



Industry Assessments

Contact: Lawrence Huang

Phone: (02) 9228 6236

Fax: (02) 9228 6555

Email: Lawrence.Huang@planning.nsw.gov.au

Mr Guy Smith
Goodman Property Services (Aust) Pty Ltd
Level 17, 60 Castlereagh Street
SYDNEY NSW 2000

Our Ref: SSD 7491
File:16/02717

Dear Mr Smith

**State Significant Development - Secretary's Environmental Assessment Requirements
Proposed Dangerous Goods Storage Facility, Goodman – Oakdale Central, Horsley Park (SSD
7491)**

Please find attached the Secretary's Environmental Assessment Requirements (SEARs) for the proposed Dangerous Goods Facility at Oakdale Central, Horsley Park in the Fairfield LGA.

The SEARs have been prepared in consultation with the relevant government agencies as well as Fairfield, Blacktown and Penrith City Councils (see **Attachment 2**), and are based on the information you have provided to date. Unfortunately, Endeavour Energy and WaterNSW were unable to respond in time, and you must consult with them directly in relation to further requirements for the EIS. If the Department receives any comment from these agencies regarding these SEARs, they will be forwarded to you.

Please note that the Department may alter the SEARs at any time. You must consult further with the Department if you do not lodge a development application and EIS for the development within two years of the date of issue of these SEARs.

I wish to emphasise the importance of effective and genuine community consultation and the need for the proposal to proactively respond to the community's concerns. Accordingly, you must undertake a comprehensive, detailed and genuine community consultation and engagement process during the preparation of the EIS. This process must ensure that the community is informed of the development and engaged with issues of concern to them. Sufficient information must be provided to the community to enable a good understanding of the development and any potential impacts.

Your development may also require separate approval under the provisions of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). If an EPBC Act approval is required, please advise the Department accordingly, as the Commonwealth assessment process may be integrated into the NSW assessment process, and supplementary SEARs may need to be issued.

Please contact the Department at least two weeks before you intend lodge the EIS and any associated documentation for the development. This will enable the Department to determine the:

- applicable fee (under Division 1AA, Part 15 of the Environmental Planning and Assessment Regulation 2000); and
- consultation and public exhibition arrangements, including copies and format requirements of the EIS.

If you have any enquiries about these SEARs, please contact Lawrence Huang on the above details.

Yours sincerely


Chris Ritchie
Director
Industry Assessments
As the delegate of the Secretary

3/3/16.

Secretary's Environmental Assessment Requirements

Section 78A(8A) of the *Environmental Planning and Assessment Act 1979*

State Significant Development

Application Number	SSD 7491
Development	Construction of a Dangerous Goods Storage Facility with a gross floor area of approximately 36,880 m ² .
Location	Lot 3 Oakdale Central, Horsley Park (Lot 21 DP 1173181)
Applicant	Goodman Property Services (Aust) Pty Ltd
Date of Issue	March 2016
General Requirements	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 detailed description of the development, including: - the need for the proposed development; - justification for the proposed development; - likely staging of the development; - likely interactions between the development and existing, approved and proposed operations in the vicinity of the site; and - plans of any proposed building works. - consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments; - risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment; - detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes: - a description of the existing environment, using sufficient baseline data; - an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes; and - 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 - consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS. The EIS must also be accompanied by a report from a qualified quantity surveyor providing: - 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; - an estimate of the jobs that will be created by the development during the construction and operational phases of the development; and - certification that the information provided is accurate at the date of preparation.
Key issues	The EIS must address the following specific matters: Strategic and Statutory Context – including: - detailed justification for the proposal and the suitability of the site; and - demonstration that the proposal is generally consistent with all relevant planning strategies, environmental planning instruments and development control plans (DCPs) and justification for any

inconsistencies.

- **Hazards and Risks** including:
 - a Preliminary Hazardous Analysis (PHA) undertaken for the proposed development with consideration of the existing Oakdale Central site. The PHA shall be prepared in accordance with *Hazardous Industry Planning Advisory Paper No. 6 - Guidelines for Hazard Analysis*, and in particular:
 - identify the hazards associated with all the dangerous goods to be stored on-site and the proposed storage quantities;
 - demonstrate that the proposed development complies with the criteria set out in *Hazardous Industry Planning Advisory Paper No 4 - Risk Criteria for Land Use Safety Planning*; and
 - estimate the cumulative impacts from the overall site and the surrounding potentially hazardous developments in the area (if any) and demonstrate that the proposed development does not increase the cumulative risk of the area to unacceptable levels.
- **Traffic and Transport** – including:
 - a Traffic Impact Assessment detailing all daily and peak traffic and transport movements likely to be generated (vehicle, public transport, pedestrian and cycle trips) during construction and operation of the development, including a description of vehicle access routes and the impacts on nearby intersections;
 - details of access to the site from the road network including intersection location, design and sight distance;
 - an assessment of predicted impacts on road safety and the capacity of the road network to accommodate the development;
 - plans of any road upgrades or new roads required for the development if necessary;
 - detailed plans of the proposed layout of the internal road network and parking provision on-site in accordance with the relevant Australian Standards; and
 - 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.
- **Urban Design and Visual** – including:
 - layout of the development including staging, site coverage, setbacks, proposed open space and landscaped areas;
 - suitable landscaping incorporating endemic species;
 - the layout and design of the development having regard to the surrounding vehicular, pedestrian and cycling networks, if applicable;
 - a detailed assessment (including photomontages and perspectives) of the facility (buildings and storage areas) including height, colour, scale, bulk, building materials and architectural treatments and finishes, signage, lighting and any retaining walls particularly from nearby public receivers and significant vantage points within the broader public domain;
 - provision of a report that assesses compliance with the requirements of *AS4282-1997 – Control of the obtrusive effects of outdoor lighting*;
 - proposed cut and fill works associated with the development; and
 - measures to minimise the extent of cut and fill.
- **Noise and Vibration**– including:
 - a description of all potential noise and vibration sources such as construction, operational, on and off-site traffic noise;
 - a noise impact assessment that considers the cumulative noise impact of the proposed development in accordance with relevant Environment Protection Authority guidelines; and
 - details of noise mitigation, management and monitoring measures.
- **Soils and Water** – including:
 - a description of the water demands and a breakdown of water supplies;
 - a description of the measures to minimise water use;
 - a description of all wastewater generated on-site;
 - a description of the proposed erosion and sediment controls during

	construction and operation; - a description of the surface and stormwater management system, including on-site detention, and measures to treat or re-use water; - an assessment of potential surface and groundwater impacts associated with the development; and - details of impact mitigation, management and monitoring measures. • Air Quality and Odour – including: - a description of all potential odour sources and predicted odour emissions from the construction and operation of the facility; - details of air quality and odour impacts on private properties, in accordance with relevant Environment Protection Authority guidelines; and - details of mitigation, management and monitoring measures for preventing and/or minimising emissions. • Greenhouse Gas and Energy Efficiency – including an assessment of the energy use on site, and demonstrate what measures would be implemented to ensure the proposal is energy efficient. • Ecologically Sustainable Development – including an assessment of how the development will incorporate ecologically sustainable development principles in all phases of the development. • Waste – including: - details of the quantities and classification of all waste streams to be generated on site; - details of waste storage, handling and disposal; and - details of 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>. • Heritage – including: - consideration of the management and mitigation measures of the Aboriginal cultural heritage, historic heritage and archaeological assessments approved under SSD 6078; and - if the application is inconsistent with the management and mitigation measures outlined in the development consent for SSD 6078, any departures must be outlined and fully justified. • Infrastructure Requirements – including: - a detailed written and/or geographical description of the infrastructure required on the site; - identification of any infrastructure upgrades required off-site to facilitate the development, and describe any arrangements to ensure that the upgrades will be implemented in a timely manner and maintained; and - a detailed description of cooling/heating systems to be installed on-site. • Contributions – including: - consideration of Council's Section 94/94A Contribution Plan and/or details of any Voluntary Planning Agreement.
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. You should provide these as part of the EIS rather than as separate documents.
Consultation	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. In particular you must consult with: • Fairfield City Council; • Blacktown City Council; • Penrith City Council; • Office of Environment and Heritage; • Department of Primary Industries; • Transport for NSW; • Roads and Maritime Services; and • local residents and stakeholders. 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.
Further consultation after 2 years	If you do not lodge an EIS for the development within 2 years of the issue date of these SEARs, you must consult with the Secretary in relation to any further requirements for lodgement.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this development.

ATTACHMENT 1

Technical and Policy Guidelines

The following guidelines may assist in the preparation of the Environmental Impact Statement. This list is not exhaustive and not all of these guidelines may be relevant to your proposal.

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

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

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

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

Policies, Guidelines & Plans

Plans and Documents

The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents.

In addition, the EIS must include the following:

1. An existing site survey plan drawn at an appropriate scale illustrating:
 - the location of the land, boundary measurements, area (sqm) 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. Locality/context plan drawn at an appropriate scale should be submitted indicating:
 - significant local features such as heritage items;
 - the location and uses of existing buildings, shopping and employment areas; and
 - traffic and road patterns, pedestrian routes and public transport nodes.
3. 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 hard copy and 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.

Aspect

Policy / Methodology

State Environmental Planning Policy No. 33 Hazardous and Offensive Development

Hazardous and Offensive Development Application Guidelines Applying SEPP 33 Assessment Guideline Multi-level Risk Assessment

Hazardous Industry Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning

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

Hazardous Industry Planning Advisory Paper No. 10 – Land Use Safety Planning	
Transport and Access	
	State Environmental Planning Policy (Infrastructure)
	Guide to Traffic Generating Development (Roads and Maritime Service)
	Road Design Guide (Roads and Maritime Service)
	Austrroads Guide to Traffic Management – Pt 12: Traffic Impacts of Development
Noise and Vibration	
	Assessing Vibration: A Technical Guide (DEC, 2006).
	Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC, 1990).
	NSW Industrial Noise Policy (EPA, 2000).
	Environmental Criteria for Road Traffic Noise (EPA, 1999).
	Environmental Noise Control Manual (DECC).
	Interim Construction Noise Guideline (DECC, 2009).
	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)
	Bunding and Spill Management (EPA)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)
	The NSW State Rivers and Estuaries Policy (NSW Water Resources Council)
	Water Sharing Plan for the Metropolitan Region Unregulated River Water Sources (NOW) 2011
Soils and Water	
<i>Groundwater</i>	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	NSW State Groundwater Policy Framework Document (DLWC)
	NSW State Groundwater Quality Protection Policy (DLWC)
	The NSW State Groundwater Dependent Ecosystem Policy (DLWC)
	Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources (NOW) 2011
<i>Acid Sulfate Soils</i>	Acid Sulfate Soil Manual (ASSMAC)
<i>Erosion and Sediment</i>	Managing Urban Stormwater: Soils & Construction (Landcom)
	Design Manual for Soil Conservation Works - Technical Handbook No. 5 (Soil Conservation Service of NSW)
	Soil and Landscape Issues in Environmental Impact Assessment (DLWC)
	Wind Erosion – 2nd Edition
<i>Stormwater</i>	Managing Urban Stormwater: Strategic Framework. Draft (EPA)
	Managing Urban Stormwater: Council Handbook. Draft (EPA)
	Managing Urban Stormwater: Treatment Techniques (EPA)
	Managing Urban Stormwater: Source Control. Draft (EPA)
	Managing Urban Stormwater: Harvesting and Reuse (DEC)
<i>Wastewater</i>	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)
	National Water Quality Management Strategy - Guidelines For Water Recycling: Managing Health And Environmental Risks (Phase1) (EPHC, NRMCC & AHMC)

	National Water Quality Management Strategy - Guidelines For Water Recycling: Managing Health And Environmental Risks (Phase1) (EPHC, NRMMC & AHMC)
Air Quality	
	Protection of the Environment Operations (Clean Air) Regulation 2002
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)
Waste	
	Waste Avoidance and Resource Recovery Strategy 2014-21 (EPA)
	Waste Avoidance and Resource Recovery Performance Report 2006 (DECC)

ATTACHMENT 2

Government Authority and Council Responses to Request for Key Issues



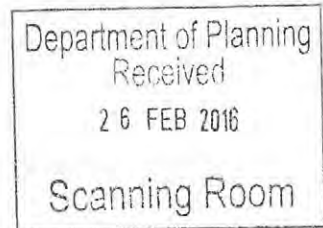
Your ref: SSD 7491
File no:

22 February 2016

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

Attention: Lawrence Huang

Dear Mr Huang,



**SSD 7491 Input into Draft Secretary's Environmental Assessment
Requirements for Proposed Dangerous Goods Facility, Oakdale Central,
Horsley Park, Fairfield LGA**

I refer to your correspondence dated 5 February 2016, requesting that Council provide input with regard to the draft Secretary's Environmental Assessment Requirements (SEARs) for the above proposal. Blacktown City Council appreciates the opportunity to provide comments on the key issues and assessment requirements for the proposal.

