Date of Issue</b>	15 February 2019
<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 a:</p> <ul style="list-style-type: none"> <li>• detailed description of the development, including:           <ul style="list-style-type: none"> <li>– need for the proposed development;</li> <li>– justification for the proposed development;</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>• consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments;</li> <li>• consideration of issues discussed in <b>Attachment 2</b> (public authority responses to key issues);</li> <li>• risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment;</li> <li>• 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, <u>using sufficient baseline data</u>;</li> <li>– an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into</li> </ul> </li> </ul>

	<p>consideration relevant guidelines, policies, plans and statutes; and</p> <ul style="list-style-type: none"> <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; and</li> <li>- consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS.</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 (CIV) of the proposal as defined in clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>, including details of all components of the CIV; and</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>
<p><b>Key issues</b></p>	<p>The EIS must address the following specific matters:</p> <ul style="list-style-type: none"> <li>• <b>Statutory and Strategic Context</b> – including: <ul style="list-style-type: none"> <li>- details of any proposed consolidation or subdivision of land</li> <li>- demonstration that the proposal is consistent with all relevant planning strategies, environmental planning instruments, adopted precinct plans, draft district plan(s) and adopted management plans and justification for any inconsistencies. The following must be addressed: <ul style="list-style-type: none"> <li>○ A Metropolis of Three Cities</li> <li>○ Western City District Plan</li> <li>○ Western Sydney Aerotropolis – Land Use and Infrastructure Implementation Plan – Stage 1: Initial Precincts.</li> </ul> </li> </ul> </li> <li>• <b>Community and Stakeholder Engagement</b> – including: <ul style="list-style-type: none"> <li>- a detailed community and stakeholder participation strategy which identifies who in the community has been consulted and a justification for their selection, other stakeholders consulted and the form(s) of the consultation, including a justification for this approach</li> <li>- a report on the results of the implementation of the strategy including issues raised by the community and surrounding occupiers and landowners that may be impacted by the proposal</li> <li>- details of how issues raised during community and stakeholder consultation have been addressed and whether they have resulted in changes to the proposal</li> <li>- details of the proposed approach to future community and stakeholder engagement based on the results of the consultation.</li> </ul> </li> <li>• <b>Waste Management</b> – including: <ul style="list-style-type: none"> <li>- a description of the waste streams that would be accepted at the site including maximum daily, weekly and annual throughputs and the maximum size for stockpiles;</li> <li>- a description of waste processing operations (including flow diagrams for each waste stream) including a description of the technology to be installed, resource outputs, and the quality</li> </ul> </li> </ul>

	<p>control measures that would be implemented including proposed procedures to ensure general solid waste is not contaminated by restricted, hazardous and/or liquid waste;</p> <ul style="list-style-type: none"> <li>- details of how waste would be stored (including the maximum daily waste storage capacity of the site) and handled on site, and transported to and from the site including details of how the receipt of non-conforming waste would be dealt with;</li> <li>- detail the developments waste tracking system for incoming and outgoing waste;</li> <li>- detail the quality of waste produced and final dispatch locations;</li> <li>- details of spoil disposal such as the quantity of spoil material to be generated;</li> <li>- strategies for handling, stockpiling, recycling and disposal of spoil;</li> <li>- maximisation of spoil material reuse in the construction industry;</li> <li>- identification of the history of spoil material and the management measures in the event of contaminated material;</li> <li>- details of the waste management strategy for demolition, construction and ongoing operational waste generated; and</li> <li>- the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the <i>NSW Waste Avoidance and Resource Recovery Strategy 2014-2021</i>.</li> </ul> <ul style="list-style-type: none"> <li>• <b>Suitability of the Site</b> – including: <ul style="list-style-type: none"> <li>- details of all development consents and approved plans for the existing facility, including for all structures, plant and equipment; and</li> <li>- a detailed justification that the site can accommodate the proposed resource recovery facility, having regard to the scope of the operations of the existing facility and its environmental impacts and relevant mitigation measures.</li> </ul> </li> <li>• <b>Soil &amp; Water</b> – including: <ul style="list-style-type: none"> <li>- characterisation of the nature and extent of contamination on the site and a description of proposed management measures;</li> <li>- a description of water and soil resources, topography, hydrology, watercourses and riparian lands on or nearby to the site;</li> <li>- a detailed site water balance including identification of water requirements for the life of the project, measures that would be implemented to ensure an adequate and secure water supply is available for the proposal and a detailed description of the measures to minimise the water use at the site;</li> <li>- characterisation of water quality at the point of discharge to surface and/or groundwater against the relevant water quality criteria (including details of the contaminants of concern that may leach from the waste into the wastewater and proposed mitigation measures to manage any impacts to receiving waters);</li> <li>- detailed flooding assessment;</li> <li>- details of stormwater/wastewater/leachate management systems including the capacity of onsite detention system/s, onsite sewage management and measures to treat, reuse or dispose of water;</li> <li>- a description of erosion and sediment controls;</li> <li>- an assessment of potential impacts to soil and water resources, topography, drainage lines, watercourses and riparian lands on or nearby to the site; and</li> </ul> </li> </ul>
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	<ul style="list-style-type: none"> <li>- consideration of salinity and acid sulphate soil impacts.</li> <li>• <b>Air Quality and Odour</b> – including: <ul style="list-style-type: none"> <li>- a quantitative assessment of the potential air quality, dust and odour impacts of the development in accordance with relevant Environment Protection Authority guidelines. This is to include the identification of existing and potential future sensitive receivers and consideration of approved and/or proposed developments in the vicinity;</li> <li>- the details of buildings and air handling systems and strong justification (including quantitative evidence) for any material handling, processing or stockpiling external to a building;</li> <li>- a greenhouse gas assessment; and</li> <li>- details of proposed mitigation, management and monitoring measures.</li> </ul> </li> <li>• <b>Noise and Vibration</b> – including: <ul style="list-style-type: none"> <li>- a quantitative assessment of potential demolition, construction, operational and transport noise and vibration impacts in accordance with relevant Environment Protection Authority guidelines. This is to include the identification of existing and potential future sensitive receivers and consideration of approved and/or proposed developments in the vicinity;</li> <li>- details and justification of the proposed noise mitigation and monitoring measures; and</li> <li>- Specify the times of operation for all phases of the development and for all noise producing activities.</li> </ul> </li> <li>• <b>Traffic and Transport</b> – including: <ul style="list-style-type: none"> <li>- details of all traffic types and volumes likely to be generated during construction and operation, including a description of haul routes;</li> <li>- an assessment of the predicted impacts of this traffic on road safety and the capacity of the road network, including consideration of cumulative traffic impacts at key intersections using SIDRA or similar traffic model. This is to include the identification and consideration of approved and/or proposed developments in the vicinity;</li> <li>- an assessment of the existing and future performance of key intersections providing access to the site (Elizabeth Drive and Range Road), and any upgrades (road/ intersections) required as a result of the development;</li> <li>- details of any likely dangerous goods to be transported on arterial and local roads to/from the site, if any, and the preparation of an incident management strategy, if necessary;</li> <li>- detailed plans of the proposed layout of the internal road and pedestrian network and parking on site in accordance with the relevant Australian Standards;</li> <li>- plans of any proposed road upgrades, infrastructure works or new roads required for the development;</li> <li>- plans demonstrating how all vehicles associated with construction and operation awaiting loading, unloading or servicing can be accommodated on the site to avoid queuing in the street network; and</li> <li>- swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site for both heavy and light vehicles.</li> </ul> </li> <li>• <b>Fire and Incident Management</b> – including: <ul style="list-style-type: none"> <li>- a bushfire assessment report which provides an assessment of bushfire hazard, including: <ul style="list-style-type: none"> <li>○ details of the storage of flammable materials</li> </ul> </li> </ul> </li> </ul>
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	<ul style="list-style-type: none"> <li>○ an assessment against the requirements of 'Planning for Bushfire Protection 2006', particularly access and provision of water supply for firefighting purposes</li> <li>○ a description of measures to ensure the proposal will not increase the bushfire risk to adjoining lands.</li> <li>- identification of the aggregate quantities of combustible waste products to be stockpiled at any one time</li> <li>- technical information on the environmental protection equipment to be installed on the premises such as air, water and noise controls, spill clean-up equipment and fire (including location of fire hydrants and water flow rates at the hydrant) management and containment measures.</li> <li>● <b>Hazards</b> – including: <ul style="list-style-type: none"> <li>- 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</li> <li>- 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).</li> </ul> </li> <li>● <b>Biodiversity</b> – including: <ul style="list-style-type: none"> <li>- Assessment of biodiversity impacts in accordance with the <i>Biodiversity Assessment Method</i> and documented in a Biodiversity Development Assessment Report (BDAR).</li> </ul> </li> <li>● <b>Heritage</b> – including: <ul style="list-style-type: none"> <li>- a detailed assessment of Aboriginal cultural heritage</li> <li>- an assessment of environmental heritage, including identification of measures to mitigate impacts on any heritage conservation area and/or items of heritage significance nearby the site.</li> </ul> </li> <li>● <b>Visual</b> – including an assessment of the potential visual impacts of the development on the amenity of the surrounding area.</li> </ul>
<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 affected landowners.</p> <p>In particular you must consult with:</p> <ul style="list-style-type: none"> <li>● Environment Protection Authority</li> <li>● Liverpool City Council</li> <li>● NSW Roads and Maritime Service</li> <li>● Office of Environment and Heritage</li> <li>● Department of Primary Industries</li> <li>● NSW Fire and Rescue</li> <li>● NSW Rural Fire Service</li> <li>● Transport for NSW</li> <li>● Department of Planning – Aerotropolis Aviation</li> <li>● Local community and other stakeholders</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 a Development Application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.
<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 proposal.

## 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 *Liverpool Local Environment Plan 2008*.
  
4. Drawings at an appropriate scale illustrating:
  - detailed plans, sections and elevations of the existing building, which clearly show all proposed internal and external alterations and additions.

##### 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.

Many of these documents can be found on the following websites:

<http://www.planning.nsw.gov.au>

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<http://www.publications.gov.au>

## Policies, Guidelines & Plans

Aspect	Policy /Methodology
<b>Waste</b>	Waste Avoidance and Resource Recovery Strategy 2014-2021 (EPA)
	The National Waste Policy: Less Waste More Resources 2009
	Waste Classification Guidelines (DECC)
	Environmental guidelines: Composting and Related Organics Processing Facilities (DEC)
	Environmental guidelines: Use and Disposal of Biosolid Products (NSW EPA)
	Composts, soil conditioners and mulches (Standards Australia, AS 4454)
<b>Soil and Water</b>	
<i>Soil</i>	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC & NHMRC)
	National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPC)
	Draft Guidelines for the Assessment & Management of Groundwater Contamination (DECC)
	State Environmental Planning Policy No. 55 – Remediation of Land
	Managing Land Contamination – Planning Guidelines SEPP 55 – Remediation of Land (DOP)
	Acid Sulfate Soils Manual (Stone et al. 1998)
<i>Surface Water</i>	National Water Quality Management Strategy: Water quality management - an outline of the policies (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Policies and principles - a reference document (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Implementation guidelines (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)
	NSW State Rivers and Estuaries Policy (1993)
	State Water Management Outcomes Plan
	NSW Government Water Quality and River Flow Environmental Objectives (DECC)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)
	Managing Urban Stormwater: Soils & Construction (Landcom)
	Managing Urban Stormwater: Treatment Techniques (DECC)
Managing Urban Stormwater: Source Control (DECC)	
Technical Guidelines: Bunding & Spill Management (DECC)	
NSW Floodplain Development Manual 2005	
NSW Guidelines for Controlled Activities on Waterfront Land (NOW 2012)	
<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 Dependent Ecosystems Policy (2002)
	NSW State Groundwater Quantity Management Policy 2002 (DLWC)
	Guidelines for the Assessment and Management of Groundwater Contamination (DEC 2007)
	NSW Aquifer Interference Policy (NOW 2012)
	MDBC Guidelines on Groundwater Flow Modelling 2000
	Australian Groundwater Modelling Guidelines (NWC, 2012)
	Environmental Guidelines: Use of Effluent by Irrigation (DECC)
<i>Wastewater</i>	National Water Quality Management Strategy - Guidelines For Water Recycling: Managing Health And Environmental Risks (Phase1) 2006 (EPHC, NRMCC & AHMC)
	National Water Quality Management Strategy – Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 2): Augmentation of Drinking Water Supplies 2008 (EPHC, NRMCC & AHMC)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems - Effluent Management (ARMCANZ/ANZECC)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems - Use of Reclaimed Water (ARMCANZ/ANZECC)
	Recycled Water Guidance Document: Recycled Water Management Systems (DPI, 2015)
<b>Air Quality and Odour</b>	
<i>Air Quality</i>	Protection of the Environment Operations (Clean Air) Regulation 2010
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA 2016)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)
<i>Odour</i>	The National Greenhouse and Energy Reporting (Measurement) Technical Guidelines (NGER Technical Guidelines)
	Guidelines for Energy Savings Action Plans (DEUS 2005)
<i>Greenhouse Gas</i>	Technical Framework: Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006)
	Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC)
	The National Greenhouse and Energy Reporting (Measurement) Technical Guidelines (NGER Technical Guidelines)
	Guidelines for Energy Savings Action Plans (DEUS 2005)
<b>Noise and Vibration</b>	
<i>Noise</i>	NSW Industrial Noise Policy (DECC)
	NSW Road Noise Policy (EPA 2011)
	Environmental Criteria for Road Traffic Noise (EPA 1999)
<i>Vibration</i>	Interim Construction Noise Guideline (DECC 2009)
	Assessing Vibration: A Technical Guideline (DEC 2006)
<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)
	Future Transport Strategy 2056
<b>Fire and Incident Management</b>	
	Planning for Bushfire Protection (NSW Rural Fire Service 2006)
<b>Flora and Fauna</b>	