We have undertaken a preliminary review of the proposal and the draft SEARs, and request that the additional specific items are included as listed in **Attachment A** to this letter.

We also trust that all relevant owners and occupiers in Eastern Creek will be informed of this proposal, in particular the industrial properties north of the site.

If you would like to discuss this matter further, please contact me on 9839 6228.

Yours faithfully,

Judith Portelli

Manager Development Assessment

ATTACHMENT A

The following items are requested to be included in the draft SEARS:

1. Stormwater Management

It is recommended that stormwater management of the development should comply with requirements that are not lesser than those required in the Blacktown Development Control Plan 2015, Part J, in relation to any potential stormwater impacts on adjoining properties north of the site located in Blacktown LGA.

Stormwater detention should also be provided to ensure no adverse impacts on flooding conditions for the full range of 1 year to 100 year ARI.

2. Ecological Management

We note that this is a preliminary report to address the SEARS and inform the EIS, and note that more detailed analysis will come out in the EIS.

We see no major biodiversity issues with the development at this stage. Things to be considered include:

- Light spill from the development into the biodiversity lots;
- Landscaping (specifically species selection);
- Impact on water quality downstream.

3. Planning Matters

(a) The proponent should provide a Traffic Impact Assessment Report.

(b) The proponent should provide a Bushfire Risk Assessment Report.

(c) ***SEPP 33 Hazardous and Offensive Development***

In relation to managing both the storage and transportation of the dangerous goods, and the risks relating to contamination, spills and explosions, the relevant state and national agency requirements and guidelines shall be complied with.



OUT16/8874

Ms Kate MacDonald
Industry Assessments
NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Kate.Macdonald@planning.nsw.gov.au

Dear Ms MacDonald,

**Proposed Dangerous Goods Facility Warehouse, Oakdale Central (SSD7491)
Request for input into Secretary's Environmental Assessment Requirements**

I refer to your email dated 4 February 2016 to the Department of Primary Industries in respect to the above matter.

Comment has been sought from DPI Water, Fisheries, Agriculture & Lands. Any further referrals to DPI can be sent by email to landuse.enquiries@dpi.nsw.gov.au. DPI Fisheries has no issues. See following comments from DPI Water, Agriculture and Lands.

Comment by DPI Water

DPI Water has reviewed the supporting documentation accompanying the request for Secretary's Environmental Assessment Requirements (SEARs) and provides the following comments below, and further detail in **Attachment A**.

It is recommended that the EIS be required to include:

- Annual volumes of surface water and groundwater proposed to be taken by the activity (including through inflow and seepage) from each surface and groundwater source as defined by the relevant water sharing plan.
- Assessment of any volumetric water licensing requirements (including those for ongoing water take following completion of the project).
- The identification of an adequate and secure water supply for the life of the project. Confirmation that water can be sourced from an appropriately authorised and reliable supply. This is 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.
- Full technical details and data of all surface and groundwater modelling.
- Proposed surface and groundwater monitoring activities and methodologies.
- Assessment of any potential cumulative impacts on water resources, and any proposed options to manage the cumulative impacts.
- Consideration of relevant policies and guidelines.
- A statement of where each element of the SEARs is addressed in the EIS (i.e. in the form of a table).

For further information please contact John Galea, Water Regulation Officer 8838 7520.

Comment by DPI Agriculture

There are some horticultural establishments about 750m from the site. The EIS will should consider potential for reduced air quality for nearby agriculture production south-east of the site.

Comment by DPI Lands

The proponent must identify any Crown land affected by the proposal. Prior to preparation of the EIS it is recommended that the proponent undertake a Crown Land Status search available through Crown Lands.

For further information please contact Rebecca Johnson, Co-ordinator Client Services, (Newcastle Office) on 4920 5040 or at rebecca.johnson@lands.nsw.gov.au.

Yours sincerely



Mitchell Isaacs
Director, Planning Policy & Assessment Advice
18/2/2016

Attachment A

Proposed Dangerous Goods Facility Warehouse, Oakdale Central (SSD7491) Request for Input into Secretary's Environment Assessment Requirements DPI Water - General Assessment Requirements for general projects

The following detailed assessment requirements are provided to assist in adequately addressing the assessment requirements for this proposal.

For further information visit the DPI Water website, www.water.nsw.gov.au

Key Relevant Legislative Instruments

This section provides a basic summary to aid proponents in the development of an Environmental Impact Statement (EIS), and should not be considered a complete list or comprehensive summary of relevant legislative instruments that may apply to the regulation of water resources for a project.

The EIS should take into account the objects and regulatory requirements of the *Water Act 1912* (WA 1912) and *Water Management Act 2000* (WMA 2000), and associated regulations and instruments, as applicable.

Water Management Act 2000 (WMA 2000)

Key points:

- Volumetric licensing in areas covered by water sharing plans
- Works within 40m of waterfront land
- SSD & SSI projects are exempt from requiring water supply work approvals and controlled activity approvals as a result of the *Environmental Planning & Assessment Act 1979 (EP&A Act)*.
- No exemptions for volumetric licensing apply as a result of the *EP&A Act*.
- Basic landholder rights, including harvestable rights dams
- Aquifer interference activity approval and flood management work approval provisions have not yet commenced and are regulated by the *Water Act 1912*
- Maximum penalties of \$2.2 million plus \$264,000 for each day an offence continues apply under the *WMA 2000*

Water Act 1912 (WA 1912)

Key points:

- Volumetric licensing in areas where no water sharing plan applies
- Monitoring bores
- Aquifer interference activities that are not regulated as a water supply work under the *WMA 2000*.
- Flood management works
- No exemptions apply to licences or permits under the *WA 1912* as a result of the *EP&A Act*.
- Regulation of water bore driller licensing.

Water Management (General) Regulation 2011

Key points:

- Provides various exemptions for volumetric licensing and activity approvals
- Provides further detail on requirements for dealings and applications.

Water Sharing Plans – these are considered regulations under the *WMA 2000*

Access Licence Dealing Principles Order 2004

Harvestable Rights Orders

Water Sharing Plans

It is important that the proponent understands and describes the ground and surface water sharing plans, water sources, and management zones that apply to the project. The relevant water sharing plans can be determined spatially at www.ourwater.nsw.gov.au. Multiple water sharing plans may apply and these must all be described.

The *Water Act 1912* applies to all water sources not yet covered by a commenced water sharing plan.

The EIS is required to:

- Demonstrate how the proposal is consistent with the relevant rules of the Water Sharing Plan including rules for access licences, distance restrictions for water supply works and rules for the management of local impacts in respect of surface water and groundwater sources, ecosystem protection (including groundwater dependent ecosystems), water quality and surface-groundwater connectivity.
- Provide a description of any site water use (amount of water to be taken from each water source) and management including all sediment dams, clear water diversion structures with detail on the location, design specifications and storage capacities for all the existing and proposed water management structures.
- Provide an analysis of the proposed water supply arrangements against the rules for access licences and other applicable requirements of any relevant WSP, including:
 - o Sufficient market depth to acquire the necessary entitlements for each water source.
 - o Ability to carry out a “dealing” to transfer the water to relevant location under the rules of the WSP.
 - o Daily and long-term access rules.
 - o Account management and carryover provisions.
- Provide a detailed and consolidated site water balance.
- Further detail on licensing requirements is provided below.

Relevant Policies and Guidelines

The EIS should take into account the following policies (as applicable):

- NSW Guidelines for Controlled Activities on Waterfront Land (NOW, 2012)
- NSW Aquifer Interference Policy (NOW, 2012)
- Risk Assessment Guidelines for Groundwater Dependent Ecosystems (NOW, 2012)
- Australian Groundwater Modelling Guidelines (NWC, 2012)
- NSW State Rivers and Estuary Policy (1993)
- NSW Wetlands Policy (2010)
- NSW State Groundwater Policy Framework Document (1997)
- NSW State Groundwater Quality Protection Policy (1998)
- NSW State Groundwater Dependent Ecosystems Policy (2002)
- NSW Water Extraction Monitoring Policy (2007)

DPI Water policies can be accessed at the following links:

<http://www.water.nsw.gov.au/Water-management/Law-and-policy/Key-policies/default.aspx>

<http://www.water.nsw.gov.au/Water-licensing/Approvals/Controlled-activities/default.aspx>

An assessment framework for the NSW Aquifer Interference Policy can be found online at: <http://www.water.nsw.gov.au/Water-management/Law-and-policy/Key-policies/Aquifer-interference>.

Licensing Considerations

The EIS is required to provide:

- Identification of water requirements for the life of the project in terms of both volume and timing (including predictions of potential ongoing groundwater take following the cessation of operations at the site – such as evaporative loss from open voids or inflows).
- Details of the water supply source(s) for the proposal including any proposed surface water and groundwater extraction from each water source as defined in the relevant Water Sharing Plan/s and all water supply works to take water.
- Explanation of how the required water entitlements will be obtained (i.e. through a new or existing licence/s, trading on the water market, controlled allocations etc.).
- Information on the purpose, location, construction and expected annual extraction volumes including details on all existing and proposed water supply works which take surface water, (pumps, dams, diversions, etc).
- Details on all bores and excavations for the purpose of investigation, extraction, dewatering, testing and monitoring. All predicted groundwater take must be accounted for through adequate licensing.
- Details on existing dams/storages (including the date of construction, location, purpose, size and capacity) and any proposal to change the purpose of existing dams/storages

- Details on the location, purpose, size and capacity of any new proposed dams/storages.
- Applicability of any exemptions under the *Water Management (General) Regulation 2011* to the project.

Water allocation account management rules, total daily extraction limits and rules governing environmental protection and access licence dealings also need to be considered.

The Harvestable Right gives landholders the right to capture and use for any purpose 10% of the average annual runoff from their property. The Harvestable Right has been defined in terms of an equivalent dam capacity called the Maximum Harvestable Right Dam Capacity (MHRDC). The MHRDC is determined by the area of the property (in hectares) and a site-specific run-off factor. The MHRDC includes the capacity of all existing dams on the property that do not have a current water licence. Storages capturing up to the harvestable right capacity are not required to be licensed but any capacity of the total of all storages/dams on the property greater than the MHRDC may require a licence.