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NSW Biodiversity Offsets Policy for Major Projects (2014) and the Framework for Biodiversity Assessment

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**Hazards and Risk**

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State Environmental Planning Policy No. 33 – Hazardous and Offensive Development

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Applying SEPP 33 – Hazardous and Offensive Development Application Guidelines (DUAP)

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AS/NZS 4360:2004 Risk Management

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HB 203:2006 Environmental Risk Management – Principles and Process

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Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis

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Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning (DUAP)

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Contaminated Sites – Guidelines on Significant Risk of Harm from Contaminated Land and the Duty to Report (EPA 2003)

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ATTACHMENT 2  
Government Authority Responses to Request for Key Issues  
For Information Only

Department of Planning and Environment  
Industry Assessments  
GPO Box 39  
**SYDNEY NSW 2001**

By email: [shaun.williams@planning.nsw.gov.au](mailto:shaun.williams@planning.nsw.gov.au)

Attention: Shaun Williams

**Re: SSD 9540 – Request for input into SEARs – Brandown Resource Recovery Facility – Lot 90 Elizabeth Drive, Cecil Park**

Liverpool City Council was invited to provide a response to a Secretary's Environmental Assessment Requirements (SEARs) request from Golder Associates Pty Ltd, on behalf of Brandown Pty Ltd, for proposed new resource recovery infrastructure and activities at Lot 90 Elizabeth Drive, Cecil Park, in the Liverpool local government area (LGA).

The site is zoned RU4 (Primary Production Small Lots) and development for the purposes of a resource recovery facility is prohibited in the zone under the Liverpool Local Environmental Plan 2008. The site is also not within a prescribed zone to make this use permissible under SEPP (Infrastructure) 2007. The proponent must ensure the proposed use is permissible with consent under an Environmental Planning Instrument including SEPP (Mining, Petroleum Production and Extractive Industries) 2007.

Council notes that a facility such as that proposed could have impacts on surrounding land uses without sufficient mitigation efforts.

Golder Associates' preliminary environmental assessment indicates the following documents will be produced as part of an Environmental Impact Statement (EIS):

- Traffic Impact Assessment
- Noise and Vibration Assessment
- Construction Environmental Management Plan
- Construction Quality Assurance Plan
- Screening Assessment to determine need for Preliminary Hazard Analysis
- Koala Habitat Assessment
- Biodiversity Assessment
- Environmental Management During Operation Plan
- Waste Management Assessment
- Air Quality and Greenhouse Gas Assessment
- Landscape and Visual Amenity Assessment
- Groundwater, Surface Water and Waste Water Impact Assessment
- Socioeconomic Assessment
- Bushfire Hazard Assessment
- Cumulative Impact Assessment

In addition, Council provides the following comments:

### Strategic context

While the facility is largely consistent with actions in the Greater Sydney Regional Plan and Western City District Plan, the waterway Kemps Creek has been identified as a priority green grid corridor in the Western City District Plan. The EIS should take into account the potential for increased recreational use of nearby lands.

### Preliminary Hazard Analysis

The proponent notes that the project is within the definition of a 'potentially hazardous industry' or 'potentially offensive industry' under SEPP 33. It notes that a screening assessment would be conducted to determine the need for a preliminary hazard analysis (PHA), and the findings presented in the EIS. Council is of the view that the proponent should engage a consultant prior to conducting the EIS to determine whether the project falls within the definition of a 'potentially hazardous industry', which would then trigger a requirement for a PHA. This PHA, if required, should be conducted as part of the EIS.

### Bushfire

The Scoping Report notes that bushfire prone land is on Lot 91, however it should be noted that bushfire prone land is also present on Lot 90.

A PHA, if required, should determine if, amongst other things, a Fire Safety Study is required. The potential for a Fire Safety Study has not been mentioned in the Scoping Report. Council suggests the section in the report dealing with 'Hazards and Dangerous Goods' be extended to include the potential for a Fire Safety Study as determined by SEPP 33 and PHA.

### Construction impacts

Section 3.17, 'Construction of the project', notes that construction would be carried out in accordance with the Construction Environmental Management Plan and Construction Quality Assurance Plan. Construction noise and vibration considerations should also be included within the construction plans noted. Provisions for handling complaints relating to noise may also be included.

### Operational impacts

Council believes further information is required regarding landfill liners and leachate management to ensure compliance with the *Protection of the Environment Operations Act 1997*.

Landfill gas management and monitoring is also not adequately addressed. Council recommends further detail of management and monitoring is provided in Section 5.4.

There is no mention of litter and pest management. It is recommended the EIS provide detail on how litter and bird populations will be addressed.

Compliance with the *NSW Industrial Noise Policy (2000)/ Noise Policy for Industry (2017)* must be adhered to, particularly as the proponent proposes 24-hour operations.

There is concern that 24-hour operation could impact substantially on surrounding properties.

Council would expect the EIS to consider the effect of additional loading on road surfaces.

#### Wastewater disposal

The proposed development includes the construction of new administration and amenities buildings. The site is within an area that does not have connection to public sewer and thus consideration for wastewater disposal is required. The upgrade of the existing onsite sewage management facility or installation of a new system will need to be considered in a manner that will ensure effluent can be satisfactorily managed onsite. An appropriately qualified consultant should be appointed to undertake a Wastewater Assessment in accordance with the relevant standards and Council's DCP. Pump out systems are not supported by Liverpool City Council.

#### Socioeconomic considerations

The additional 45 jobs as projected would be welcomed, although evidence to support the creation of jobs should be captured in the proposed Socioeconomic Assessment to be undertaken, as stated in Section 5.8 of the Scoping Report. Council would also like to see assessment of training opportunities to be provided at the site in accordance with this report, given the skills shortages being experienced in some sectors of the construction and transport sectors currently, or linkages with training organisations ready to meet these demands. There is an opportunity to investigate training and employment for socioeconomically disadvantaged residents, and the use of social enterprise models.

Under *Section 5.8* the proponent states that 'it is considered unlikely there would be significant social or economic impacts', which is used as justification for the development not requiring a comprehensive social impact assessment (CSIA). Considering the size and potential cumulative impacts associated with such developments, and the difficulty of identifying socioeconomic impacts without carrying out a social baseline study, it is recommended the proponent contracts a qualified party to conduct a CSIA as a part of its EIS submission.

#### Biodiversity

The Scoping Report indicates that the application will be considered under the *Biodiversity Conservation Act 2016* (BC Act). It notes a biodiversity assessment would be completed as part of the EIS, which would identify if a Biodiversity Development Assessment Report (BDAR) would need to be completed if thresholds are met. Council notes that, under the BC Act, State Significant Development must always be accompanied by a BDAR unless the Planning Agency Head and Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values. It is considered that the noted agency heads are best placed to determine whether a BDAR would be required, or whether they are satisfied that the proposed development is not likely to have any significant impact on biodiversity values.

Council, however, notes that the adjacent Kemps Creek Nature Reserve has recorded threatened fauna species, and part of Lot 90 is listed as a Refuge Area in the Kemps

Creek Nature Reserve Fire Management Strategy. Proposed unsealed road use around the perimeter, adjacent to bushland, could have potential impacts on threatened fauna species if not mitigated.

While 'Section 5.9' of the Scoping Report indicates project design has sought to avoid potential biodiversity impacts on the south side of the Site, 'Figure 4: The Project Site Layout' appears to have unsealed roads impacting upon non-biodiversity-certified bushland deemed by the Office of Environment and Heritage as a biodiversity corridor of regional significance, a core area, and Cumberland Plains Priority Conservation Lands. The land also includes areas mapped on the State Biodiversity Values map.

It is recommended that Section '5.9 Biodiversity' and the Appendix B Preliminary Risk Registry be updated to better reflect potential biodiversity impacts.

#### Consultation

It is recommended that the NSW Environment Protection Authority be consulted on the project.

If you have any questions please contact Cameron Jewell, Strategic Planner on 8711 7862.

Yours sincerely

A handwritten signature in black ink, appearing to read 'David Smith', written in a cursive style.

**David Smith**  
Manager Planning & Transport Strategy



Office of  
Environment  
& Heritage

DOC18/862406  
SSD 9540

Shaun Williams  
Planning Officer  
Industry Assessments  
NSW Department of Planning and Environment  
GPO Box 39  
SYDNEY NSW 2001

Dear Mr Williams

**Request for Input to SEARs – Brandown Resource Recovery Facility – Lot 90 Elizabeth Drive, Kemps Creek, SSD 9540.**

I refer to your email of 26 October 2018, requesting comments from the Office of Environment and Heritage (OEH) on the Secretary's Environmental Assessment Requirements (SEARs) for the above State Significant Development.

Please find attached OEH's environmental assessment requirements in relation to Aboriginal cultural heritage, water, soils and flooding.

OEH notes the land subject to the proposed development appears to be 'Existing Certified Land' in the 'South West Growth Centre – Biodiversity Certification' map under s.43 of the *Biodiversity Conservation (Savings and Transition) Regulation 2017* – it is recommended confirmation of this be sought. The effect of biodiversity certification is that a consideration of the likely impacts of the proposed development on biodiversity values is not required (s.8.4, *Biodiversity Conservation Act 2016*). If any of the proposed development is on non-certified land, an assessment of biodiversity impacts should be made in accordance with Section 7.9 of the *Biodiversity Conservation Act 2017*, the Biodiversity Assessment Method (BAM) and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the *Biodiversity Conservation Act 2016* (s.6.12), *Biodiversity Conservation Regulation 2017* (s.6.8) and BAM, including an assessment of the impacts of the proposal (and an assessment of impacts prescribed by the regulations).

A separate response may be provided on heritage matters by the Heritage Division of OEH as delegate of the Heritage Council of NSW.

Should you have any queries regarding this matter, please contact Richard Bonner on 9995 6917 or richard.bonner@environment.nsw.gov.au.

Yours sincerely

**SUSAN HARRISON**  
**Senior Team Leader Planning**  
**Greater Sydney**  
**Communities and Greater Sydney Division**

## OEH's Environmental Assessment Requirements – SSD 9540

### Aboriginal cultural heritage

1. The 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 an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the *Code of Practice for Archaeological Investigations of Aboriginal Objects in NSW* (OEH 2010), and guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (DECCW, 2011).
  2. 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.
  3. 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.
- Note that a due diligence report is not acceptable, a ACHAR must be prepared.

### Water and soils

4. 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 s.4.2 of the BAM).
  - Wetlands as described in s.4.2 of the BAM.
  - Groundwater.
  - Groundwater dependent ecosystems.
  - Proposed intake and discharge locations.
5. 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 [see [www.environment.nsw.gov.au/ieo/index.htm](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 above 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.
  - Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions [see [www.environment.nsw.gov.au/research-and-publications/publications-search/risk-based-framework-for-considering-waterway-health-outcomes-in-strategic-land-use-planning](http://www.environment.nsw.gov.au/research-and-publications/publications-search/risk-based-framework-for-considering-waterway-health-outcomes-in-strategic-land-use-planning)]
6. The EIS must assess the impacts of the development on water quality, including:
  - 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.
  - Identification of proposed monitoring of water quality.

7. The EIS must assess the impact of the development on hydrology, including:
- Water balance including quantity, quality and source.
  - Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.
  - Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.
  - 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).
  - Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.
  - 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.
  - Identification of proposed monitoring of hydrological attributes.