For more information on Harvestable Right dams, including a calculator, visit: <http://www.water.nsw.gov.au/Water-licensing/Basic-water-rights/Harvesting-runoff/Harvesting-runoff>

Dam Safety

Where new or modified dams are proposed, or where new development will occur below an existing dam, the NSW Dams Safety Committee should be consulted in relation to any safety issues that may arise. Conditions of approval may be recommended to ensure safety in relation to any new or existing dams.

See www.damsafety.nsw.gov.au for further information.

Surface Water Assessment

The predictive assessment of the impact of the proposed project on surface water sources should include the following:

- Identification of all surface water features including watercourses, wetlands and floodplains transected by or adjacent to the proposed project.
- Identification of all surface water sources as described by the relevant water sharing plan.
- Detailed description of dependent ecosystems and existing surface water users within the area, including basic landholder rights to water and adjacent/downstream licensed water users.
- Description of all works and surface infrastructure that will intercept, store, convey, or otherwise interact with surface water resources.
- Assessment of predicted impacts on the following:
 - flow of surface water, sediment movement, channel stability, and hydraulic regime,

- o water quality,
- o flood regime,
- o dependent ecosystems,
- o existing surface water users, and
- o planned environmental water and water sharing arrangements prescribed in the relevant water sharing plans.

Groundwater Assessment

To ensure the sustainable and integrated management of groundwater sources, the EIS needs to include adequate details to assess the impact of the project on all groundwater sources.

Where it is considered unlikely that groundwater will be intercepted or impacted (for example by infiltration), a brief site assessment and justification for the minimal impacts may be sufficient, accompanied by suitable contingency measures in place in the event that groundwater is intercepted, and appropriate measures to ensure that groundwater is not contaminated.

Where groundwater is expected to be intercepted or impacted, the following requirements should be used to assist the groundwater assessment for the proposal.

- The known or predicted highest groundwater table at the site.
- Works likely to intercept, connect with or infiltrate the groundwater sources.
- Any proposed groundwater extraction, including purpose, location and construction details of all proposed bores and expected annual extraction volumes.
- Bore construction information is to be supplied to DPI Water by submitting a “Form A” template. DPI Water will supply “GW” registration numbers (and licence/approval numbers if required) which must be used as consistent and unique bore identifiers for all future reporting.
- A description of the watertable and groundwater pressure configuration, flow directions and rates and physical and chemical characteristics of the groundwater source (including connectivity with other groundwater and surface water sources).
- Sufficient baseline monitoring for groundwater quantity and quality for all aquifers and GDEs to establish a baseline incorporating typical temporal and spatial variations.
- The predicted impacts of any final landform on the groundwater regime.
- The existing groundwater users within the area (including the environment), any potential impacts on these users and safeguard measures to mitigate impacts.
- An assessment of groundwater quality, its beneficial use classification and prediction of any impacts on groundwater quality.

- An assessment of the potential for groundwater contamination (considering both the impacts of the proposal on groundwater contamination and the impacts of contamination on the proposal).
- Measures proposed to protect groundwater quality, both in the short and long term.
- Measures for preventing groundwater pollution so that remediation is not required.
- Protective measures for any groundwater dependent ecosystems (GDEs).
- Proposed methods of the disposal of waste water and approval from the relevant authority.
- The results of any models or predictive tools used.

Where potential impact/s are identified the assessment will need to identify limits to the level of impact and contingency measures that would remediate, reduce or manage potential impacts to the existing groundwater resource and any dependent groundwater environment or water users, including information on:

- Any proposed monitoring programs, including water levels and quality data.
- Reporting procedures for any monitoring program including mechanism for transfer of information.
- An assessment of any groundwater source/aquifer that may be sterilised from future use as a water supply as a consequence of the proposal.
- Identification of any nominal thresholds as to the level of impact beyond which remedial measures or contingency plans would be initiated (this may entail water level triggers or a beneficial use category).
- Description of the remedial measures or contingency plans proposed.
- Any funding assurances covering the anticipated post development maintenance cost, for example on-going groundwater monitoring for the nominated period.

Groundwater Dependent Ecosystems

The EIS must consider the potential impacts on any Groundwater Dependent Ecosystems (GDEs) at the site and in the vicinity of the site and:

- Identify any potential impacts on GDEs as a result of the proposal including:
 - o the effect of the proposal on the recharge to groundwater systems;
 - o the potential to adversely affect the water quality of the underlying groundwater system and adjoining groundwater systems in hydraulic connections; and
 - o the effect on the function of GDEs (habitat, groundwater levels, connectivity).
- Provide safeguard measures for any GDEs.

Watercourses, Wetlands and Riparian Land

The EIS should address the potential impacts of the project on all watercourses likely to be affected by the project, existing riparian vegetation and the rehabilitation of riparian land. It is recommended the EIS provides details on all watercourses potentially affected by the proposal, including:

- Scaled plans showing the location of:
 - o wetlands/swamps, watercourses and top of bank;
 - o riparian corridor widths to be established along the creeks;
 - o existing riparian vegetation surrounding the watercourses (identify any areas to be protected and any riparian vegetation proposed to be removed);
 - o the site boundary, the footprint of the proposal in relation to the watercourses and riparian areas; and
 - o proposed location of any asset protection zones.
- Photographs of the watercourses/wetlands and a map showing the point from which the photos were taken.
- A detailed description of all potential impacts on the watercourses/riparian land.
- A detailed description of all potential impacts on the wetlands, including potential impacts to the wetlands hydrologic regime; groundwater recharge; habitat and any species that depend on the wetlands.
- A description of the design features and measures to be incorporated to mitigate potential impacts.
- Geomorphic and hydrological assessment of water courses including details of stream order (Strahler System), river style and energy regimes both in channel and on adjacent floodplains.

Landform rehabilitation

Where significant modification to landform is proposed, the EIS must include:

- Justification of the proposed final landform with regard to its impact on local and regional surface and groundwater systems;
- A detailed description of how the site would be progressively rehabilitated and integrated into the surrounding landscape;
- Outline of proposed construction and restoration of topography and surface drainage features if affected by the project; and
- An outline of the measures to be put in place to ensure that sufficient resources are available to implement the proposed rehabilitation.

Consultation and general enquiries

General licensing enquiries can be made to Advisory Services:

water.enquiries@dpi.nsw.gov.au, 1800 353 104.

Assessment or state significant development enquiries, or requests for review or consultation should be directed to the Strategic Stakeholder Liaison Unit, water.referrals@dpi.nsw.gov.au.

A consultation guideline and further information is available online at: www.water.nsw.gov.au/water-management/law-and-policy/planning-and-assessment

End Attachment A

Draft Secretary's Environmental Assessment Requirements	Fairfield City Council comments	Comment
• Traffic and Transport – including: – a Traffic Impact Assessment detailing all daily and peak traffic and transport movements likely to be generated (vehicle, public transport, pedestrian and cycle trips) during construction and operation of the development, including a description of vehicle access routes and the impacts on nearby intersections; – details of access to the site from the road network including intersection location, design and sight distance; – an assessment of predicted impacts on road safety and the capacity of the road network to accommodate the development; – plans of any road upgrades or new roads required for the development if necessary; – detailed plans of the proposed layout of the internal road network and parking provision on-site in accordance with the relevant Australian Standards; and – 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.	• Details of all traffic and transport types and volumes likely to be generated during construction and operation, including a description of haul routes. • A traffic impact assessment of predicted impacts of traffic generation on the safety and capacity of the surrounding road network and access points, using current traffic counts and modelling of nearby intersections. • details of the proposed site access, including detailed consideration of access options, justification for the proposed locations of main access points, and compliance with Australian Standards. •	Consider suggested <i>amendment</i>: – a Traffic Impact Assessment detailing: – <i>all daily and peak traffic and transport movements likely to be generated (vehicle, public transport, pedestrian and cycle trips) during construction and operation of the development, including a description of heavy vehicle access/hauling routes;</i> – <i>predicted impacts of traffic generation on the safety and capacity of the surrounding road network, intersections and access points, using current traffic counts and modelling of nearby intersections.</i> – details of access to the site from the road network including <i>detailed consideration of access options</i>, intersection location, design and sight distance <i>and compliance with Australian Standards.</i>
• Hazards and Risks including: – a Preliminary Hazard Analysis (PHA)	– Under the 'Hazards and risks' heading, there is reference to a Preliminary Hazard Analysis	Note comment.

SSD 7491

Construction of a Dangerous Goods Facility to warehouse and distribute Dangerous Goods - Lot 3 Oakdale Central, Horsley Park
 Comments to DP&E from Fairfield City Council regarding draft SEARs
 February 2016

Draft Secretary's Environmental Assessment Requirements	Fairfield City Council comments	Comment
must be prepared in accordance with <i>Hazardous Industry Planning Advisory Paper No. 6 - Guidelines for Hazard Analysis</i> (DoP, 2011), and <i>Multi-Level Risk Assessment</i> (DoP, 2011). The PHA must: - provide details of all hazardous materials stored or handled on the premises; - identify the hazards associated with materials that will be stored or handled at the proposed development. Any safety measures to be implemented should also be clearly identified; - estimate the risks from the proposed development; - demonstrate that the potential offsite risk from the proposed development comply with the criteria set out in <i>Hazardous Industry Planning Advisory Paper No 4 - Risk Criteria for Land Use Safety Planning</i>; and - an evaluation of the impacts of the transport of dangerous goods to and from the site in the surrounding area.	(PHA) being prepared. As a PHA has previously been prepared, presented and assessed, a further PHA is unnecessary unless the volumes of materials referred to in the previous report has changed. In this case, a statement to that effect will be adequate.	
• Noise and Vibration– including: - a description of all potential noise and	– Under the 'Noise' heading, there is no requirement for a post development report.	Consider suggested <i>amendment</i>:

09/03134 A1665233

Draft Secretary's Environmental Assessment Requirements	Fairfield City Council comments	Comment
vibration sources such as construction, operational, on and off-site traffic noise; - a noise impact assessment including a cumulative noise impact assessment in accordance with relevant Environment Protection Authority guidelines; and - details of noise mitigation, management and monitoring measures.		- details of noise mitigation, management and monitoring measures <i>that would form a post development Noise Impact Assessment Report.</i>
• Soils and Water – including: - a description of the water demands and a breakdown of water supplies; - a description of the measures to minimise water use; - a detailed water balance; - a description of all wastewater generated on-site; - a description of the proposed erosion and sediment controls during construction and operation; - a description of the surface and stormwater management system, including on site detention, and measures to treat or reuse water; - an assessment of potential surface and groundwater impacts associated with the development; and - details of impact mitigation, management and monitoring measures.	• Under the 'Soil and water' heading, there is no reference to: • A Sediment and Erosion Control Plan; or, • A storm water isolation valve for the operational site.	Consider suggested <i>amendment</i>: - a description of the proposed erosion and sediment controls during construction and operation <i>that would form a Sediment and Erosion Control Plan</i>; - a description of the surface and stormwater management system, including on site detention, <i>storm water isolation valve for the operational site</i> and measures to treat or reuse water

Draft Secretary's Environmental Assessment Requirements	Fairfield City Council comments	Comment
• Air Quality and Odour – including: – a description of all potential odour sources and predicted odour emissions from the construction and operation of the facility; – details of air quality and odour impacts on private properties, in accordance with relevant Environment Protection Authority guidelines; and – details of mitigation, management and monitoring measures for preventing and/or minimising emissions.	• Under the 'Air quality' heading, there is reference to controlling dust during construction. This should be included in the Sediment and Erosion Control Plan.	Consider suggested <i>amendment</i>: details of air quality and odour impacts on private properties, <i>that includes the controlling of dust during construction that would form part of the Sediment and Erosion Control Plan</i>, in accordance with relevant Environment Protection Authority guidelines;
• Waste – including: – details of the quantities and classification of all waste streams to be generated on site; – details of waste storage, handling and disposal; and – details of 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>.	• Under the 'Waste' heading, there is Plan of Management to cover operational waste. No waste storage area is shown on plans provided. Further details on waste management/storage should be sought.	Consider suggested <i>amendment</i>: – details of waste storage, handling and disposal <i>including the location of waste storage and management facilities</i> ; and
• Urban Design & Visual – including: – layout of the development including staging, site coverage, setbacks, proposed open space and landscaped areas; – suitable landscaping incorporating	• Under the 'Visual amenity' heading, there no reference to the intrusive impacts of on-site lighting. This can be addressed by the preparation of an intrusive lighting report.	Consider suggested <i>amendment</i>: – a detailed assessment (including photomontages and perspectives) of the facility (buildings and storage areas) including height, colour, scale, bulk,

SSD 7491

Construction of a Dangerous Goods Facility to warehouse and distribute Dangerous Goods - Lot 3 Oakdale Central, Horsley Park

Comments to DP&E from Fairfield City Council regarding draft SEARs

February 2016

Draft Secretary's Environmental Assessment Requirements	Fairfield City Council comments	Comment
- endemic species; – the layout and design of the development having regard to the surrounding vehicular, pedestrian and cycling networks, if applicable; – a detailed assessment (including photomontages and perspectives) of the facility (buildings and storage areas) including height, colour, scale, bulk, building materials and architectural treatments and finishes, signage, lighting and any retaining walls particularly from nearby public receivers and significant vantage points within the broader public domain; – proposed cut and fill works associated with the development; and – measures to minimise the extent of cut and fill.		building materials and architectural treatments and finishes, signage, lighting and any retaining walls particularly from nearby public receivers and significant vantage points within the broader public domain; – <i>details of on-site lighting and any significant potential intrusive impacts that would require the preparation of an intrusive lighting report</i>

09/03134 A1665233

10th February 2016

Lawrence Huang
Student Planner
Industry Assessments
Department of Planning & Environment
GPO Box 39
Sydney NSW 2001

Your Reference: SSD7491
Our Reference: OUT16/5988

Emailed: Lawrence.Huang@planning.nsw.gov.au

Dear Mr Huang

**Re: Request for SEARs – SSD 7491 – Proposed Dangerous Goods Facility,
Oakdale Central, Horsley Park – Fairfield LGA.**

I refer to your letter of 4th February requesting advice on issues concerning the preparation of Secretary's Environmental Assessment Requirements for the above project. Thank you for the opportunity to provide advice on the above matter. This is a response from the NSW Department of Industry – Geological Survey of NSW (GSNSW). The Department of Primary Industries (incorporating advice from Agriculture and Fisheries) and the Forestry Corporation of NSW may respond separately.

Mineral Resources Requirements

Identification and assessment of impacts on other land users is required as a critical component of the Environmental Assessment (EA) process. Specifically, the EA must consider the potential for the project to impact upon any significant mineral resources, including metallic minerals, industrial and extractive minerals, petroleum, gas and coal resources. A significant aspect of mineral resource evaluation and development in regards to land use planning is that the locations of mineable deposits cannot always be predicted. This makes it imperative that known resources are protected from sterilisation by inappropriate zoning or development, and that access to land for mineral exploration should be maintained over as much of the project area as possible.

As such, the GSNSW requires the proponent to conduct an assessment as part of the EA, regarding the potential impacts of the project on any significant mineral resources, including:

- **Any operating mines, extractive industries or known mineral or petroleum resources.**
- **Exploration activities in the vicinity of the proposed development.**
- **Access for future exploration in the area.**

Specific Issues

GSNSW recently completed a Statewide Mineral Resource Audit (MRA) which includes Mining Lease (ML) 1636 held by CSR Building Products (associated with PGH Horsley Park Brickworks) extracting structural clay for brick manufacturing. ML1636 is positioned around 300m south-east from the subject site (**Figure 1**). The titleholder should be consulted regarding any potential impacts associated with the proposed development, with a record of consultation included in the EIS.

The proposed development is also located within the transition area for ML1636 (Figure 1). Transition areas are an indicative area surrounding an identified resource (or operating mine or quarry). They indicate an area that may possibly be impacted by potential activities associated with mining or quarrying operations such as noise, vibration, dust, traffic etc.

The Austral Horsley Park Brick Plant (also included the MRA) is located around 700m east from the proposed development (Figure 1). GSNSW recommends consultation with the operator regarding the proposed development, with a record of consultation included in the EIS.

Geoscience Information Services

The GSNSW has a range of online data available on line through the following website address:

<http://www.resources.nsw.gov.au/titles/online-services>

This site hosts a range of data to enable research into exploration, land use and general geoscience topics. Additionally, the location of exploration and mining titles in NSW may be accessed by the general public using the following online utilities:

1. **NSW Titles** enables the public to access and view frequently updated titles mapping information across NSW. This online service is available at:
<http://nswtitles.minerals.nsw.gov.au/nswtitles/>
2. **MinView** allows on-line interactive display and query of exploration tenement information and geoscience data. It allows spatial selection, display and download of geological coverages, mineral deposits and mine locations, geophysical survey boundaries, drillhole locations, historical and current exploration title boundaries and other spatial datasets of New South Wales. This online service is available at:
<http://www.resources.nsw.gov.au/geological/online-services/minview>

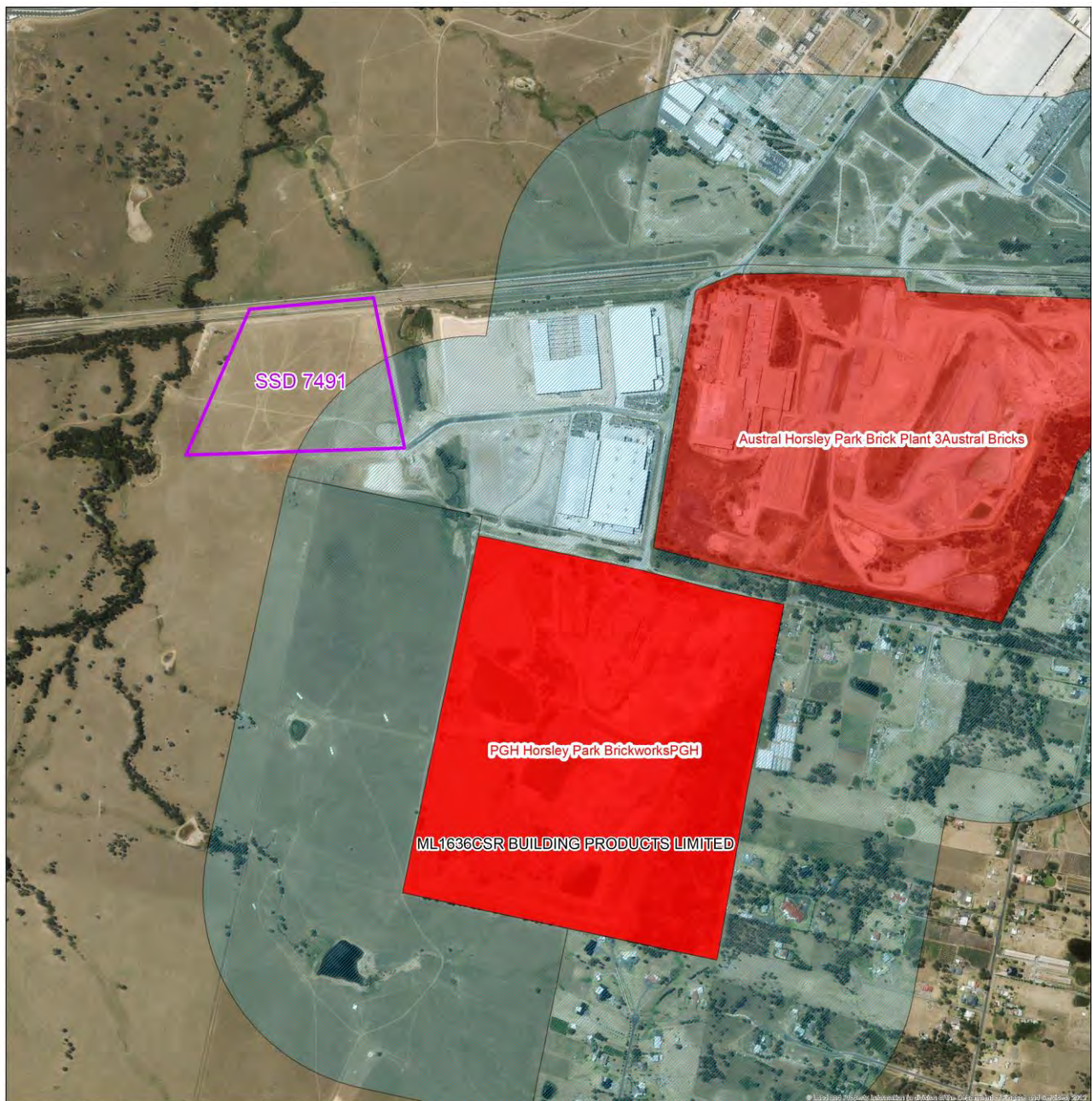
Queries regarding the above information, and future requests for advice in relation to this matter, should be directed to the GSNSW Land Use team at landuse.minerals@industry.nsw.gov.au.

Yours sincerely



Cressida Gilmore
Team Leader - Land Use

Figure 1 – Identified resources located near SSD 7491



© State of New South Wales through NSW Department of Industry, Skills & Regional Development 2015.
You must obtain permission from the Department to copy, distribute, display or store in electronic form, any part of this publication, except as permitted under the Copyright Act 1968 (Cth).

DISCLAIMER
The information in these materials is protected by copyright, and is confidential until the time that Department of Planning & Environment publishes that information. The recipient is not permitted to use, disclose or reproduce the information in these materials except for land use and planning purposes. Any unauthorised use, copying or reproduction without obtaining the relevant permissions from the Department will constitute an infringement of copyright. The information contained in this publication is based on knowledge and understanding at time of writing (February 2016). The Department excludes all liability for the accuracy or completeness of the information, or for any injury, loss, or damage whatsoever (including without limitation liability for negligence and consequential losses) suffered by any person acting, or purporting to act, in reliance upon anything contained herein. Users rely on and use this information at their own risk. This information has been prepared by NSW Department of Industry, Skills & Regional Development and the State of New South Wales (Department) to provide information to local councils about the location and status of State and Regionally significant mineral, energy and extractive resources as part of its legislative obligations under 117(2) of the Environmental Planning and Assessment Act 1979.



**Department
of Industry**
Resources & Energy



Legend

Horsley_Park_Oakdale_Central_SSD_7491

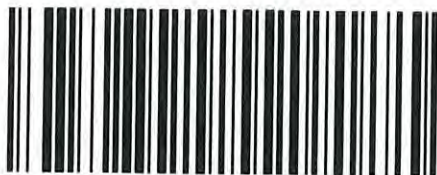
Current Mineral Titles

NSW Mineral Resource Audit

Notification Type

Identified Resource

Transition Area

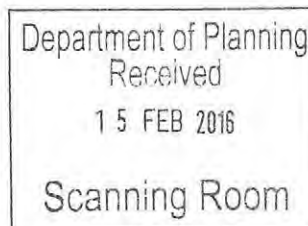


PCU064091



Department of Planning
Sydney NSW 2001

Attention: Lawrence Huang



Notice Number 1537801
File Number EF13/4640
Date 10-Feb-2016

**RE: Request for SEARs for Proposed Dangerous Good Facility, SSD 7491,
Warehouse 3B Oakdale Central, Hurlsey Park, Fairfield LGA**

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 4th February 2016.