### **Flooding**

8. The EIS must map the following features relevant to flooding as described in the *Floodplain Development Manual 2005* (NSW Government) including:
- Flood prone land.
  - Flood planning area, the area below the flood planning level.
  - Hydraulic categorisation (floodways and flood storage areas).
  - Flood Hazard.
9. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1% AEP, flood levels and the probable maximum flood, or an equivalent extreme event.
10. The EIS must model the effect of the proposed development (including fill) on current flood behaviour for a range of design events as identified above. This includes the 0.5% and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.
11. Modelling in the EIS must consider and document:
- Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies.
  - The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood, or an equivalent extreme flood.
  - Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazard categories and hydraulic categories
  - Relevant provisions of the *NSW Floodplain Development Manual 2005*.
12. The EIS must assess the impacts on the proposed development on flood behaviour, including:
- Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
  - Consistency with Council floodplain risk management plans.
  - Consistency with any Rural Floodplain Management Plans.
  - Compatibility with the flood hazard of the land.
  - Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
  - Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.
  - 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.
  - Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the NSW SES and Council.
  - Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the NSW SES and Council.
  - 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 NSW SES.
  - Any impacts the development may have on the social and economic costs to the community as consequence of flooding.





Department of Planning & Environment  
Industry Assessments  
GPO Box 39  
Sydney NSW 2001

Attention: Shaun Williams

Notice Number      1571686  
Date                    07-Nov-2018

Dear Mr Williams,

**RE: Resource recovery facility including a refuse derived fuel production facility, mechanical biological treatment facility and a cement stabilisation facility at Lot 90, DP 1101411, Elizabeth Drive Kemp's Creek NSW**

I refer to your request for the Environment Protection Authority's (EPA) requirements for the environmental assessment (EA) in regard to the above proposal received by EPA on 25 October 2018.

The EPA has considered the details of the proposal as provided by Department of Planning & Environment and has identified key issues and the information it requires to issue its general terms of approval in Attachment A. In summary, the EPA's key information requirements for the proposal include an adequate assessment of:

1. Air quality (including dust, odour, other air emissions assessment modelling and management)
2. Noise impact
3. Waste acceptance, storage, processing, reuse, management, and disposal
4. Surface water and waste water management
5. Odour impacts

Other information required for the EA is outlined in Attachment B.

Please note that in carrying out the assessment, the proponent should refer to the relevant guidelines as listed in Attachment C and any relevant industry codes of practice and best practice management guidelines.

Please note that this response does not cover biodiversity or Aboriginal cultural heritage issues, which are the responsibility of the Office of Environment and Heritage.



The Proponent should be made aware that any commitments made in the EA may be formalised as approval conditions and may also be placed as formal licence conditions.

The Proponent should also be made aware that, consistent with provisions under Part 9.4 of the *Protection of the Environment Operations Act 1997* (the Act) the EPA may require the provision of a financial assurance and/or assurances. The amount and form of the assurance(s) would be determined by the EPA and required as a condition of an Environment Protection Licence (EPL).

In addition, as a requirement of an EPL, the EPA will require the Proponent to prepare, test and implement a Pollution Incident Response Management Plan and/or Plans in accordance with Section 153A of the Act.

The EPA request that an electronic copy of the EIS is submitted for assessment. The EIS should be directed to [waste.operations@epa.nsw.gov.au](mailto:waste.operations@epa.nsw.gov.au)

If you have any queries regarding this matter please contact Michaela Burgess on (02) 9995 6025.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Ruth Ower'.

**Ruth Ower**

**Unit Head**

**Waste & Resource Recovery**

(by Delegation)

## ATTACHMENT A:

### KEY ISSUES FOR PROPOSED REFUSE DERIVED FUEL PRODUCTION FACILITY, MECHANICAL BIOLOGICAL TREATMENT FACILITY & CEMENT STABILISATION FACILITY

#### Air

The EIS must:

- Assess the risk associated with potential discharges of fugitive and point source emissions. This assessment should include analysis of risks relating to environmental harm, risks to human health and amenity.
- Justify the level of assessment undertaken on the basis of risk factors, including but not limited to:
  - a. proposal location
  - b. characteristics of the receiving environment
  - c. type and quantity of pollutants emitted
- Describe the receiving environment in details. The proposal must be contextualised within the receiving environment (local, regional, inter-regional as appropriate). The description must include but is not limited to:
  - a. meteorology and climate
  - b. topography
  - c. surrounding land-use and receptors; and
  - d. ambient air quality
- Include a detailed description of the proposal. All processes that could result in air emissions (including odour) must be identified and described. Sufficient detail should be provided which accurately describes and quantifies that characteristics and quantity of all emissions must be provided.
- Include a detailed emissions inventory for the proposal. All point and fugitive sources are to be included in the inventory together with estimates of emission concentration and rate of all air pollutants emitted. Any nominated controls must be explicitly linked to calculated emission reductions adopted in the air quality impact assessment emissions inventory, with all assumptions documented and justified.
- Include a consideration of 'worst case' emissions scenarios and impacts at proposed emission limits
- Account for cumulative impacts associated with existing emissions sources as well as any currently approved developments linked to the receiving environment.
- Include air dispersion modelling where there is a risk of adverse air quality impacts. Air dispersion modelling must be conducted in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (2005)*.
- Demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations Act (1997)* and the *Protection of the Environment Operations (Clean Air) Regulation (2010)*.

## **Waste**

The EIS must provide details of:

- The proposed sources, types, quantities and classifications of all waste to be treated at the facility. This must include details of how the input wastes will comply with the applicable resource recovery criteria.
- The procedures for the assessment, handling, storage, transport and disposal of all waste produced by the facility.
- Waste management at the facility including:
  - a. the transportation, assessment and handling of waste arriving at or generated at the facility
  - b. any stockpiling of wastes or recovered materials at the facility including stockpile footprints, heights and locations
  - c. any waste processing related to the facility including reuse, recycling, reprocessing or treatment
  - d. the method for disposing of residual waste from the facility
  - e. the emissions arising from the handling, storage, processing and reprocessing of waste at the facility
  - f. the proposed controls for managing the environmental impacts of these activities
- The quantity, type and specifications for all output products proposed to be produced from the facility. The description should include the physical, chemical and biological characteristics (including contaminant concentrations) of those output products as well as relevant accredited standards against which the products would comply. In documenting or describing the composition of output products and/or wastes generated from the proposed facility, reference should be made to the relevant EPA resource recovery exemption or waste classification guidelines.
- Identify, characterise and classify all waste that is proposed to be disposed of, including proposed quantities of waste and the disposal locations for the waste.
- The procedures that will be implemented to control inputs to the facility, including contingency measures that would be implemented in the event that ineligible wastes are received at the facility.

## **Noise**

The EIS must:

- Provide details of the facility's operating hours and types of plant & equipment intended to be used during operations.
- Include details of the predicted increase in traffic created by the operation as well as the likely routes to be taken to and from the facility to the main thoroughfares.
- Include details of any sensitive noise receptors likely to be affected by the activities at the facility.
- Determine the existing amenity noise levels in accordance with the *EPA Noise Policy for Industry (2017)*
- Provide project specific noise levels for the facility at potentially affected receivers in accordance with the *EPA Noise Policy for Industry (2017)*
- Provide an assessment of the potential for noise from the construction and operation of the facility to impact the surrounding community and any sensitive receivers. The assessment should be prepared in accordance with:
  - a. the *Interim Construction Noise Guidelines (2009)*

- b. the *Noise Policy for Industry (2017)*
- c. the *Assessing Vibration: a technical guideline (2006)*

### **Water**

The EIS must provide details of:

- Where a discharge is proposed that includes a mixing zone, the proponent 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 demonstrate to be reversible.
- Stormwater management during the construction and operations of the facility.
- How leachate from stockpiled waste material will be managed and separated from stormwater run off.
- Leachate management at the facility including any proposed transport, disposal, or re-injection into landfill cells.
- Measures which will be implemented to avoid discharge from any leachate or stormwater detention basins and mitigate pollution of any near-by water bodies, water courses and the stormwater system.

### **Odour**

The EIS must provide:

- Provide a quantitative assessment of the potential odour impacts from the construction and operations of the plant on surrounding receptors.
- Details on the nature of any waste that is proposed to be stored inside and outside of the facility, the proposed quantities and locations of that waste, the period of time the waste will be stored and any mitigation measures to be implemented to ensure that the waste does not generate odour and impact surrounding receivers.
- The odour impact assessment must have regard to the *Technical Framework and Notes for the Assessment and Management of Odour from Stationary Sources in NSW (2006)*.

## **ATTACHMENT B: EIS REQUIREMENTS FOR**

### **Refuse Derived Fuel Production Facility, Mechanical Biological Treatment Facility & Cement Stabilisation Facility**

#### **How to use these requirements**

The EPA requirements have been structured in accordance with the DIPNR EIS Guidelines, as follows. It is suggested that the EIS follow the same structure:

- A. Executive summary
  - B. The proposal
  - C. The location
  - D. Identification and prioritisation of issues
  - E. The environmental issues
- 
- F. List of approvals and licences
  - G. Compilation of mitigation measures
  - H. Justification for the proposal

## **A Executive summary**

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The executive summary should include a brief discussion of the extent to which the proposal achieves identified environmental outcomes.

## **B The proposal**

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### **1. Objectives of the proposal**

- The objectives of the proposal should be clearly stated and refer to:
  - a) the size and type of the operation, the nature of the processes and the products, by-products and wastes produced
  - b) a life cycle approach to the production, use or disposal of products
  - c) the anticipated level of performance in meeting required environmental standards and cleaner production principles
  - d) the staging and timing of the proposal and any plans for future expansion
  - e) the proposal's relationship to any other industry or facility.

### **2. Description of the proposal**

#### ***General***

- Outline the production process including:
  - a) the environmental “mass balance” for the process – quantify in-flow and out-flow of materials, any points of discharge to the environment and their respective destinations (sewer, stormwater, atmosphere, recycling, landfill etc)
  - b) any life-cycle strategies for the products.
- Outline cleaner production actions, including:
  - a) measures to minimise waste (typically through addressing source reduction)
  - b) proposals for use or recycling of by-products
  - c) proposed disposal methods for solid and liquid waste
  - d) air management systems including all potential sources of air emissions, proposals to re-use or treat emissions, emission levels relative to relevant standards in regulations, discharge points
  - e) water management system including all potential sources of water pollution, proposals for re-use, treatment etc, emission levels of any wastewater discharged, discharge points, summary of options explored to avoid a discharge, reduce its frequency or reduce its impacts, and rationale for selection of option to discharge.
  - f) soil contamination treatment and prevention systems.
- Outline construction works including:
  - a) actions to address any existing soil contamination
  - b) any earthworks or site clearing; re-use and disposal of cleared material (including use of spoil on-site)
  - c) construction timetable and staging; hours of construction; proposed construction methods

- d) environment protection measures, including noise mitigation measures, dust control measures and erosion and sediment control measures.
- Include a site diagram showing the site layout and location of environmental controls.

### **Air**

- Identify all sources or potential sources of air emissions from the development.  
*Note: emissions can be classed as either:*
  - *point (e.g. emissions from stack or vent) or*
  - *fugitive (from wind erosion, leakages or spillages, associated with loading or unloading, conveyors, storage facilities, plant and yard operation, vehicle movements (dust from road, exhausts, loss from load), land clearing and construction works).*
- Provide details of the project that are essential for predicting and assessing air impacts including:
  - a) the quantities and physio-chemical parameters (e.g. concentration, moisture content, bulk density, particle sizes etc) of materials to be used, transported, produced or stored
  - b) an outline of procedures for handling, transport, production and storage
  - c) the management of solid, liquid and gaseous waste streams with potential to generate emissions to air.

### **Noise and vibration**

- Identify all noise sources or potential sources from the development (including both construction and operation phases). Detail all potentially noisy activities including ancillary activities such as transport of goods and raw materials.
- Specify the times of operation for all phases of the development and for all noise producing activities.
- For projects with a significant potential traffic noise impact provide details of road alignment (include gradients, road surface, topography, bridges, culverts etc), and land use along the proposed road and measurement locations – diagrams should be to a scale sufficient to delineate individual residential blocks.

### **Water**

- Provide details of the project that are essential for predicting and assessing impacts to waters including:
  - a) the quantity and physio-chemical properties of all potential water pollutants and the risks they pose to the environment and human health, including the risks they pose to Water Quality Objectives in the ambient waters (as defined on <http://www.environment.nsw.gov.au/ieo/index.htm>, using technical criteria derived from *the Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, ANZECC 2000)
  - b) the management of discharges with potential for water impacts
  - c) drainage works and associated infrastructure; land-forming and excavations; working capacity of structures; and water resource requirements of the proposal.

- Outline site layout, demonstrating efforts to avoid proximity to water resources (especially for activities with significant potential impacts e.g. effluent ponds) and showing potential areas of modification of contours, drainage etc.
- Outline how total water cycle considerations are to be addressed showing total water balances for the development (with the objective of minimising demands and impacts on water resources). Include 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.