The EPA has considered the details of the proposal as provided by DPE and has identified 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 impacts (notably dust);
2. Noise impacts;
3. Storm water management; and
4. Waste management.

In carrying out the assessment, the proponent should refer to the relevant guidelines as listed in Attachment B 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 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.

Yours sincerely



A handwritten signature in black ink, appearing to read 'D. Gathercole', written over a dotted line.

David Gathercole

Unit Head

Metropolitan - Sydney Industry

(by Delegation)

ATTACHMENT A: EIS REQUIREMENTS FOR Proposed Dangerous Goods Facility SSD 7491

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

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

B The proposal

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.

Air

- Identify all sources of air emissions from the development.

Note: emissions can be classed as either:

- *point (eg 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 (eg 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 for significant air impacts.

Noise and vibration

- Identify all noise 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:
 - a) including 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 eg 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 *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-liquid Wastes* (NSW EPA, 2014).
- 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: *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes* (NSW EPA, 2014).

ESD

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

1. General

- Provide an overview of the affected environment to place the proposal in its local and regional environmental context including:
 - a) meteorological data (eg 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
 - c) wind speed and direction
 - d) atmospheric stability class
 - e) mixing height (the height that emissions will be ultimately mixed in the atmosphere)
 - f) katabatic air drainage
 - g) 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

- 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 (eg 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

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 eg 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.

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 (eg 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 DECCW.
- 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 / DECCW 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 *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (DEC, 2001); *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); and *Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW* (DEC, 2006).

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 in accordance with the *NSW Industrial Noise Policy*.
- Determine the existing road traffic noise levels in accordance with the *NSW Environmental Criteria for Road Traffic Noise*, 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, including the procedure used to choose the site, having regards to the definition of 'noise sensitive locations(s)' and 'most affected locations(s)' described in Section 3.1.2 of the *NSW Industrial Noise Policy*
 - 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 under Step 1 in Section B1.3 of the *NSW Industrial Noise Policy*
 - j) determination of LAeq noise levels from existing industry.

Assess impacts

- Determine the project specific noise levels for the site. For each identified potentially affected receiver, this should include:
 - a) determination of the intrusive criterion 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 amenity criterion for each receiver
 - d) determination of the appropriate sleep disturbance limit.

- Maximum noise levels during night-time period (10pm-7am) should be assessed to analyse possible affects on sleep. Where LA1(1min) noise levels from the site are less than 15 dB above the background LA90 noise level, sleep disturbance impacts are unlikely. Where this is not the case, further analysis is required. Additional guidance is provided in Appendix B of the *NSW Environmental Criteria for Road Traffic Noise*.
- Determine expected noise level and noise character (eg tonality, impulsiveness, vibration, etc) 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 most sensitive locations (these may vary for different activities at each phase of the development). Potential impacts should be determined for any identified significant adverse meteorological conditions. Predicted noise levels under calm conditions may also aid in quantifying the extent of impact where this is not the most adverse condition.
- 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. Where modelling approaches other than the use of the ENM or SoundPlan computer models are adopted, the approach should be appropriately justified and validated
 - e) an assessment of appropriate weather conditions for the noise predictions including reference to any weather data used to justify the assumed conditions
 - f) the predicted noise impacts from each noise source as well as the combined noise level for each prediction scenario under any identified significant adverse weather conditions as well as calm conditions where appropriate
 - 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 Section 4 of the *NSW Industrial Noise Policy*.
- Discuss the findings from the predictive modelling and, where relevant noise criteria have not been met, recommend additional 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.

- Where relevant noise/vibration criteria cannot be met after application of all feasible and cost effective mitigation measures the residual level of noise impact needs to be quantified by identifying:
 - a) locations where the noise level exceeds the criteria and extent of exceedence
 - b) numbers of people (or areas) affected
 - c) times when criteria will be exceeded
 - d) likely impact on activities (speech, sleep, relaxation, listening, etc)
 - e) change on ambient conditions
 - f) the result of any community consultation or negotiated agreement.
- 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.
- Where blasting is intended an assessment in accordance with the *Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration* (ANZECC, 1990) should be undertaken. The following details of the blast design should be included in the noise assessment:
 - a) bench height, burden spacing, spacing burden ratio
 - b) blast hole diameter, inclination and spacing
 - c) type of explosive, maximum instantaneous charge, initiation, blast block size, blast frequency.

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 breaks
 - 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 the technical guidelines section 'Bunding and Spill Management' of the *Authorised Officers Manual* (EPA, 1995) (<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 *Managing Urban Stormwater: Soils and Construction* (DECC, 2008), *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 (eg 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 *Contaminated Sites – Guidelines for Consultants Reporting on Contaminated Sites* (OEH, 2011); *Contaminated Sites – Guidelines on Significant Risk of Harm from Contaminated Land and the Duty to Report* (EPA, 2003).

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 *Assessing and Managing Acid Sulfate Soils*, Environment Protection Authority, 1995 (note that this is the only methodology accepted by the EPA).

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 *Waste Classification Guidelines* (EPA, Nov 2014).

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 (eg 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 (eg travel demand management strategies).

H. Justification for the Proposal

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

ATTACHMENT B: GUIDANCE MATERIAL

Title	Web address
Relevant Legislation	
<i>Contaminated Land Management Act 1997</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+140+1997+cd+0+N
<i>Environmentally Hazardous Chemicals Act 1985</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+14+1985+cd+0+N
<i>Environmental Planning and Assessment Act 1979</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
<i>Protection of the Environment Operations Act 1997</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
<i>Water Management Act 2000</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
Licensing	
Guide to Licensing	www.epa.nsw.gov.au/licensing/licenceguide.htm
Air Issues	
Air Quality	
Approved methods for modelling and assessment of air pollutants in NSW (2005)	http://www.epa.nsw.gov.au/resources/air/ammodelling05361.pdf
POEO (Clean Air) Regulation 2010	http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+428+2010+cd+0+N
Noise and Vibration	
Interim Construction Noise Guideline (DECC, 2009)	http://www.epa.nsw.gov.au/noise/constructnoise.htm
Assessing Vibration: a technical guideline (DEC, 2006)	http://www.epa.nsw.gov.au/noise/vibrationguide.htm
Industrial Noise Policy Application Notes	http://www.epa.nsw.gov.au/noise/applicnotesindustnoise.htm
Environmental Criteria for Road Traffic Noise (EPA, 1999)	http://www.epa.nsw.gov.au/resources/noise/roadnoise.pdf
Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects (DECC, 2007)	http://www.epa.nsw.gov.au/noise/railinfranoise.htm
Environmental assessment requirements for rail traffic-generating developments	http://www.epa.nsw.gov.au/noise/railnoise.htm

Waste, Chemicals and Hazardous Materials and Radiation	
Waste	
Environmental Guidelines: Solid Waste Landfills (EPA, 1996)	http://www.epa.nsw.gov.au/resources/waste/envguidlns/solidlandfill.pdf
Draft Environmental Guidelines - Industrial Waste Landfilling (April 1998)	http://www.epa.nsw.gov.au/resources/waste/envguidlns/industrialfill.pdf
Waste Classification Guidelines (EPA, 2014)	http://www.epa.nsw.gov.au/waste/envguidlns/index.htm
Resource recovery exemption	http://www.epa.nsw.gov.au/waste/RRecoveryExemptions.htm
Chemicals subject to Chemical Control Orders	
Chemical Control Orders (regulated through the EHC Act)	http://www.epa.nsw.gov.au/pesticides/CCOs.htm
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
Water and Soils	
Acid sulphate soils	
Coastal acid sulfate soils guidance material	http://www.environment.nsw.gov.au/acidsulfatesoil/
Acid Sulfate Soils Planning Maps	http://www.environment.nsw.gov.au/acidsulfatesoil/riskmaps.htm
Contaminated Sites Assessment and Remediation	
Managing land contamination: Planning Guidelines – SEPP 55 Remediation of Land	http://www.planning.nsw.gov.au/assessingdev/pdf/gu_contam.pdf
Guidelines for Consultants Reporting on Contaminated Sites (EPA, 2000)	http://www.epa.nsw.gov.au/resources/clm/20110650consultantsguidelines.pdf
Guidelines for the NSW Site Auditor Scheme - 2nd edition (DEC, 2006)	http://www.epa.nsw.gov.au/resources/clm/auditorguidelines06121.pdf
Sampling Design Guidelines (EPA, 1995)	Available by request from EPA's Environment Line

National Environment Protection (Assessment of Site Contamination) Measure 1999 (or update)	http://www.scew.gov.au/nepms/assessment-site-contamination
Soils – general	
Managing land and soil	http://www.environment.nsw.gov.au/soils/landandsoil.htm
Managing urban stormwater for the protection of soils	http://www.environment.nsw.gov.au/stormwater/publications.htm
Landslide risk management guidelines	http://www.australiangeomechanics.org/resources/downloads/
Site Investigations for Urban Salinity (DLWC, 2002)	http://www.environment.nsw.gov.au/resources/salinity/booklet3siteinvestigationsforurbansalinity.pdf
Local Government Salinity Initiative Booklets	http://www.environment.nsw.gov.au/salinity/solutions/urban.htm
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	http://www.environment.gov.au/water/publications/quality/nwgms-guidelines-4-vol1.html
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)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf



3 Marist Place
Parramatta NSW 2150

Locked Bag 5020
Parramatta NSW 2124
DX 8225 PARRAMATTA

Telephone: 61 2 9873 8500
Facsimile: 61 2 9873 8599

heritage@heritage.nsw.gov.au
www.heritage.nsw.gov.au

Job ID: DOC15/319516
File: SF15/35622
Your ref: SSD 7491

Ms Kate MacDonald
Team Leader
Industry Assessments
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Lawrence Huang <by email to Lawrence.Huang@planning.nsw.gov.au>

Dear Ms MacDonald

RE: Request for SEARs for Proposed Dangerous Goods Facility, Warehouse 3B, Oakdale Central, Horsley Park (State Significant Development SSD 7491)

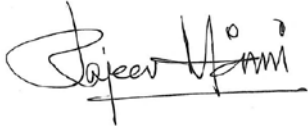
I refer to your email dated 11 February 2015, seeking the Heritage Council of NSW input into the Secretary's Environmental Assessment Requirements (SEARs) for the above described SSD. A search of the Heritage Division database has found there are no record of any State Heritage Register items within the SSD site. However, it should be noted that Horsley Complex (SHR 00030) is located approximately 2km from the SSD site.

As delegate of the Heritage Council of NSW, I recommend that the following requirements should be included in the SEARs:

- The Environmental Impact Statement (EIS) should identify if there are any listed or potential heritage items within or in the vicinity of the proposed project area. If any listed or potential heritage items are likely to be affected, a Heritage Impact Assessment (HIA) must be prepared by a suitably qualified and experienced heritage consultant as part of the EIS. The HIA should assess how the development would impact on any places of heritage significance in or surrounding the SSD site.
- A historical archaeological assessment should be prepared by a suitably qualified historical archaeologist in accordance with the Heritage Division, Office of Environment and Heritage Guidelines 'Assessing Significance for Historical Archaeological Sites and 'Relics' 2009. This assessment should identify what relics, if any, are likely to be present, assess their significance and consider the impacts from the proposal on this potential resource. Where harm is likely to occur, it is recommended that the significance of the relics be considered in determining an appropriate mitigation strategy. In the event that harm cannot be avoided in whole or part, an appropriate Research Design and Excavation Methodology should also be prepared to guide any proposed excavations.
- The proposal should have regard to any impacts on places, items or relics of significance to Aboriginal people. Where it is likely that the project will impact on Aboriginal heritage, adequate community consultation should take place regarding the assessment of significance, likely impacts and management/mitigation measures.