### **Waste and chemicals**

Provide details of the quantity and type of both liquid waste and non-liquid waste generated, handled, processed or disposed of at the premises. Waste must be classified according to the EPA's *Waste Classification Guidelines 2014 (as amended from time to time)*

- Provide details of liquid waste and non-liquid waste management at the facility, including:
  - a) the transportation, assessment and handling of waste arriving at or generated at the site
  - b) any stockpiling of wastes or recovered materials at the site
  - c) any waste processing related to the facility, including reuse, recycling, reprocessing (including composting) or treatment both on- and off-site
  - d) the method for disposing of all wastes or recovered materials at the facility
  - e) the emissions arising from the handling, storage, processing and reprocessing of waste at the facility
  - f) the proposed controls for managing the environmental impacts of these activities.
- Provide details of spoil disposal with particular attention to:
  - a) the quantity of spoil material likely to be generated
  - b) proposed strategies for the handling, stockpiling, reuse/recycling and disposal of spoil
  - c) the need to maximise reuse of spoil material in the construction industry
  - d) identification of the history of spoil material and whether there is any likelihood of contaminated material, and if so, measures for the management of any contaminated material
  - e) designation of transportation routes for transport of spoil.
- Provide details of procedures for the assessment, handling, storage, transport and disposal of all hazardous and dangerous materials used, stored, processed or disposed of at the site, in addition to the requirements for liquid and non-liquid wastes.
- Provide details of the type and quantity of any chemical substances to be used or stored and describe arrangements for their safe use and storage.
- Reference should be made to the guidelines: EPA's *Waste Classification Guidelines 2014 (as amended from time to time)*

### **ESD**

- Demonstrate that the planning process and any subsequent development incorporates objectives and mechanisms for achieving ESD, including:

- a) an assessment of a range of options available for use of the resource, including the benefits of each option to future generations

proper valuation and pricing of environmental resources

- b) identification of who will bear the environmental costs of the proposal.

### **3. Rehabilitation**

- Outline considerations of site maintenance, and proposed plans for the final condition of the site (ensuring its suitability for future uses).

### **4. Consideration of alternatives and justification for the proposal**

- Consider the environmental consequences of adopting alternatives, including alternative:
  - a) sites and site layouts
  - b) access modes and routes
  - c) materials handling and production processes
  - d) waste and water management
  - e) impact mitigation measures
  - f) energy sources
- Selection of the preferred option should be justified in terms of:
  - a) ability to satisfy the objectives of the proposal
  - b) relative environmental and other costs of each alternative
  - c) acceptability of environmental impacts and contribution to identified environmental objectives
  - d) acceptability of any environmental risks or uncertainties
  - e) reliability of proposed environmental impact mitigation measures
  - f) efficient use (including maximising re-use) of land, raw materials, energy and other resources.

## **C The location**

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### **1. General**

- Provide an overview of the affected environment to place the proposal in its local and regional environmental context including:
  - a) meteorological data (e.g. rainfall, temperature and evaporation, wind speed and direction)
  - b) topography (landform element, slope type, gradient and length)
  - c) surrounding land uses (potential synergies and conflicts)
  - d) geomorphology (rates of landform change and current erosion and deposition processes)
  - e) soil types and properties (including erodibility; engineering and structural properties; dispersibility; permeability; presence of acid sulfate soils and potential acid sulfate soils)
  - f) ecological information (water system habitat, vegetation, fauna)
  - g) availability of services and the accessibility of the site for passenger and freight transport.

### **2. Air**

- Describe the topography and surrounding land uses. Provide details of the exact locations of dwellings, schools and hospitals. Where appropriate provide a perspective view of the study area such as the terrain file used in dispersion models.
- Describe surrounding buildings that may effect plume dispersion.
- Provide and analyse site representative data on following meteorological parameters:
  - a) temperature and humidity
  - b) rainfall, evaporation and cloud cover  
wind speed and direction
  - c) atmospheric stability class
  - d) mixing height (the height that emissions will be ultimately mixed in the atmosphere)
  - e) katabatic air drainage
  - f) air re-circulation.

### **3. Noise and vibration**

- Identify any noise sensitive locations likely to be affected by activities at the site, such as residential properties, schools, churches, and hospitals. Typically the location of any noise sensitive locations in relation to the site should be included on a map of the locality.
- Identify the land use zoning of the site and the immediate vicinity and the potentially affected areas.

#### **4. Water**

- Describe the catchment including proximity of the development to any waterways and provide an assessment of their sensitivity/significance from a public health, ecological and/or economic perspective. The Water Quality and River Flow Objectives on the website: <http://www.environment.nsw.gov.au/ieo/index.htm> should be used to identify the agreed environmental values and human uses for any affected waterways. This will help with the description of the local and regional area.

#### **5. Soil Contamination Issues**

- Provide details of site history – if earthworks are proposed, this needs to be considered with regard to possible soil contamination, for example if the site was previously a landfill site or if irrigation of effluent has occurred.

## **D Identification and prioritisation of issues / scoping of impact assessment**

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- Provide an overview of the methodology used to identify and prioritise issues. The methodology should take into account:
  - a) relevant NSW government guidelines
  - b) industry guidelines
  - c) EISs for similar projects
  - d) relevant research and reference material
  - e) relevant preliminary studies or reports for the proposal
  - f) consultation with stakeholders.
- Provide a summary of the outcomes of the process including:
  - a) all issues identified including local, regional and global impacts (e.g. increased/ decreased greenhouse emissions)
  - b) key issues which will require a full analysis (including comprehensive baseline assessment)
  - c) issues not needing full analysis though they may be addressed in the mitigation strategy
  - d) justification for the level of analysis proposed (the capacity of the proposal to give rise to high concentrations of pollution compared with the ambient environment or environmental outcomes is an important factor in setting the level of assessment).

## **E The environmental issues**

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### **1. General**

- The potential impacts identified in the scoping study need to be assessed to determine their significance, particularly in terms of achieving environmental outcomes, and minimising environmental pollution.
- Identify gaps in information and data relevant to significant impacts of the proposal and any actions proposed to fill those information gaps so as to enable development of appropriate management and mitigation measures. This is in accordance with ESD requirements.

*Note: The level of detail should match the level of importance of the issue in decision making which is dependent on the environmental risk.*

#### ***Describe baseline conditions***

- Provide a description of existing environmental conditions for any potential impacts.

#### ***Assess impacts***

- For any potential impacts relevant for the assessment of the proposal provide a detailed analysis of the impacts of the proposal on the environment including the cumulative impact of the proposal on the receiving environment especially where there are sensitive receivers.
- Describe the methodology used and assumptions made in undertaking this analysis (including any modelling or monitoring undertaken) and indicate the level of confidence in the predicted outcomes and the resilience of the environment to cope with the predicted impacts.
- The analysis should also make linkages between different areas of assessment where necessary to enable a full assessment of environmental impacts e.g. assessment of impacts on air quality will often need to draw on the analysis of traffic, health, social, soil and/or ecological systems impacts; etc.
- The assessment needs to consider impacts at all phases of the project cycle including: exploration (if relevant or significant), construction, routine operation, start-up operations, upset operations and decommissioning if relevant.
- The level of assessment should be commensurate with the risk to the environment.

#### ***Describe management and mitigation measures***

- Describe any mitigation measures and management options proposed to prevent, control, abate or mitigate identified environmental impacts associated with the proposal and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.
- Proponents are expected to implement a 'reasonable level of performance' to minimise environmental impacts. The proponent must indicate how the proposal meets reasonable levels of performance. For example, reference technology based criteria if available, or identify good practice for this type of activity or development. A 'reasonable level of performance' involves adopting and implementing technology and

management practices to achieve certain pollutant emissions levels in economically viable operations. Technology-based criteria evolve gradually over time as technologies and practices change.

- Use environmental impacts as key criteria in selecting between alternative sites, designs and technologies, and to avoid options having the highest environmental impacts.
- Outline any proposed approach (such as an Environmental Management Plan) that will demonstrate how commitments made in the EIS will be implemented. Areas that should be described include:
  - a) operational procedures to manage environmental impacts
  - b) monitoring procedures
  - c) training programs
  - d) community consultation
  - e) complaint mechanisms including site contacts
  - f) strategies to use monitoring information to improve performance
  - g) strategies to achieve acceptable environmental impacts and to respond in event of exceedences.

#### 4. Air

##### ***Describe baseline conditions***

- Provide a description of existing air quality and meteorology, using existing information and site representative ambient monitoring data.

Refer to Attachment A for specific requirements for air assessment.

##### ***Assess impacts***

- Identify all pollutants of concern and estimate emissions by quantity (and size for particles), source and discharge point.
- Estimate the resulting ground level concentrations of all pollutants. Where necessary (e.g. potentially significant impacts and complex terrain effects), use an appropriate dispersion model to estimate ambient pollutant concentrations. Discuss choice of model and parameters with the EPA.
- Describe the effects and significance of pollutant concentration on the environment, human health, amenity and regional ambient air quality standards or goals.
- Describe the contribution that the development will make to regional and global pollution, particularly in sensitive locations.
- For potentially odorous emissions provide the emission rates in terms of odour units (determined by techniques compatible with EPA procedures). Use sampling and analysis techniques for individual or complex odours and for point or diffuse sources, as appropriate.

*Note: With dust and odour, it may be possible to use data from existing similar activities to generate emission rates.*

- Reference should be made to the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (DEC, 2016); *Approved Methods for the Sampling and Analysis of Air Pollutants in*

NSW (DEC, 2007); *Assessment and Management of Odour from Stationary Sources in NSW* (DEC, 2006); *Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW* (DEC, 2006); *Load Calculation Protocol for use by holders of NSW Environment Protection Licences when calculating Assessable Pollutant Loads* (DECC, 2009).

### ***Describe management and mitigation measures***

- Outline specifications of pollution control equipment (including manufacturer's performance guarantees where available) and management protocols for both point and fugitive emissions. Where possible, this should include cleaner production processes.

## **5. Noise and vibration**

### ***Describe baseline conditions***

- Determine the existing background (LA90) and ambient (LAeq) noise levels, as relevant, in accordance with the *NSW Noise Policy for Industry*.
- Determine the existing road traffic noise levels in accordance with the *NSW Road Noise Policy*, where road traffic noise impacts may occur.
- The noise impact assessment report should provide details of all monitoring of existing ambient noise levels including:
  - a) details of equipment used for the measurements
  - b) a brief description of where the equipment was positioned
  - c) a statement justifying the choice of monitoring site(s), including the procedure used to choose the site(s), having regards to Fact Sheets A and B of the *NSW Noise Policy for Industry*.
  - d) details of the exact location of the monitoring site and a description of land uses in surrounding areas
  - e) a description of the dominant and background noise sources at the site
  - f) day, evening and night assessment background levels for each day of the monitoring period
  - g) the final Rating Background Level (RBL) value
  - h) graphs of the measured noise levels for each day should be provided
  - i) a record of periods of affected data (due to adverse weather and extraneous noise), methods used to exclude invalid data and a statement indicating the need for any re-monitoring.

### ***Assess impacts***

- Determine the project noise trigger levels for the site. For each identified potentially affected receiver, this should include:
  - a) determination of the project intrusive noise level for each identified potentially affected receiver
  - b) selection and justification of the appropriate amenity category for each identified potentially affected receiver

- c) determination of the project amenity noise level for each receiver
- d) determination of the appropriate maximum noise level event assessment (sleep disturbance) trigger level.
- Maximum noise levels during night-time period (10pm-7am) should be assessed to analyse possible affects on sleep. Determine expected noise level and noise character likely to be generated from noise sources during:
  - a) site establishment
  - b) construction
  - c) operational phases
  - d) transport including traffic noise generated by the proposal
  - e) other services.

*Note: The noise impact assessment report should include noise source data for each source in 1/1 or 1/3 octave band frequencies including methods for references used to determine noise source levels. Noise source levels and characteristics can be sourced from direct measurement of similar activities or from literature (if full references are provided).*

- Determine the noise levels likely to be received at the reasonably most affected location(s) (these may vary for different activities at each phase of the development).
- The noise impact assessment report should include:
  - a) a plan showing the assumed location of each noise source for each prediction scenario
  - b) a list of the number and type of noise sources used in each prediction scenario to simulate all potential significant operating conditions on the site
  - c) any assumptions made in the predictions in terms of source heights, directivity effects, shielding from topography, buildings or barriers, etc
  - d) methods used to predict noise impacts including identification of any noise models used.
  - e) the weather conditions considered for the noise predictions
  - f) the predicted noise impacts from each noise source as well as the combined noise level for each prediction scenario
  - g) for developments where a significant level of noise impact is likely to occur, noise contours for the key prediction scenarios should be derived
  - h) an assessment of the need to include modification factors as detailed in Fact Sheet C of the *NSW Noise Policy for Industry*.
- Discuss the findings from the predictive modelling and, where relevant noise criteria have not been met, recommend additional feasible and reasonable mitigation measures.
- The noise impact assessment report should include details of any mitigation proposed including the attenuation that will be achieved and the revised noise impact predictions following mitigation.
  - a) Where relevant noise/vibration levels cannot be met after application of all feasible and reasonable mitigation measures the residual level of noise impact needs to be quantified
- For the assessment of existing and future traffic noise, details of data for the road should be included such as assumed traffic volume; percentage heavy vehicles by time of day; and details of the calculation process. These details should be consistent with any traffic study carried out in the EIS.

### ***Describe management and mitigation measures***

- Determine the most appropriate noise mitigation measures and expected noise reduction including both noise controls and management of impacts for both construction and operational noise. This will include selecting quiet equipment and construction methods, noise barriers or acoustic screens, location of stockpiles, temporary offices, compounds and vehicle routes, scheduling of activities, etc.
- For traffic noise impacts, provide a description of the ameliorative measures considered (if required), reasons for inclusion or exclusion, and procedures for calculation of noise levels including ameliorative measures. Also include, where necessary, a discussion of any potential problems associated with the proposed ameliorative measures, such as overshadowing effects from barriers. Appropriate ameliorative measures may include:
  - a) use of alternative transportation modes, alternative routes, or other methods of avoiding the new road usage
  - b) control of traffic (eg: limiting times of access or speed limitations)
  - c) resurfacing of the road using a quiet surface
  - d) use of (additional) noise barriers or bunds
  - e) treatment of the façade to reduce internal noise levels buildings where the night-time criteria is a major concern
  - f) more stringent limits for noise emission from vehicles (i.e. using specially designed 'quite' trucks and/or trucks to use air bag suspension
  - g) driver education
  - h) appropriate truck routes
  - i) limit usage of exhaust brakes
  - j) use of premium muffles on trucks
  - k) reducing speed limits for trucks
  - l) ongoing community liaison and monitoring of complaints
  - m) phasing in the increased road use.

## 4. Water

### **Describe baseline conditions**

- Describe existing surface and groundwater quality – an assessment needs to be undertaken for any water resource likely to be affected by the proposal and for all conditions (e.g. a wet weather sampling program is needed if runoff events may cause impacts).  
*Note: Methods of sampling and analysis need to conform with an accepted standard (e.g. Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC 2004) or be approved and analyses undertaken by accredited laboratories).*
- Provide site drainage details and surface runoff yield.
- State the ambient Water Quality and River Flow Objectives for the receiving waters. These refer to the community's agreed environmental values and human uses endorsed by the Government as goals for the ambient waters. These environmental values are published on the website: <http://www.environment.nsw.gov.au/ieo/index.htm>. The EIS should state the environmental values listed for the catchment and waterway type relevant to your proposal. NB: A consolidated and approved list of environmental values are not available for groundwater resources. Where groundwater may be affected the EIS should identify appropriate groundwater environmental values and justify the choice.
- State the indicators and associated trigger values or criteria for the identified environmental values. This information should be sourced from the ANZECC 2000 *Guidelines for Fresh and Marine Water Quality* (<http://www.environment.gov.au/water/publications/quality/nwqms-guidelines-4-vol1.html>) (Note that, as at 2004, the NSW Water Quality Objectives booklets and website contain technical criteria derived from the 1992 version of the ANZECC Guidelines. The Water Quality Objectives remain as Government Policy, reflecting the community's environmental values and long-term goals, but the technical criteria are replaced by the more recent ANZECC 2000 Guidelines). NB: While specific guidelines for groundwater are not available, the ANZECC 2000 Guidelines endorse the application of the trigger values and decision trees as a tool to assess risk to environmental values in groundwater.
- State any locally specific objectives, criteria or targets, which have been endorsed by the government e.g. the Healthy Rivers Commission Inquiries or the NSW Salinity Strategy (DLWC, 2000) (<http://www.environment.nsw.gov.au/salinity/government/nswstrategy.htm>).
- Where site specific studies are proposed to revise the trigger values supporting the ambient Water Quality and River Flow Objectives, and the results are to be used for regulatory purposes (e.g. to assess whether a licensed discharge impacts on water quality objectives), then prior agreement from the EPA on the approach and study design must be obtained.
- Describe the state of the receiving waters and relate this to the relevant Water Quality and River Flow Objectives (i.e. are Water Quality and River Flow Objectives being achieved?). Proponents are generally only expected to source available data and information. However, proponents of large or high risk developments may be required to collect some ambient water quality / river flow / groundwater data to enable a suitable level of impact assessment. Issues to include in the description of the receiving waters could include:
  - a) lake or estuary flushing characteristics
  - b) specific human uses (e.g. exact location of drinking water offtake)
  - c) sensitive ecosystems or species conservation values
  - d) a description of the condition of the local catchment e.g. erosion levels, soils, vegetation cover, etc

- e) an outline of baseline groundwater information, including, but not restricted to, depth to watertable, flow direction and gradient, groundwater quality, reliance on groundwater by surrounding users and by the environment
- f) historic river flow data where available for the catchment.

### **Assess impacts**

- No proposal should breach clause 120 of the *Protection of the Environment Operations Act 1997* (i.e. pollution of waters is prohibited unless undertaken in accordance with relevant regulations).
- Identify and estimate the quantity of all pollutants that may be introduced into the water cycle by source and discharge point including residual discharges after mitigation measures are implemented.
- Include a rationale, along with relevant calculations, supporting the prediction of the discharges.
- Describe the effects and significance of any pollutant loads on the receiving environment. This should include impacts of residual discharges through modelling, monitoring or both, depending on the scale of the proposal. Determine changes to hydrology (including drainage patterns, surface runoff yield, flow regimes, wetland hydrologic regimes and groundwater).
- Describe water quality impacts resulting from changes to hydrologic flow regimes (such as nutrient enrichment or turbidity resulting from changes in frequency and magnitude of stream flow).
- Identify any potential impacts on quality or quantity of groundwater describing their source.
- Identify potential impacts associated with geomorphological activities with potential to increase surface water and sediment runoff or to reduce surface runoff and sediment transport. Also consider possible impacts such as bed lowering, bank lowering, instream siltation, floodplain erosion and floodplain siltation.
- Identify impacts associated with the disturbance of acid sulfate soils and potential acid sulfate soils.
- Containment of spills and leaks shall be in accordance with EPA's guidelines section 'Bunding and Spill Management' at <http://www.epa.nsw.gov.au/mao/bundingspill.htm> and the most recent versions of the Australian Standards referred to in the Guidelines. Containment should be designed for no-discharge.
- The significance of the impacts listed above should be predicted. When doing this it is important to predict the ambient water quality and river flow outcomes associated with the proposal and to demonstrate whether these are acceptable in terms of achieving protection of the Water Quality and River Flow Objectives. In particular the following questions should be answered:
  - a) will the proposal protect Water Quality and River Flow Objectives where they are currently achieved in the ambient waters; and
  - b) will the proposal contribute towards the achievement of Water Quality and River Flow Objectives over time, where they are not currently achieved in the ambient waters.
- Consult with the EPA as soon as possible if a mixing zone is proposed (a mixing zone could exist where effluent is discharged into a receiving water body, where the quality of the water being discharged does not immediately meet water quality objectives. The mixing zone could result in dilution, assimilation and decay of the effluent to allow water quality objectives to be met further downstream, at the edge of the mixing zone). The EPA will advise the proponent under what conditions a mixing zone will and will not be acceptable, as well as the information and modelling requirements for assessment.

*Note: The assessment of water quality impacts needs to be undertaken in a total catchment management context to provide a wide perspective on development impacts, in particular cumulative impacts.*

- Where a licensed discharge is proposed, provide the rationale as to why it cannot be avoided through application of a reasonable level of performance, using available technology, management practice and industry guidelines.
- Where a licensed discharge is proposed, provide the rationale as to why it represents the best environmental outcome and what measures can be taken to reduce its environmental impact.
- Reference should be made to relevant guidelines including but not limited to: *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004), *Guidelines for Fresh and Marine Water Quality* (ANZECC 2000), and *Environmental Guidelines: Use of effluent by Irrigation* (DEC, 2004).

### ***Describe management and mitigation measures***

- Outline stormwater management to control pollutants at the source and contain them within the site. Also describe measures for maintaining and monitoring any stormwater controls.
- Outline erosion and sediment control measures directed at minimising disturbance of land, minimising water flow through the site and filtering, trapping or detaining sediment. Also include measures to maintain and monitor controls as well as rehabilitation strategies.
- Describe waste water treatment measures that are appropriate to the type and volume of waste water and are based on a hierarchy of avoiding generation of waste water; capturing all contaminated water (including stormwater) on the site; reusing/recycling waste water; and treating any unavoidable discharge from the site to meet specified water quality requirements.
- Outline pollution control measures relating to storage of materials, possibility of accidental spills (e.g. preparation of contingency plans), appropriate disposal methods, and generation of leachate.
- Describe hydrological impact mitigation measures including:
  - a) site selection (avoiding sites prone to flooding and waterlogging, actively eroding or affected by deposition)
  - b) minimising runoff
  - c) minimising reductions or modifications to flow regimes
  - d) avoiding modifications to groundwater.
- Describe groundwater impact mitigation measures including:
  - a) site selection
  - b) retention of native vegetation and revegetation
  - c) artificial recharge
  - d) providing surface storages with impervious linings
  - e) monitoring program.
- Describe geomorphological impact mitigation measures including:
  - a) site selection
  - b) erosion and sediment controls
  - c) minimising instream works
  - d) treating existing accelerated erosion and deposition

- e) monitoring program.
- Any proposed monitoring should be undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Water Pollutants in NSW* (DEC 2004).

## 5. Soils and contamination

### ***Describe baseline conditions***

- Provide any details (in addition to those provided in the location description - Section C) that are needed to describe the existing situation in terms of soil types and properties and soil contamination.

### ***Assess impacts***

- Identify any likely impacts resulting from the construction or operation of the proposal, including the likelihood of:
  - a) disturbing any existing contaminated soil
  - b) contamination of soil by operation of the activity
  - c) subsidence or instability
  - d) soil erosion
  - e) disturbing acid sulfate or potential acid sulfate soils.
- Reference should be made to relevant guidelines including but not limited to: *Contaminated Sites – Guidelines for Consultants Reporting on Contaminated Sites* (OEH, 2011); *Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997* (EPA, 2015).

### ***Describe management and mitigation measures***

- Describe and assess the effectiveness or adequacy of any soil management and mitigation measures during construction and operation of the proposal including:
  - a) erosion and sediment control measures
  - b) proposals for site remediation – see *Managing Land Contamination, Planning Guidelines SEPP 55 – Remediation of Land* (Department of Urban Affairs and Planning and Environment Protection Authority, 1998)
  - c) proposals for the management of these soils – see *Acid Sulfate Soil Manual* (Acid Sulfate Soil Advisory Committee 1998) and *Acid Sulfate Soils Assessment Guidelines* (Acid Sulfate Soil Advisory Committee 1998).

## 6. Waste and chemicals

### ***Describe baseline conditions***

- Describe any existing waste or chemicals operations related to the proposal.

### ***Assess impacts***

- Assess the adequacy of proposed measures to minimise natural resource consumption and minimise impacts from the handling, transporting, storage, processing and reprocessing of waste and/or chemicals.
- Reference should be made to: the EPA's *Waste Classification Guidelines 2014 (as in force from time to time)*
- If the proposal is an energy from waste facility it must:
  - demonstrate that the proposed operation will comply with the NSW EPA's Energy from Waste Policy Statement;
  - describe 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;
  - detail 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;
  - detail the location and size of stockpiles of unprocessed and processed recycled waste at the site;
  - demonstrate any waste material (e.g. biochar, ash) produced 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 order and /or exemption by the EPA;
  - detail 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 2014-21*.

### ***Describe management and mitigation measures***

- Outline measures to minimise the consumption of natural resources.
- Outline measures to avoid the generation of waste and promote the re-use and recycling and reprocessing of any waste.
- Outline measures to support any approved regional or industry waste plans.

## 7. Cumulative impacts

- Identify the extent that the receiving environment is already stressed by existing development and background levels of emissions to which this proposal will contribute.
- Assess the impact of the proposal against the long term air, noise and water quality objectives for the area or region.
- Identify infrastructure requirements flowing from the proposal (e.g. water and sewerage services, transport infrastructure upgrades).
- Assess likely impacts from such additional infrastructure and measures reasonably available to the proponent to contain such requirements or mitigate their impacts (e.g. travel demand management strategies).

## **F. List of approvals and licences**

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- Identify all approvals and licences required under environment protection legislation including details of all scheduled activities, types of ancillary activities and types of discharges (to air, land, water).