If you have any questions regarding the above matter please contact Nina Pollock, Heritage Assets Officer at the Heritage Division, Office of Environment and Heritage, on (02) 9873 8520 or by email at nina.pollock@environment.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Rajeev Maini', with a horizontal line drawn underneath.

RAJEEV MAINI

Acting Manager, Conservation

Heritage Division

Office of Environment & Heritage

As Delegate of the Heritage Council of NSW

18 February 2016

Lawrence Huang

From: Dana Alderson
Sent: Thursday, 11 February 2016 9:34 AM
To: Lawrence Huang
Subject: Re: Request for Secretary's Environmental Assessment Requirements - SSD 7491 - Proposed Dangerous Goods Facility, Oakdale Central, Horsley Park, Fairfield LGA

Dear Lawrence,

Thank you for your email dated 4 February 2016 to the Office of Environment and Heritage (OEH) requesting our input into the SEARs for the Proposed Dangerous Goods Facility, Oakdale Central, Horsley Park (SSD 7491).

After reviewing the relevant documents, OEH's Greater Sydney Planning Team has concluded that the matter does not contain biodiversity, natural hazards and Aboriginal Cultural Heritage issues that require a formal OEH response. We have no need to be further involved in the assessment of the project.

Please note that the Heritage Division in the Office of Environment and Heritage may wish to provide separate comments. The Heritage Division can be contacted at heritage@heritage.nsw.gov.au.

Kind regards,
Dana

Dana Alderson
Conservation Planning Officer
Regional Operations Group
Office of Environment and Heritage
T: 02 8837 6304
F: 02 9995 6900
W: www.environment.nsw.gov.au

Please note my work days are Wed-Fri



Please consider the environment before printing this e-mail

From: Lawrence Huang
Sent: Thursday, 4 February 2016 12:38 PM
To: Planning Matters Mailbox
Subject: Request for Secretary's Environmental Assessment Requirements - SSD 7491 - Proposed Dangerous Goods Facility, Oakdale Central, Horsley Park, Fairfield LGA

Good Afternoon

The Department has received a request for SEARs lodged by Willowtree Planning on behalf of Goodman Property Services (Aust) Pty Ltd. The proposal is for the construction of a Dangerous Goods Facility on Lot 3 Oakdale Central, Horsley Park in the Fairfield Local Government Area.

The proposed Dangerous Goods Facility will be used to warehouse and distribute Dangerous Goods and will have a gross floor area of 36,880 sqm.

The proposal is State Significant Development under section 89C of the *Environmental Planning and Assessment Act 1979*. The Minister for Planning is the consent authority.

It would be appreciated if you could provide input to the SEARs for the proposal. Under clause 3 Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*, the Department must provide SEARs to the applicant within 28 days of receiving the request.

Please find attached the documentation received in the SEARs request to assist in providing comment. A draft version of the Department's SEARs have also been attached for your comments.

I therefore request that you review the enclosed information and provide details of any key issues and assessment requirements by **Thursday 18 February 2016**.

Kind Regards

Lawrence Huang

Student Planner

Industry Assessments

Department of Planning & Environment

23-33 Bridge Street | GPO Box 39 SYDNEY NSW 2001

T 02 9228 6236 E Lawrence.Huang@planning.nsw.gov.au





24 February 2016

Our Reference: SYD16/00192 (A11789103)
Council Ref: SSD 7491

Student Planner
Industry Assessments
Department of Planning & Environment
GPO Box 39 SYDNEY NSW 2001

Attention: Lawrence Huang

Dear Sir/Madam,

OAKDALE WAREHOUSE DISTRIBUTION FACILITY
WAREHOUSE 3B, OAKDALE CENTRAL, HORSLEY PARK (FAIRFIELD LGA)

Reference is made to the department's email dated 4 February 2016, regarding the abovementioned Application which was referred to Roads and Maritime Services (Roads and Maritime) for comment in accordance with the State Environmental Planning Policy (Infrastructure) 2007.

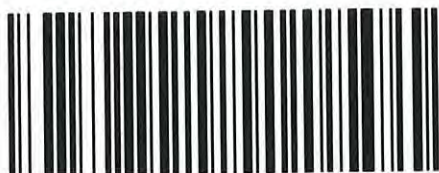
Roads and Maritime has reviewed the submitted draft SEARs and has no further request for inclusion.

Should you have any further inquiries in relation to this matter, please do not hesitate to contact Hans Pilly Mootanah on telephone 8849 2076 or by email at development.sydney@rms.nsw.gov.au

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Pahee Rathan'.

Pahee Rathan
Senior Land Use Planner
Network and Safety Section



PCU064124

15 February 2016

Mr Lawrence Huang
Student Planner
Industry Assessments
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Department of Planning
Received
17 FEB 2016
Scanning Room

Request for SEARs for Proposed Dangerous Goods Facility, Oakdale Central, Horsley Park (SSD 7491)

Dear Mr Huang,

Thank you for your letter requesting Sydney Water's input on the Secretary's Environmental Assessment Requirements for the above development. We have reviewed the proposal and provide the following comments for your consideration.

General Comments

- The developer, Goodman, as the initial developer of WSEA Site 8 – Area South of Pipeline will be required to provide lead-in water and wastewater infrastructure, consistent with the Sydney Water endorsed Local Area Servicing Plan for the area.
- The Local Area Servicing Plan will consider the ultimate development and capacity for water and wastewater mains to service the adjacent landowners in the future.
- The developer will be required to seek environmental planning approval for the required works as the application progresses.

Sydney Water Requirements for Environmental Assessment

Sydney Water requests Secretary Environment Assessment Requirements include the following:

1. The proponent should include an integrated water management strategy that considers water, wastewater and stormwater. It must also include alternative water supply, proposed end uses of potable and non-potable water, demonstration of water sensitive urban design and any water conservation measures. This will allow Sydney Water to determine the impact of the proposed project on its existing services and identify any augmentation requirements.
2. When determining landscaping options, the proponent should take into account that certain tree species can cause cracking or blockage of Sydney Water pipes and therefore should be avoided.
3. Strict requirements for Sydney Water's stormwater assets for certain types of development may apply. Consider the following in your submission, stormwater assets protection, building over and/or adjacent to stormwater assets, building bridges over stormwater assets, potential flood, water quality and heritage impacts and creation of easements.
4. Continuation of the managing new development process will be required for the applicant to finalise all of Sydney Water's issued requirements for issuing of Section 73 certificates.

If you require any further information, please contact Beau Reid of Urban Growth Strategy on 02 8849 4357 or e-mail beau.reid@sydneywater.com.au.

Yours sincerely,



Greg Joblin
Manager, Growth Strategy

Property and Services | Field Services
Telephone: (02) 9620 0104
Your Reference: SSD 7491

16 February, 2016

The General Manager
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Attn: Lawrence Huang

Dear Mr Huang,

Re: Request for SEARs for Proposed Dangerous Good Facility SSD 7491
Warehouse 3B, Oakdale Central, Horsley Park, Fairfield Local Government Area

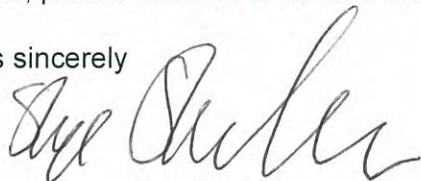
Thank you for the Notice of Exhibition notification SSD 7491, Lot 21 in DP 1173181.

We can advise after review of the abovementioned Development Application using *TransGrid's Asset Management Information System (TAMIS)*, this proposed development does not affect our infrastructure, therefore we do not object to this proposal. Please also find enclosed a TransGrid plan identifying the subject site as per our records.

Please find enclosed a copy of *TransGrid's Easement Guidelines for Third Party Development (V10) (Guidelines)*. Please note this is not an extensive list and should there be any uncertainty further consultation with TransGrid would be required.

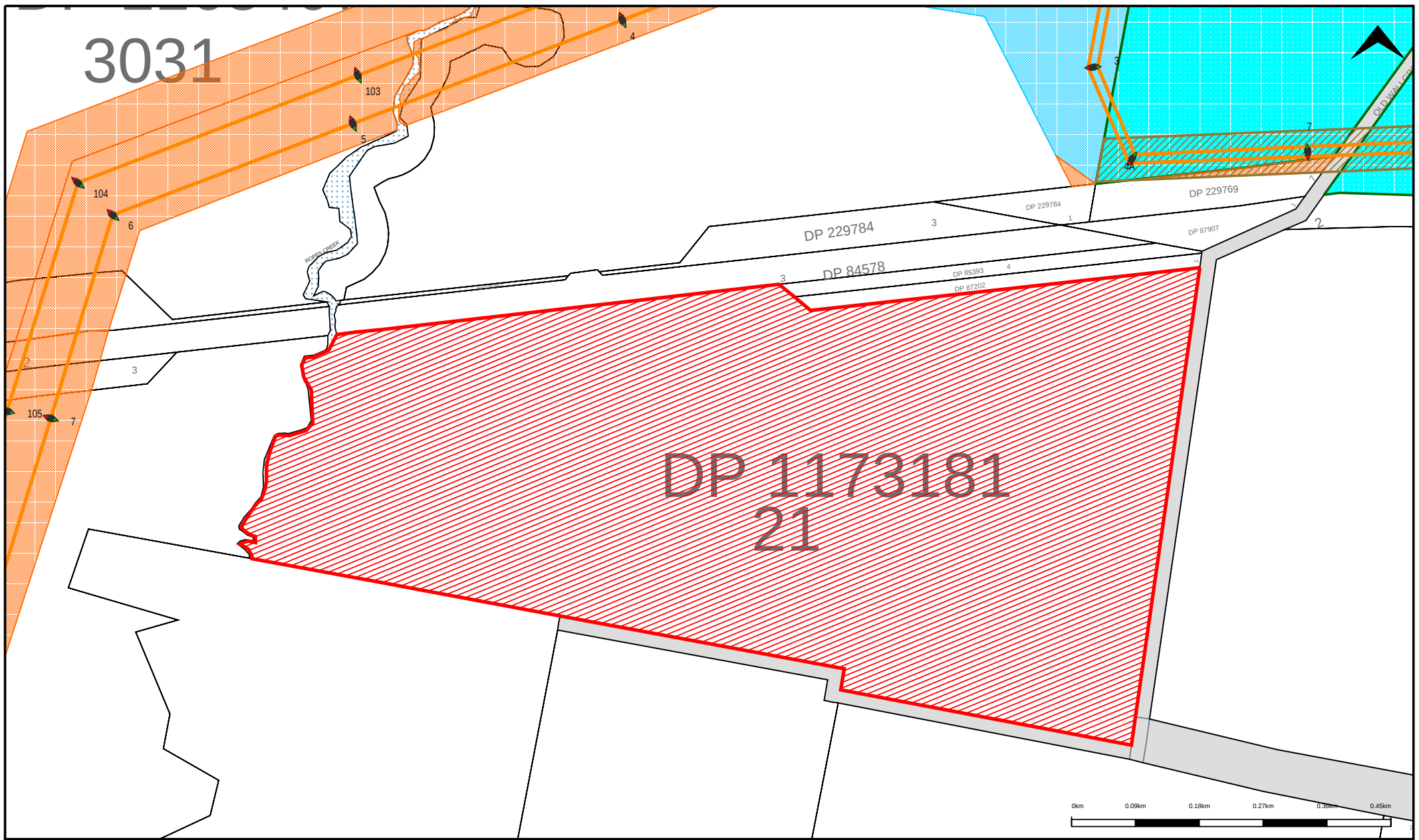
Thank you for consulting with TransGrid in respect of this matter and should you have any queries, please feel free to contact the undersigned on (02) 9620 0104.