## **G. Compilation of mitigation measures**

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- Outline how the proposal and its environmental protection measures would be implemented and managed in an integrated manner so as to demonstrate that the proposal is capable of complying with statutory obligations under EPA licences or approvals (e.g. outline of an environmental management plan).
- The mitigation strategy should include the environmental management and cleaner production principles which would be followed when planning, designing, establishing and operating the proposal. It should include two sections, one setting out the program for managing the proposal and the other outlining the monitoring program with a feedback loop to the management program.

## **H. Justification for the Proposal**

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- Reasons should be included which justify undertaking the proposal in the manner proposed, having regard to the potential environmental impacts.

## ATTACHMENT C: GUIDANCE MATERIAL

Title	Web address
<b>Relevant Legislation</b>	
<i>Contaminated Land Management Act 1997</i>	<a href="http://www.legislation.nsw.gov.au/#/view/act/1997/140">http://www.legislation.nsw.gov.au/#/view/act/1997/140</a>
<i>Environmentally Hazardous Chemicals Act 1985</i>	<a href="http://www.legislation.nsw.gov.au/#/view/act/1985/14">http://www.legislation.nsw.gov.au/#/view/act/1985/14</a>
<i>Environmental Planning and Assessment Act 1979</i>	<a href="http://www.legislation.nsw.gov.au/#/view/act/1979/203">http://www.legislation.nsw.gov.au/#/view/act/1979/203</a>
<i>Protection of the Environment Operations Act 1997</i>	<a href="http://www.legislation.nsw.gov.au/#/view/act/1997/156">http://www.legislation.nsw.gov.au/#/view/act/1997/156</a>
<i>Water Management Act 2000</i>	<a href="http://www.legislation.nsw.gov.au/#/view/act/2000/92">http://www.legislation.nsw.gov.au/#/view/act/2000/92</a>
<b>Licensing</b>	
Guide to Licensing	<a href="http://www.epa.nsw.gov.au/licensing/licenceguide.htm">www.epa.nsw.gov.au/licensing/licenceguide.htm</a>
<b>Air Issues</b>	
<b>Air Quality</b>	
Approved methods for modelling and assessment of air pollutants in NSW (2016)	<a href="http://www.epa.nsw.gov.au/air/appmethods.htm">http://www.epa.nsw.gov.au/air/appmethods.htm</a>
POEO (Clean Air) Regulation 2010	<a href="http://www.legislation.nsw.gov.au/#/view/regulation/2010/428">http://www.legislation.nsw.gov.au/#/view/regulation/2010/428</a>
<b>Noise and Vibration</b>	
NSW Noise Policy for Industry	<a href="http://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-(2017)">http://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-(2017)</a>
Interim Construction Noise Guideline (DECC, 2009)	<a href="http://www.epa.nsw.gov.au/noise/constructnoise.htm">http://www.epa.nsw.gov.au/noise/constructnoise.htm</a>
Assessing Vibration: a technical guideline (DEC, 2006)	<a href="http://www.epa.nsw.gov.au/noise/vibrationguide.htm">http://www.epa.nsw.gov.au/noise/vibrationguide.htm</a>
	<a href="http://www.epa.nsw.gov.au/your-environment/noise/transport-noise">http://www.epa.nsw.gov.au/your-environment/noise/transport-noise</a>
NSW Road Noise Policy (DECCW, 2011)	
NSW Rail Infrastructure Noise Guideline (EPA, 2013)	<a href="http://www.epa.nsw.gov.au/your-environment/noise/transport-noise">http://www.epa.nsw.gov.au/your-environment/noise/transport-noise</a>
<b>Human Health Risk Assessment</b>	

Environmental Health Risk Assessment: Guidelines for assessing human health risks from environmental hazards (enHealth, 2012)	<a href="http://www.eh.org.au/documents/item/916">http://www.eh.org.au/documents/item/916</a>
<b>Waste, Chemicals and Hazardous Materials and Radiation</b>	
<b>Waste</b>	
Environmental Guidelines: Solid Waste Landfills (EPA, 2016)	<a href="http://www.epa.nsw.gov.au/waste/landfill-sites.htm">http://www.epa.nsw.gov.au/waste/landfill-sites.htm</a>
Draft Environmental Guidelines - Industrial Waste Landfilling (April 1998)	<a href="http://www.epa.nsw.gov.au/resources/waste/envguidlns/industrialfill.pdf">http://www.epa.nsw.gov.au/resources/waste/envguidlns/industrialfill.pdf</a>
EPA's Waste Classification Guidelines 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 orders and exemptions	<a href="http://www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm">http://www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm</a>
European Unions Waste Incineration Directive 2000	<a href="http://ec.europa.eu/environment/archives/air/stationary/wid/legislation.htm">http://ec.europa.eu/environment/archives/air/stationary/wid/legislation.htm</a>
EPA's Energy from Waste Policy Statement	<a href="http://www.epa.nsw.gov.au/wastestrategy/energy-from-waste.htm">http://www.epa.nsw.gov.au/wastestrategy/energy-from-waste.htm</a>
NSW Waste Avoidance and Resource Recovery Strategy 2014-2021	<a href="http://www.epa.nsw.gov.au/wastestrategy/warr.htm">http://www.epa.nsw.gov.au/wastestrategy/warr.htm</a>
<b>Chemicals subject to Chemical Control Orders</b>	
Chemical Control Orders (regulated through the EHC Act )	<a href="http://www.epa.nsw.gov.au/pesticides/CCOs.htm">http://www.epa.nsw.gov.au/pesticides/CCOs.htm</a>
National Protocol - Approval/Licensing of Trials of Technologies for the Treatment/Disposal of Schedule X Wastes - July 1994	Available in libraries
National Protocol for Approval/Licensing of Commercial Scale Facilities for the Treatment/Disposal of Schedule X Wastes - July 1994	Available in libraries
<b>Water and Soils</b>	
<b>Acid sulphate soils</b>	
Coastal acid sulfate soils guidance material	<a href="http://www.environment.nsw.gov.au/acidsulfatesoil/">http://www.environment.nsw.gov.au/acidsulfatesoil/</a> and <a href="http://www.epa.nsw.gov.au/mao/acidsulfatesoils.htm">http://www.epa.nsw.gov.au/mao/acidsulfatesoils.htm</a>
Acid Sulfate Soils Planning Maps	<a href="http://www.environment.nsw.gov.au/acidsulfatesoil/riskmaps.htm">http://www.environment.nsw.gov.au/acidsulfatesoil/riskmaps.htm</a>
<b>Contaminated Sites Assessment and Remediation</b>	
Managing land contamination: Planning Guidelines – SEPP 55 Remediation of Land	<a href="http://www.epa.nsw.gov.au/clm/planning.htm">http://www.epa.nsw.gov.au/clm/planning.htm</a>

Guidelines for Consultants Reporting on Contaminated Sites (EPA, 2000)	<a href="http://www.epa.nsw.gov.au/resources/clm/20110650consultantsguidelines.pdf">http://www.epa.nsw.gov.au/resources/clm/20110650consultantsguidelines.pdf</a>
Guidelines for the NSW Site Auditor Scheme - 2nd edition (DEC, 2006)	<a href="http://www.epa.nsw.gov.au/resources/clm/auditorguidelines06121.pdf">http://www.epa.nsw.gov.au/resources/clm/auditorguidelines06121.pdf</a>
Sampling Design Guidelines (EPA, 1995)	<a href="http://www.epa.nsw.gov.au/resources/clm/95059sampingdline.pdf">http://www.epa.nsw.gov.au/resources/clm/95059sampingdline.pdf</a>
National Environment Protection (Assessment of Site Contamination) Measure 1999 (or update)	<a href="http://www.scew.gov.au/nepms/assessment-site-contamination">http://www.scew.gov.au/nepms/assessment-site-contamination</a>
<b>Soils – general</b>	
Managing land and soil	<a href="http://www.environment.nsw.gov.au/soils/landandsoil.htm">http://www.environment.nsw.gov.au/soils/landandsoil.htm</a>
Managing urban stormwater for the protection of soils	<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://australiangeomechanics.org/admin/wp-content/uploads/2010/11/LRM2000-Concepts.pdf">http://australiangeomechanics.org/admin/wp-content/uploads/2010/11/LRM2000-Concepts.pdf</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.environment.gov.au/water/publications/quality/nwgms-guidelines-4-vol1.html">http://www.environment.gov.au/water/publications/quality/nwgms-guidelines-4-vol1.html</a>
Applying Goals for Ambient Water Quality Guidance for Operations Officers - Mixing Zones	Contact the EPA on 131555
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>



# Department of Industry

OUT18/16553

Shaun Williams  
Planning Officer  
Industry Assessments  
NSW Department of Planning and Environment

[shaun.williams@planning.nsw.gov.au](mailto:shaun.williams@planning.nsw.gov.au)

Dear Mr Williams

**Brandown Resource Recovery Facility, Kemps Creek (9540)  
Comment on the Secretary's Environmental Assessment Requirements (SEARs)**

I refer to your email of 25 October 2018 to the Department of Industry (DoI) in respect to the above matter. Comment has been sought from relevant branches of Lands & Water and Department of Primary Industries (DPI), and the following requirements for the proposal are provided:

**DoI – Water and Natural Resources Access Regulator**

- The identification of an adequate and secure water supply for the life of the project. This includes confirmation that water can be sourced from an appropriately authorised and reliable supply. This is also to include an assessment of the current market depth where water entitlement is required to be purchased.
- A detailed and consolidated site water balance.
- Assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts.
- Proposed surface and groundwater monitoring activities and methodologies.
- Consideration of relevant legislation, policies and guidelines, including the NSW Aquifer Interference Policy (2012), the Guidelines for Controlled Activities on Waterfront Land (2018) and the relevant Water Sharing Plans (available at <https://www.industry.nsw.gov.au/water>).

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).

Yours sincerely

Alison Collaros  
A/Manager, Assessment Advice  
**Lands and Water - Strategy and Policy**  
12 November 2018

Mr. Shaun Williams  
Planning Officer  
Industry Assessments  
Department of Planning & Environment  
GPO Box 39  
Sydney NSW 2001

Dear Mr. Williams,

**Request for input to SEARs for Brandown Resource Recovery Facility  
Lot 90 Elizabeth Drive, Kemps Creek (SSD 9540)**

Thank you for your email sent on 25 October 2018 requesting Transport for NSW (TfNSW) input on the Secretary's Environmental Assessment Requirements (SEARs) for the proposed works for the Brandown Resource Recovery Facility at the subject address.

TfNSW has reviewed the Scoping Report prepared by Golder Associates Pty Ltd on behalf of the Applicant. The following assessment requirements should be included within the Environmental Impact Statement (EIS):

- a quantitative Traffic Impact Assessment which details all daily and peak traffic and transport movements likely to be generated (light and heavy vehicle, public transport, pedestrian and cycle trips) during construction and operation of the development;
- details of the current daily and peak hour vehicle, public transport, pedestrian and bicycle movements and existing traffic and transport facilities provided on the road network located adjacent to the proposed development;
- an assessment of the operation of existing and future transport networks including public transport, pedestrian and bicycle provisions and their ability to accommodate the forecast number of trips to and from the development;
- details the type of heavy vehicles likely to be used (e.g. B-doubles) during the operation of the development and the impacts of heavy vehicles on nearby intersections;
- details of access to/from and within the site from/to the road network including intersection location, design and sight distance (i.e. turning lanes, swept paths, sight distance requirements);
- an assessment of the existing and future performance of key intersections providing access to the site (Elizabeth Drive and Range Road), and any upgrades (road/ intersections) required as a result of the development;
- an assessment of predicted impacts on road safety and the capacity of the road network to accommodate the development;
- demonstrate the measures to be implemented to encourage employees of the development to make sustainable travel choices, including walking, cycling, public transport and car sharing;
- appropriate provision, design and location of on-site bicycle parking;
- details of the proposed number of car parking spaces and compliance with appropriate

- parking codes and justify the level of car parking provided on the site;
- details of any likely dangerous goods to be transported on arterial and local roads to/from the site, if any, and the preparation of an incident management strategy, if necessary;
- the existing and proposed pedestrian and bicycle routes and end of trip facilities within the vicinity of and surrounding the site and to public transport facilities; and
- Preparation of a draft Construction Traffic Management Plan which includes:
  - details of vehicle routes, number of trucks, hours of operation, access management and traffic control measures for all stages of construction;
  - assessment of cumulative impacts associated with other construction activities;
  - an assessment of road safety at key intersections;
  - details of anticipated peak hour and daily truck movements to and from the site;
  - details of access arrangements for workers to/from the site, emergency vehicles and service vehicle movements;
  - details of temporary cycling and pedestrian access during constructions;
  - an assessment of traffic and transport impacts during construction and how these impacts will be mitigated for any associated traffic, pedestrians, cyclists and public transport operations.

### **Strategic planning context**

The EIS should detail how the proposed development will be consistent and align with the objectives, goals and directions of the following:

- Greater Sydney Region Plan
- Western City District Plan
- Future Transport Strategy 2056
- Future Transport – Greater Sydney Services and Infrastructure Plan
- NSW Freight & Ports Plan 2018-2023

If you require any further information regarding this matter, please do not hesitate to contact Ken Ho, Transport Planner, via email at [ken.ho@transport.nsw.gov.au](mailto:ken.ho@transport.nsw.gov.au).

Yours sincerely



6/11/2018

Mark Ozinga  
**Principal Manager, Land Use Planning & Development  
Freight, Strategy & Planning**

CD18/09775



22 November 2018

Roads and Maritime Reference: SYD18/01713/01 (A24890548)  
DP&E Reference: SSD 9540

Director  
Department of Planning and Environment  
Industry Assessments  
GPO Box 39  
SYDNEY NSW 2001

Attention: **Shaun Williams**

Dear Sir/Madam

**PROPOSED BRANDOWN RESOURCE RECOVERY FACILITY – LOT 90 ELIZABETH DRIVE,  
KEMPS CREEK**

Reference is made to your correspondence dated 25 October 2018 requesting Roads and Maritime Services (Roads and Maritime) to provide details of key issues and assessment requirements regarding the abovementioned development for inclusion in the Secretary's Environmental Assessment (EA) requirements.

Roads and Maritime require the following issues to be included in the transport and traffic impact assessment of the proposed development:

1. Daily and peak traffic movements likely to be generated by the proposed development including the impact on nearby intersections (i.e. Range Road/Elizabeth Drive which currently has turn bans in place) and the need/associated funding for upgrading or road improvement works (if required).
2. Details of the proposed site access and the parking provisions associated with the proposed development including compliance with the requirements of the relevant Australian Standards (ie: turn paths, sight distance requirements, aisle widths, etc).
3. Detailing vehicle circulation, proposed number of car parking spaces and compliance with the appropriate parking codes.
4. Details of light and heavy vehicle movements (including vehicle type and likely arrival and departure times).
5. To ensure that the above requirements are fully addressed, the transport and traffic study must properly ascertain the cumulative study area traffic impacts associated with the development (and any other known proposed developments in the area with particular emphasis on future land use/zonings likely as a result of the Western Sydney airport). This process provides an

**Roads and Maritime Services**

opportunity to identify a package of traffic and transport infrastructure measures required to support future development. Regional and local intersection and road improvements, vehicular access options for adjoining sites, public transport needs, the timing and cost of infrastructure works and the identification of funding responsibilities associated with the development should be identified.

6. Measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks.
7. Traffic and transport impacts during construction and how these impacts will be mitigated for any associated traffic, pedestrians, cyclists, parking and public transport, including the preparation of a draft Construction Traffic Management Plan to demonstrate the proposed management of the impact.
8. The applicant is advised that a Road Network Plan has recently been completed by Sydney Planning which identified the need for the upgrade of Elizabeth Drive from 2 lanes to 4 lanes with future capacity for 6 lanes. Further work is currently being undertaken to reserve a corridor on this section of Elizabeth Drive. Whilst there are no strategic designs available yet the subject property may be required to accommodate the increased capacity required on Elizabeth Drive.

Further information on the project can be obtained from contacting Kate Lunney, Project Development Manager on 1800 865 503 or at [Elizabethdrive@rms.nsw.gov.au](mailto:Elizabethdrive@rms.nsw.gov.au).

9. Roads and Maritime is currently investigating the proposed M12 Motorway Project and the subject property is within the broad investigation area. However Roads and Maritime has now defined a preferred corridor for further examination (see attached Community Update).

The investigations completed to date indicate the subject property is within the preferred corridor. It is emphasised however that the proposal may change, as it has not yet been approved and it is not possible at this date to provide any more definite information as to the likely requirement for any part of the property.

The applicant should be advised to contact the Project Team (PH 1800 703 457 or at [wsip@rms.nsw.gov.au](mailto:wsip@rms.nsw.gov.au)) if further information is required.

Any inquiries in relation to this Application can be directed to Malgy Coman on 8849 2413 or [development.sydney@rms.nsw.gov.au](mailto:development.sydney@rms.nsw.gov.au).

Yours sincerely



Pahee Rathan  
**A/Senior Land Use Assessment Coordinator**  
**North West Precinct**

5 November 2018

Contact: *Alison Kniha*  
Telephone: *02 9865 2505*  
Our ref: *D2018/118034*

Shaun Williams  
Planning Officer  
Industry Assessments  
Department of Planning and Environment  
GPO Box 39  
Sydney NSW 2001

Dear Mr Williams

**RE: REQUEST FOR SEARS – BRANDOWN RESOURCE RECOVERY FACILITY LOT 90 DP  
1101411 ELIZABETH DRIVE KEMPS CREEK**

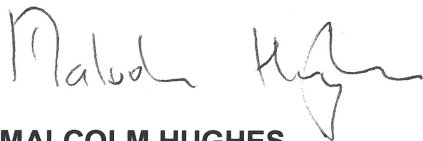
Thank you for your email and the opportunity for WaterNSW to provide input to the Secretary's Environmental Assessment Requirements (SEARs) for the proposed new resource recovery facility (RRF) including a refuse derived fuel (RDF) production facility, mechanical biological treatment (MBT) facility and a cement stabilisation facility at Lot 90 in Deposited Plan 1101411 Elizabeth Drive, Kemps Creek, in the Liverpool local government area (LGA).

As the subject site is situated over one kilometre west of the Upper Canal, WaterNSW has no particular requirements and has no wish to provide input to the SEARs for the proposal.

We request the Department continues to consult with WaterNSW regarding proposals on land adjacent to and impacting on WaterNSW infrastructure, land or assets due to the potential for impact on water quality and water supply. Please email all correspondence using the address [Environmental.Assessments@watnsw.com.au](mailto:Environmental.Assessments@watnsw.com.au).

If you have any questions regarding this matter, please contact Alison Kniha on (02) 9865 2505 [alison.kniha@watnsw.com.au](mailto:alison.kniha@watnsw.com.au).

Yours sincerely,

A handwritten signature in black ink, appearing to read "Malcolm Hughes". The signature is fluid and cursive.

**MALCOLM HUGHES**  
**Manager Catchment Protection**



# NSW RURAL FIRE SERVICE



The Secretary  
Department of Planning and Environment (Sydney  
Offices)  
GPO Box 39  
Sydney NSW 2001

Your reference: SSD 9540  
Our reference: D18/7870

19 November 2018

**Attention:** : Shaun Williams

Dear Sir/Madam,

## **Proposed Resource Recovery Facility at Elizabeth Drive Cecil Park**

Reference is made to correspondence dated 25 October 2018 seeking input regarding the preparation of Secretary's environmental assessment requirements for the above State Significant Development in accordance with the *Environmental Planning and Assessment Act 1979*.

The New South Wales Rural Fire Service (NSW RFS) has reviewed the information provided and advises that a bush fire assessment report shall be prepared which identifies the extent to which the proposed development conforms with or deviates from the relevant provisions of *Planning for Bush Fire Protection 2006* (or equivalent) with regard to the bush fire prone vegetation on and off site.

If you have any queries regarding this advice, please contact Kalpana Varghese, Development Assessment and Planning Officer, on 1300 NSW RFS.

Yours sincerely,

Nika Fomin  
**Manager**  
**Planning and Environment Services (East)**

**Postal address**

NSW Rural Fire Service  
Planning and Environment Services  
Locked Bag 17  
GRANVILLE NSW 2141

T 1300 NSW RFS  
F (02) 8741 5433  
E [records@rfs.nsw.gov.au](mailto:records@rfs.nsw.gov.au)  
[www.rfs.nsw.gov.au](http://www.rfs.nsw.gov.au)





## Application Details

Assessing Officer	Kalpana Varghese	NSW RFS Reference	D18/7870
Referral agency	Liverpool	Referral Reference	SSD 9540
Stage of Application:	<b>SEARs</b>	Assessed against:	<b>PBP Aims and Objectives</b>
Lot & Street Address	Lot 90 DP 1101411 Elizabeth Drive Cecil Park		
Description of Proposal	Proposed new resource recovery facility (RRF)		
Bush Fire Report Provided	No	FPAAC Accredited	<<..>> Author, Date, Reference

## Assessment Summary

### Application Details & Background

The application seeks consent for:

- Proposed modifications to the existing operations, including:
  - Extended operational hours of the existing recycling operations
  - Re-siting of weigh bridges, maintenance workshop and amenities buildings,
  - Re-siting of the existing Crushing and Screening Facility, the C & D Recycling facility, Composting Facility and the Soil Processing Facility.
- New infrastructure and operational activities, including:
  - Refuse Derived Fuel (RDF) Production Facility,
  - Mechanical Biological Treatment Facility, and
  - Cement Stabilisation Facility.
- New ancillary infrastructure, including:
  - New weighbridge,
  - Parking,
  - Two wheel washes, and
  - Administration and amenities buildings.

### Planning History

Reference	Site	Proposal	Outcome / Relevant assessment details

### Site Inspection

Was a site inspection undertaken? No - sufficient information was available to undertake an assessment

If Yes: - Date undertaken:

- Reason for inspection:

— Asset Protection Zones	— Vegetation	— Emergency Management & Evacuation
— Siting and Design	— Effective slope	— Separation distance
— Construction level	— Services	— Site Slope
— Access	— Landscaping	— Other

- Inspection Notes:

According to the Scoping Report:

- A 70 metre power easement transects the northern portion of the site and runs along the south eastern boundary. There is an excavation setback of 20 metres from the western and eastern boundaries. There is an existing area of biodiversity in the south west corner of the site.
- The subject site includes Lot 91//1101411 to provide road access. The main entrance to the site is from Elizabeth Road via Range Road. All traffic will enter through the new access point.
- The existing administration building will remain in the current location. The maintenance workshop and amenities buildings are proposed to the south of the administration building.
- Water supply is via existing mains water supply on Elizabeth Drive and on site storm water storage dams.
- The Environmental Impact Statement (EIS) will address the potential for bush fire hazards to comply with relevant requirements.

### Conclusion

The subject site has bush fire prone vegetation on the eastern, southern and western aspects. There are additional facilities proposed as part of the development. No information has been provided to demonstrate compliance of the proposal with *Planning for Bush Fire Protection 2006* (PBP 2006). In this regard, it will be recommended to undertake a bush fire risk assessment of the proposed development.

Recommendation	Recommended conditions to be provided	Date:	16/11/2018
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## Development Plan(s)