Yours sincerely



Skye Shanahan
Property Enquiries Coordinator | Property and Services

Encl.



Legend

Structure Cable	TransGrid Land Interest TransGrid Proposal	TransGrid Easement
--------------------	---	--------------------

		Lot 21 in DP 1173181	
Property of Transgrid. No warranty is given that information shown is complete or accurate.		PRODUCED FROM TAMIS	Scale: 1:7083
16/02/2016 11:23:56 Created by: P86813		A4	

Background

TransGrid acquires Transmission Line (TL) and cable easements to provide adequate clearance along the route of a TL for construction and maintenance work and to preserve certain property rights in perpetuity. These easements also ensure no work or other activity is undertaken under or near a TL or cable that could create an unsafe situation either for persons or for the security of the TL or cable.

The TL or cable easement area and its ongoing maintenance are control measures that cannot be compromised. Easements are established to prevent and mitigate against the following electrical safety risks:

- > Infringement of electrical safety clearances e.g. due to an activity or vegetation growth;
- > Electrical Induction e.g. due to parallel conducting materials;
- > Step and touch potentials under fault conditions e.g. due to lightning or bushfire;
- > Failure of structures or line equipment e.g. due to third party vehicle or plant impact;
- > Transfer off easement of dangerous voltages, e.g. by services installed within the easement area; and
- > Blowout of a conductor under high wind (or blow in of vegetation) e.g. into an adjacent structure.

TransGrid's paramount concern is the safety of people and property. TransGrid is also bound to maintain its infrastructure efficiently and cost effectively. The TL and cable easements, along with the accesses, have been designed to facilitate effective operational maintenance.

Development Approval Process

The *Environmental Planning and Assessment Act 1979* may empower Local Councils to act as the consent authority for development applications. In these situations, a Development Application (DA) is prepared and submitted to the Local Council for development consent.

The *State Environmental Planning Policy (Infrastructure) 2007* (SEPP), which commenced on 1 January 2008, requires Local Councils to consult with Electricity Network Operators before granting development consent for proposals that might adversely affect:

- > existing electricity infrastructure; and
- > easements for electricity purposes, even if no infrastructure has yet been constructed in the easement.

The Local Council must take into consideration any comments made by the Electricity Network Operator who has 21 days to respond to any written notification of a DA received by Council. Council must take into consideration any comments provided by the Electricity Network Operator before it determines any DA. TransGrid's initial response may be a request for additional information to assess a development that seeks to encroach or is immediately adjacent to our easements and infrastructure. Such a request is likely to then be forwarded to the applicant.

The party submitting the development application is required to consult with TransGrid in accordance with the *State Environmental Planning Policy (Infrastructure) 2007 (SEPP)*; the *NSW Occupational Health and Safety Act 2000*; the WorkCover NSW 'Work Near Overhead Power Lines' Code of Practice 2006, and; the WorkCover NSW 'Work Near Underground Assets' Guide 2007.

TransGrid Approval

The statutory approval authority should obtain a written approval from TransGrid for all proposed activities within an easement area in accordance with regulation 45 of the *SEPP*.

It is recommended that the development proponent consult with TransGrid prior to lodging a DA, so the proposed development may be assessed relative to TransGrid's easements and infrastructure within the specific locality. Statutory notification pursuant to regulation 45 of the *SEPP* may not always provide an adequate response time for TransGrid to assess any development proposed within or immediately adjacent to our easements and infrastructure. Therefore, it is considered to be in the best interests of any development proponent to thoroughly consult and attempt to resolve all and any issues with TransGrid prior to submitting a DA. In consulting with TransGrid prior to submitting the DA, the following information must be provided.

1. Detailed specifications and plans drawn to scale and fully dimensioned, showing property boundaries and other relevant information. Survey plans must clearly identify TransGrid's easements; any high voltage transmission infrastructure located therein (including stanchions); and horizontal clearances;
2. Three dimensional CAD file of the development, preferably in 3D-DXF format; and
3. TransGrid will also require an *Impact Assessment* of the development on TransGrid's infrastructure and associated interests (including easements). Details of how any adverse impacts will be managed, mitigated or resolved must also be provided. The *Impact Assessment* form is contained in **Appendix A** of these guidelines.

Upon receipt of the abovementioned documentation, TransGrid will assess the proposed development in relation to its impact on TransGrid infrastructure, easements and means of access. For complicated proposals the consultation process will be comprehensive and the proponent should allow sufficient time for this process prior to lodgement of a DA (see *Timeframes* below).

General Development Proposal Guidelines

1. Prohibited Activities and Encroachments

A number of activities and encroachments are not permitted within the easement area. These are detailed in the "TransGrid Easement Guide" contained in **Appendix B** of these guidelines.

Any *Development Proposal* should be designed in such a way that:

- > It does not involve the listed activities, nor introduce the identified encroachments; and
- > Does not encourage other parties to undertake such activities or introduce such encroachments in the future.

2. Development

The Development Proposal should be planned taking into consideration the policy of "*prudent avoidance*" as identified by The Right Honourable Harry Gibbs Report (*Inquiry into Community Needs and High Voltage Transmission Line Development*).

This report placed recommendations on the design of new TL's having regard to their proximity to houses, schools, work sites and the like and is equally valid when considering new developments proposed in proximity to existing powerlines and associated easements.

The policy not only considers electrical safety risks it also takes into consideration Electric and Magnetic Field (EMF). The EMF strength rises from the easement edge to beneath the conductors and the most practical way to achieve *prudent avoidance* is to keep any development entirely outside the easement area.

If it is desired to place any part of a development within an easement the proponent shall, in conjunction with the *Development Proposal*, undertake an *Impact Assessment* (see **Appendix A**) to be provided to TransGrid that covers the changes in risk and mitigation measures proposed. General development requirements are listed in **Appendix C**.

Relocating Infrastructure and Interruption to Transmission

The development proponent will be liable for any costs involved in any agreed relocation of TransGrid infrastructure as part of any proposed development. Depending on how the development proposes to encroach on TransGrid's easement, an earthing study and earthing modifications may be required at the developer's expense. Further, the developer will also be liable for any costs and penalties incurred as a consequence of interruptions to TransGrid's transmission operations arising from the development, whether planned or inadvertent.

Post Construction Compliance Statement

The Development Proposal, as provided to TransGrid, must include as-built plans compliant with TransGrid's drawing management system of the final construction where approval of an encroachment is granted. The as-built drawings must be accurate, scaled and display distances/measurements, demonstrating compliance to the agreed plans and implementation of agreed control measures.

Timeframes

TransGrid will respond to a Local Council notification of a proposed development within 21 days as required in the SEPP, however that response may not be an approval (or disapproval). If the Development Proposal does not meet the requirements of these Guidelines, or in the event further detailed engineering analysis is required, TransGrid may require the Development Proposal to be revised and resubmitted or additional information will be sought.

Developers are advised to consider TransGrid's requirements early in the process as discussed and not as an afterthought that could result in project delays, including the future demolition of any prohibited construction works. To this extent, development proponents and their consultants are encouraged to contact and meet with TransGrid in the preliminary planning and design stages of the development in order to establish what restrictions and prohibitions apply and what, if any conditional encroachments can be accommodated.

Further Assistance

For any further development enquiry assistance please contact the Enquiries Services Coordinator:

Enquiries Services Coordinator	Telephone	(02) 9620 0104
	Mobile	0427 094 860
TransGrid Community Liaison Group	Phone	1800 222 537
	Email	community@transgrid.com.au
	Website	www.transgrid.com.au

Appendix A - Development Proposal Impact Assessment

Details of the Development

Street Address	
Land and Title References	
Encroachment and/or Proximity to Easement	
Development Proposal's Clearances to TransGrid's high voltage infrastructure	
Detailed plans of development attached	

Safety

Consideration	Yes/No (If Yes, please provide details and mitigation/resolution)
Are ground levels being changed within or in the vicinity of the easement? If so, by how much?	
Is any part of the development proposed within 30m of a transmission line structure or guy? If so, how close to the structure/guy?	
Will the development increase earth potential rise risk? (If unsure please consult with TransGrid Enquiries Services Coordinator.)	
Will the development contain metallic structures or services in the easement?	
Will the development result in voltages being transferred off the easement or bring remote earths onto the easement? (If unsure, please consult with TransGrid's Enquiries Services Coordinator.)	
Are public spaces or recreational areas proposed within or adjacent to the easement?	
Will the development encourage people to congregate and/or spend time within the easement or immediately adjacent thereto?	
Are structures with a height greater than 2.5m proposed on the easement?	
Will an Elevated Work Platform (EWP) be required to maintain any structures within the easement?	
Is infrastructure proposed that is a fire hazard, or that would encourage the storage or use of flammable material on the easement?	
Is infrastructure proposed that would require emergency workers (such as fire fighters) to come near, or their equipment to come onto or near high voltage conductors?	

Consideration	Yes/No (If Yes, please provide details and mitigation/ resolution)
Will the easement or the nature of the land in the vicinity of the easement, be altered in any way that would encourage prohibited encroachments to occur within the easement?	
Will access around any TransGrid structure be altered preventing EWPs, crane or other plant access? (Required for TransGrid maintenance purposes.)	
Will the development introduce other risks to maintenance staff when working within the easement?	
Will access to the easement be altered that would introduce risks to TransGrid personnel including, although not limited to, asset inspectors or patrol staff?	

Operations

Consideration	Yes/No (If Yes, please provide details and mitigation/ resolution)
Have any ground level developments been proposed (including roads, driveways, parking lots and turning bays etc) that would expose TransGrid transmission structures and lines to impact risk? (If unsure please consult with the TransGrid Enquiries Services Coordinator.)	
Will the development result in a change in water flows or drainage that could impact on the foundations or structural integrity of any TransGrid structure or guy-wire?	
Are excavations or surface activities proposed that would impact a TransGrid structure's foundations, stability or subterranean earthing systems? (If unsure please consult with the TransGrid Enquiries Services Coordinator.)	

Maintenance

Consideration	Yes/No (If Yes, please provide details and mitigation/ resolution)
Have roads, driveways or landscaping been proposed that would prevent or hinder TransGrid maintenance, or increase maintenance costs, for the above or below ground components of the transmission line structure?	
Will access to the easement or within the easement, be obstructed, restricted or altered?	
Have access roads, bridges, crossings and the like been designed to cater for the weight and size of TransGrid maintenance plant (EWPs and Cranes)?	
Does the development encourage the placement of obstructions that would prevent access for routine or emergency works?	

Development Design & Construction

Consideration	Yes/No (If Yes, please provide details and mitigation/ resolution)
Has the development been designed so that during the construction phase TransGrid is not restricted from undertaking normal maintenance and inspection activities?	
Has the development been designed so that during the construction phase prohibited activities or encroachments are not required in the easement area?	
Has the design health and safety risk assessment complied with the following WorkCover NSW instruments: • 'Work Near Overhead Power Lines' Code of Practice 2006; and/or • 'Work Near Underground Assets' Guide 2007?	