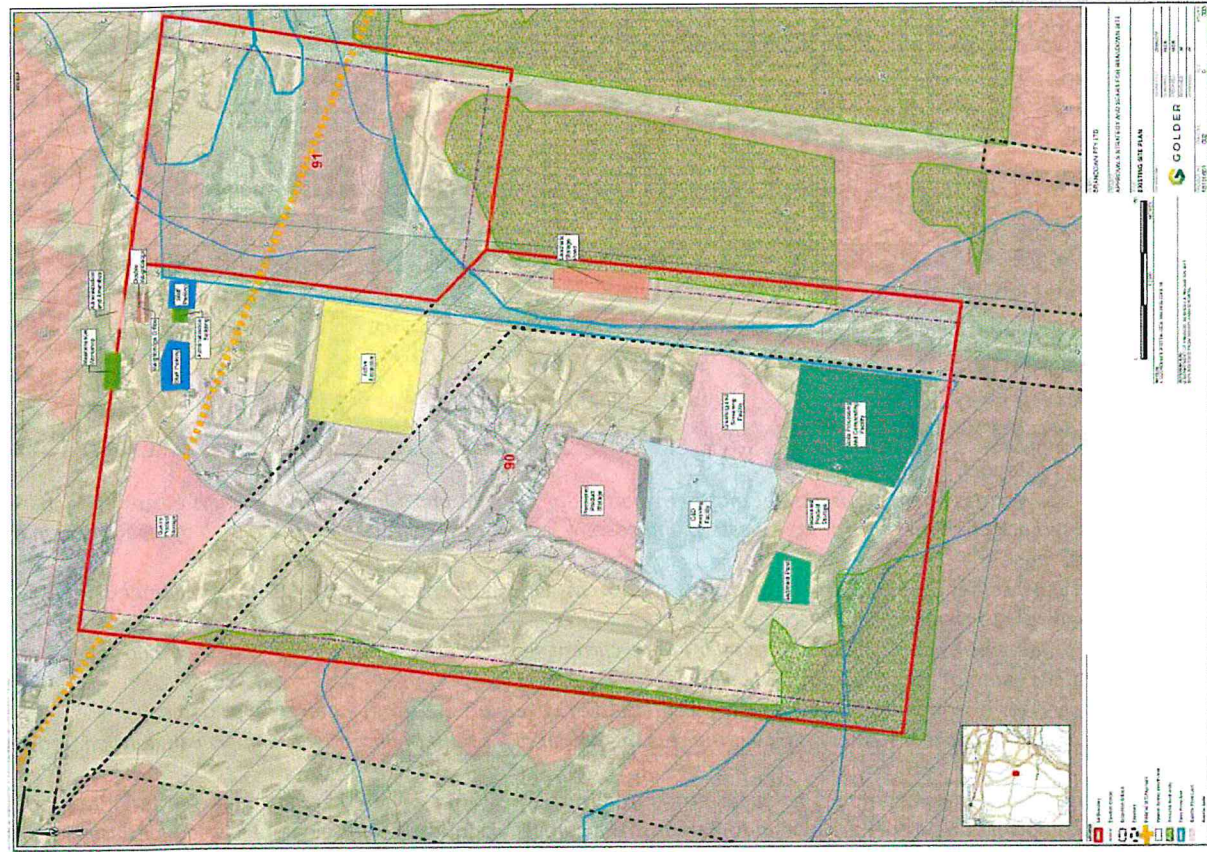


Figure 3: Existing Site layout on the Site

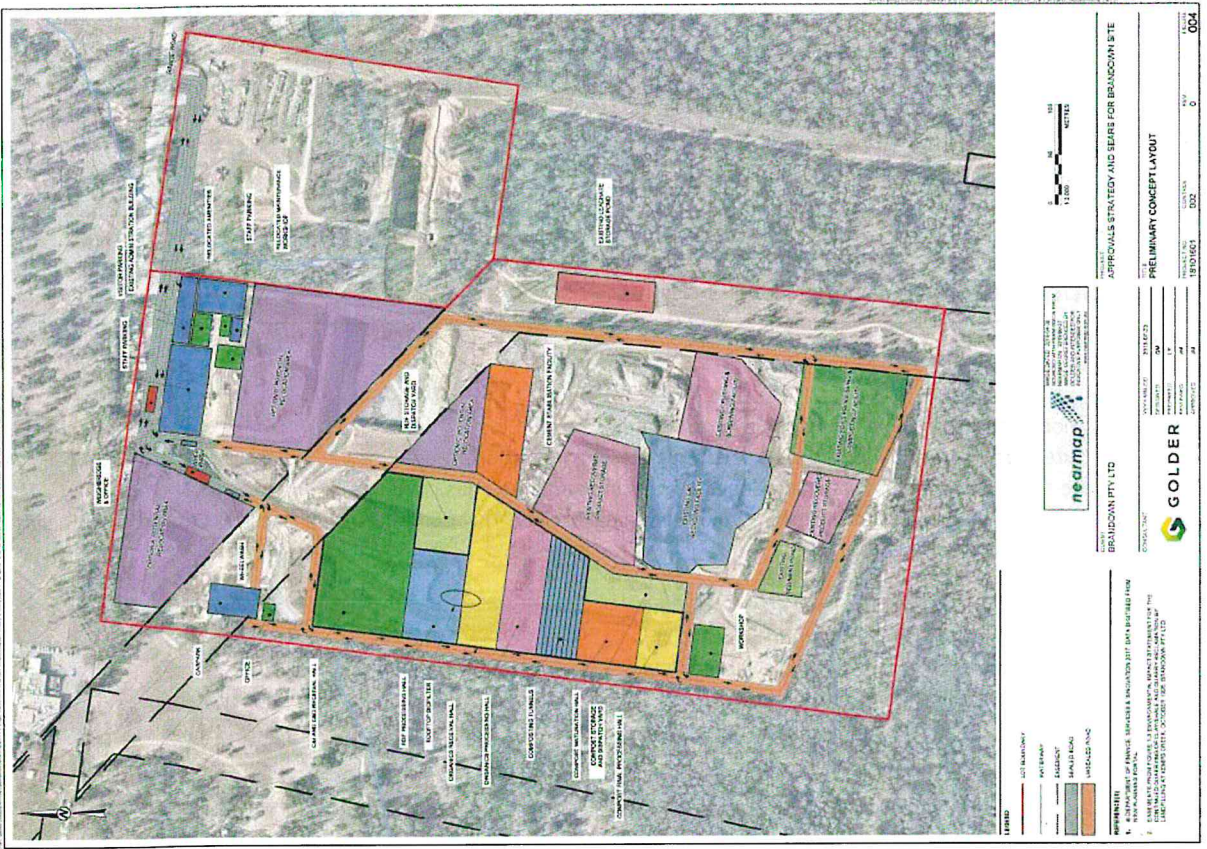
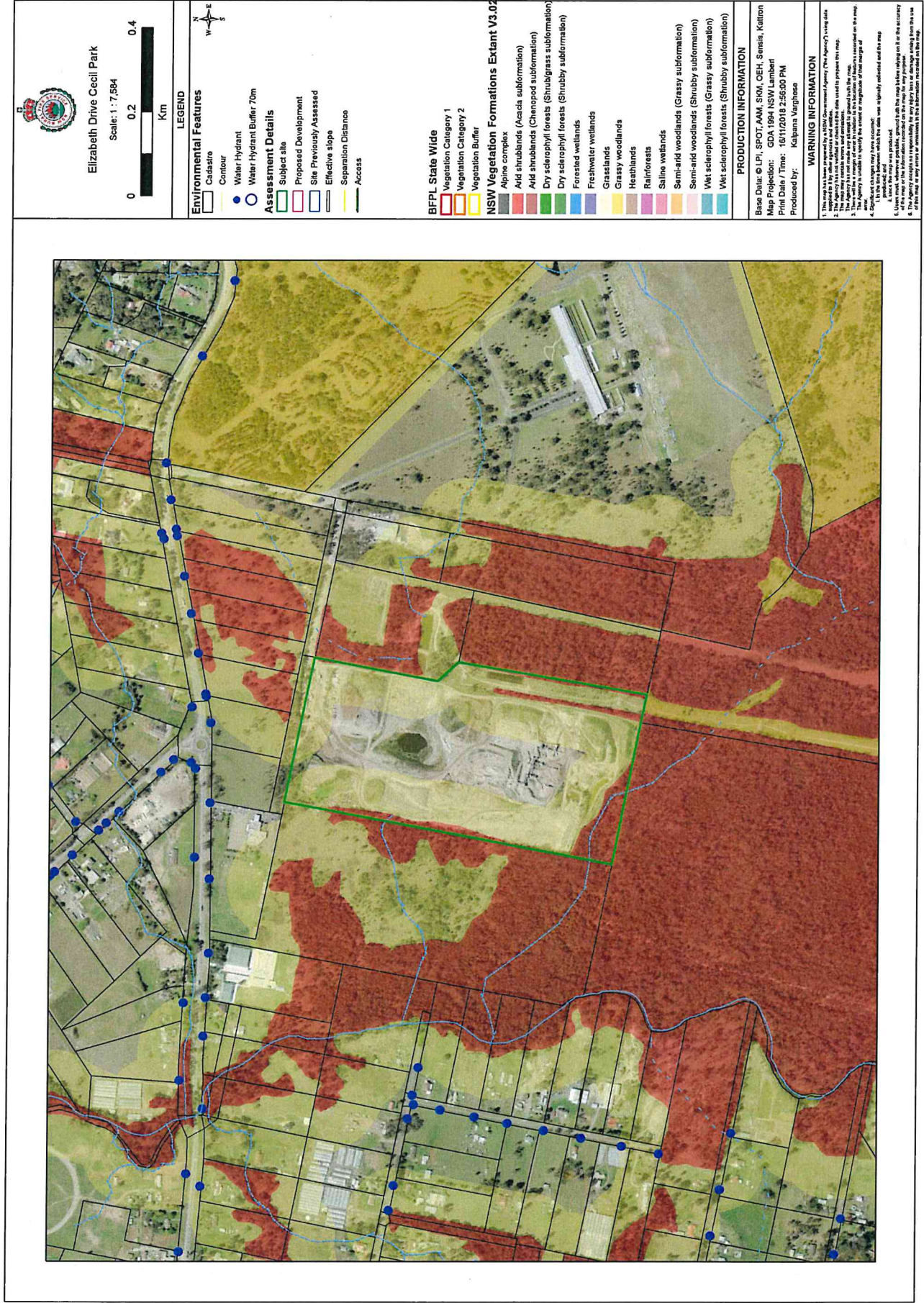


Figure 4: The Project Site Layout

# Assessment Map(s)





**From:** Easements&Development  
**To:** [Shaun Williams](#)  
**Subject:** HPE CM: 2018-535 Secretary's Environmental Assessment Requirements (SEARs) - Brandown Resource Recovery Facility - Lot 90 Elizabeth Drive, Kemps Creek - SSD 9540  
**Date:** Wednesday, 31 October 2018 9:24:13 AM

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Good Morning Shaun,

**TransGrid Number : 2018-535**

**Proposal: Secretary's Environmental Assessment Requirements (SEARs) -  
Brandown Resource Recovery Facility - Lot 90 Elizabeth Drive, Kemps Creek - SSD 9540**

Thank you for referring the above mentioned Development Application to TransGrid for review.

Please be advised after reviewing the proposed works at **Brandown Resource Recovery Facility - Lot 90 Elizabeth Drive, Kemps Creek - SSD 9540**

TransGrid has reviewed the proposal and advises:

- No comments for this project as the main concerns are already going to be addressed in the EIS phase.
- The project scope description should include all ancillary electricity transmission works (all works associated with connection to the National Electricity Market, such as ancillary substation works, transmission line works (direct and upstream), and telecommunications works) that would be necessary for the construction and operation of the Project.
- The EIS should identify all land parcels affected by these works and include them within the project boundary.

Regards

Michael

**Michael Platt**

*Development Assessment and Control Officer* | Network Planning and Operations

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**TransGrid** | 200 Old Wallgrove Road, Wallgrove, NSW, 2766

**T:** (02) 9620 0161 **M:** 0427 529 997

**E:** [Michael.Platt@transgrid.com.au](mailto:Michael.Platt@transgrid.com.au) **W:** [www.transgrid.com.au](http://www.transgrid.com.au)

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**From:** Fire Safety  
**To:** [Shaun Williams](#)  
**Subject:** HPE CM: Secretary's Environmental Assessment Requirements (SEARs) - Brandown Resource Recovery Facility - Lot 90 Elizabeth Drive, Kemps Creek - SSD 9540  
**Date:** Wednesday, 7 November 2018 3:25:34 PM  
**Attachments:** [image001.gif](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)  
[image005.png](#)  
[image006.png](#)

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Dear Shaun,

In regards to your email correspondence dated the 25th of October 2018, Fire & Rescue NSW confirms receipt of the SEARs report for Brandown Resource Recovery Facility - Lot 90 Elizabeth Drive, Kemps Creek - SSD 9540.

It has been the experience of FRNSW that waste recycling facilities pose unique challenges to firefighters when responding to and managing an incident. Factors such as high and potentially hazardous fuel loads, facility layout, and design of fire safety systems have a significant impact on the ability to conduct firefighting operations safely and effectively. Consultation with organisations such as FRNSW throughout the development process enables the design and implementation of more effective fire safety solutions that help to mitigate the impact of incidents when they occur.

Following a review of the SEARs report FRNSW notes the following:

- 4.2.3 Page 21 - that the development proposal is within the definition of a potentially hazardous or potentially offensive industry under SEPP 33
- 5.7 Page 26 - existing operations on the site involve the use and storage of hazardous and dangerous goods including diesel, LPG, oils, greases and hydraulic fluids
- 5.10 Page 26 – lot 91 of the site contains land classified as bushfire prone with surrounding buffer area in accordance with relevant mapping and the LEP. The EIS will address the potential for bushfire hazards to ensure that the project addresses any relevant requirements.

FRNSW requests the opportunity to review and comment on the forthcoming SEPP 33 screening assessment and EIS.

While there is currently no requirement for a fire safety study, FRNSW may request one be undertaken at a later stage should information be provided such it is deemed that the development poses unique challenges to the response to and management of an incident.

For any future correspondence regarding this matter, we request that you quote your job / reference number:

Project Reference: FRN18/2289

Job Number: BFS18/3136 (8000005285)

Should you have any further queries regarding this matter, please contact the Fire Safety Branch on 02 9742 7434.

Regards,

Fire & Rescue NSW



**Administration Officer**

FIRE SAFETY ADMINISTRATION UNIT  
COMMUNITY SAFETY DIRECTORATE

T: 02 9742 7434 [LinkedIn](#)

E: [firesafety@fire.nsw.gov.au](mailto:firesafety@fire.nsw.gov.au)

1 Amarina Ave, Greenacre, NSW 2190

Locked Mail Bag 12, Greenacre, NSW 2190

[www.fire.nsw.gov.au](http://www.fire.nsw.gov.au)



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