TransGrid's Rights

Consideration	Yes/No (If Yes, please provide details and mitigation/ resolution)
Are TransGrid's existing access rights preserved, pursuant to the terms of the easement?	
Will TransGrid be exposed to new or higher maintenance costs (e.g. landscaping or other development changes impacting easement access, use and maintenance)?	
Does a new deed of easement need to be negotiated by the development proponent?	

Preservation of Easement for Access

Consideration	Yes/No (If Yes, please provide details and mitigation/ resolution)
Will TransGrid's <i>Easement for Access</i> be affected?	
Does a new <i>Easement for Access</i> need to be arranged by the development proponent, including to supersede an existing registered right of carriageway?	

Appendix B - Prohibited encroachments and activities

TransGrid will use its powers under the Electricity Supply Act, involve WorkCover or take other legal action as required to prevent or halt prohibited activities.

1. Transmission Lines

Activities and encroachments that are **prohibited** within a Transmission Line (TL) Easement include, but are not limited to (Note 2), the following:

- > The construction of houses, buildings, substantial structures, or parts thereof.
- > The installation of fixed plant or equipment.
- > The storage of flammable materials, corrosive or explosive material.
- > The placing of garbage, refuse or fallen timber.
- > The planting or cultivation of trees or shrubs capable of growing to a height exceeding 4 metres.
- > The placing of obstructions within 20 metres of any part of a transmission line structure or supporting guy-wire.
- > Camping or the permanent parking of caravans or other camping vehicles.
- > Public spaces or recreational areas which encourage people to spend time within or congregate within the easement.
- > The parking or storage of flammable liquid carriers or containers.
- > The installation of site construction offices, workshops or storage compounds.
- > Flying of kites or wire-controlled model aircraft within the easement area.
- > Flying of any manned aircraft or balloon within 60m of any structure, guy-wire or conductor.
- > Flying of remote controlled or autonomous aerial devices (such as UAVs) within 60m of any structure, guy-wire or conductor.
- > Placing any obstructions on access tracks or placed within the easement area that restricts access.
- > Any vegetation maintenance (such as felling tall trees) where the vegetation could come within the Ordinary Persons Zone – refer to the WorkCover NSW 'Work Near Overhead Power Lines' - Code of Practice 2006'.
- > Any substantial excavation within 15 metres of a pole or supporting guy-wire or guy foundation or within 20 metres of a tower
- > The climbing of any structure (any development that encourages or facilitates climbing will not be permitted).
- > Any change in ground levels that reduce clearances below that required in AS7000.
- > The attachment of any fence, any signage, posters, or anything else, to a structure or guy-wire.
Note: Interference to electricity infrastructure is an offence under the *Electricity Supply Act 1995*.
- > The movement of any vehicle or plant between the tower legs, within 5m of a structure, guy-wire or between a guy-wire and the transmission pole.
Note: Any damage to electricity infrastructure is an offence under the *Electricity Supply Act 1995*.
- > The storage of anything whatsoever within the tower base or within 10m of any tower leg.
- > Any structure whatsoever that during its construction or future maintenance will require an Accredited person to access.
Note: The final structure may meet AS7000 clearances, but may be accessible (e.g. by EWP) by Ordinary Persons within the Ordinary Persons Zone.
- > Any work that generates significant amounts of dust or smoke that can compromise the TL high voltage insulation.
- > The erection of any structure in a location that could create an unsafe situation work area for TransGrid staff.
- > Burning off or the lighting of fires.

- > Any activity (including operation of mobile plant or equipment having a height when fully extended exceeding 4.3 metres) by persons not Accredited or not in accordance with the requirements of the WorkCover NSW 'Work Near Overhead Power Lines' Code of Practice 2006 that is within (Note 1):
 - 3m of an exposed 132kV overhead power line
 - 6m of an exposed 220kV or 330kV overhead power line
 - 8m of an exposed 500kV overhead power line

Note: Distances quoted are to the design conductor position (i.e. maximum sag and blowout)

The following activities may possibly be approved with conditions. TransGrid's prior written consent is required. The proponent will have to demonstrate (using the Impact Assessment process) that the risks associated with the activity have been satisfactorily mitigated.

- > Temporary parking of caravans and other large vehicles in the outer 3m of the easement area, subject to a 4.3 metre height restriction and metallic parts being earthed.
- > The erection of flagpoles, weather vanes, single post signs, outdoor lighting, subject to a 4.3 metre height restriction and metallic parts being earthed.
- > The erection of non-electric agricultural fencing, yards and the like.

Note: Fencing that exceeds 2.5 metres in height or that impedes access would not be approved.

- > The erection of metallic fencing less than 2.5 metres in height providing that it is earthed, located more than 20 metres from any part of a transmission line structure or supporting guy and greater than 4 metres of the vertical projection of the overhead conductors.
- > The erection of electric fencing provided that the height of the fencing does not exceed 2.5 metres and provided that the fence does not pass beneath the overhead conductors.

Note: Approval may be given for a portable electric fence to pass underneath the conductors provided that it is supplied from a portable battery-powered energiser that is located remotely from frequented areas. Where it is necessary for a permanent electric fence to pass beneath the overhead conductors, or where an extensive permanent electric fencing system is installed in proximity to a transmission line certain additional safety requirements will be required.

- > The installation or use of irrigation equipment inside the easement.
NOTE: An irrigation system will not be approved if it is capable of coming within 4 metres of the overhead conductors; exceeds 4.3 metres in height; consists of individual sections of rigid or semi-rigid pipe exceeding 4.3 metres; is capable of projecting a solid jet of water to within 4 metres of any overhead conductors; requires fuel to be stored within the easement; and/or requires an outage of the transmission line for its operation.

- > The installation of low voltage electricity, telephone, communication, water, sewerage, gas, whether overhead, underground or on the surface.

Note: Services that do not maintain standard clearances to the overhead conductors that are within 15 metres from the easement centre-line, 20 metres from any part of a transmission line supporting structure or are metallic and within 30 metres of any part of a structure will not be approved. TransGrid may impose additional conditions or restrictions on proposed development.

- > The installation of high voltage electricity services, subject to there being no practicable alternative and provided the standard clearances are maintained to the supporting structures.

Note: Where extensive parallels are involved certain additional safety requirements may be imposed by TransGrid, depending on the particular case and engineering advice.

- > Swimming pools, subject to TransGrid's strict compliance criteria.

Note: Above ground pools will not be approved. In-ground pools will not be approved if there is a practicable alternative site clear of the easement area. If there is no practical alternative site, in-ground

pools including coping will not be approved if it encroaches more than 4.5 metres, or is less than 30 metres away from a transmission line structure. A site specific assessment by TransGrid is required.

- > Detached garages, detached carports, detached sheds, detached stables, detached glass houses, caravans, site containers, portable tool sheds, pergolas and unroofed verandahs attached to residences on the outer 3 meters of the easement only.

- > Prefabricated metal (garden) sheds. TransGrid approved sheds must be earthed.

Note: Sheds exceeding 2.5 metres in height, with a floor area exceeding 8m², encroaching more than of up to 3 metres or within 30 metres of any part of a transmission line structure will not be approved. Connection of electric power will not be approved.

- > Single tennis courts.

Note: Tennis courts that hinder access are for commercial use or do not provide adequate clearances shall not be approved.

- > Subdivisions. See **Appendix C** requirements.

- > Roads, carparks, cycleways, walking tracks and footpaths on the outer part of the easement or as a thoroughfare across the easement, subject to horizontal and vertical clearances. Restrictions and other conditions on consent may also apply. These will not be approved when located within:

- 20 metres of any part of a transmission line structure
- 10 metres of the centre-line of a transmission line 132kV and below
- 17 metres of the centre-line of a transmission line above 132kV

Note: Roads and pathways that cross the transmission line as a thoroughfare may be permitted. Where it is proposed that a road passes within 30 metres of a transmission structure or supporting guy, TransGrid may refuse consent or impose restrictions and other conditions on consent. Where a road passes within 30 metres of a transmission structure or supporting guy, the structure's earthing system may require modification for reasons including, but not limited to, preventing fault currents from entering utility services which may be buried in the road. The option of raising conductors or relocation of structures, at the full cost to the proponent, may be considered.

- > Excavation – subject to restriction criteria.

Note: Substantial excavations located within 20 metres of any part of a steel tower or pole structure and exceeding a depth 3 metres will not be approved.

- > Quarrying activities, earthworks, dam or artificial lake construction.
- > Mining. Approval would be based on the merits of the proposal and any related circumstances.
- > Use of explosives.

Note 1: An encroachment or activity that is located outside the prohibited distance of the infrastructure but still within the easement will not necessarily be permitted. It will generally need to be addressed in the Impact Assessment and remains subject to TransGrid prior consent.

Note 2: The above list is not exhaustive and if there is any uncertainty as to whether an activity or encroachment is acceptable within an easement, please contact TransGrid. TransGrid may impose additional conditions or restrictions on proposed development.

2. Cables

The location of TransGrid's subterranean infrastructure and associated easements includes, but is not limited to, beneath private freehold and strata land as well as public roadways and railways etc. All development proposed within immediate proximity of TransGrid's subterranean infrastructure, including high voltage cables, stratum tunnels and conduits, must undertake a *Dial Before You Dig* search of any land where development is proposed, including roads adjoining a development site where subterranean services are proposed to be installed. The activities listed below are prohibited within cable easements:

- > The storage of flammable liquids or explosives
- > The planting or cultivation of trees or shrubs with extensive root systems
- > The construction of houses, buildings or substantial structures
- > The installation of fixed plant or equipment
- > The placing of garbage, refuse or fallen timber
- > Boring directly over the cable lay (eg. the installation of fencing or safety railing)
- > The raising or lowering of existing ground surface levels
- > Any excavation within 2m of an underground cable.

The following activities may be approved with conditions. TransGrid's prior written consent is required. The proponent will have to demonstrate (using the Impact Assessment process) that the risks associated with the activity have been satisfactorily mitigated.

- > Parking of vehicles

Note: Parking will be prohibited if the surface is not capable of supporting the vehicles likely to be parked, risking the crushing of the cable/ducts or erosion of the ground

- > The operation of mobile plant and equipment

Note: Such operations will be prohibited if the surface is not capable of supporting the vehicles likely to be parked, whereby risking the crushing of the cable/ducts or erosion of the ground

- > The erection of structures spanning the easement
- > Excavation
- > Concrete driveways
- > The installation of metallic pipes, fences, underground or overhead cables and services
- > Road-boring within approved distances of a high voltage cable.

Where TransGrid's prior written consent has been granted to undertake work near an easement and related subterranean infrastructure, including the tunnels and conduits that accommodate our high voltage transmission line cables, all works must be undertaken in accordance with the WorkCover NSW 'Work Near Underground Assets' Guide 2007. Further, all development works must comply with the TransGrid guidelines for subterranean infrastructure referring to the document titled "*Requirements for Working In the Vicinity of TransGrid Underground Cables*".

Appendix C - General Requirements for Developments and Subdivisions

The following list of current general requirements is provided for your information. It should be noted that the list is not exhaustive and, where there is any doubt concerning a particular activity within the easement area advice should be sought from TransGrid.

1. Completed Works

The completed works shall provide for the following considerations:

- > A safe unobstructed working platform shall be preserved around the transmission line structures for access by EWP, cranes as well as other large plant and equipment. No obstructions of any type shall be placed within 30 metres of any part of a transmission line structure.
- > Roads, streets etc (including kerb to property boundaries) and intersections shall not be located within 30 metres of any TL structure.
- > Developments must meet the clearances requirements set out in AS7000 between their finished level and the conductor at its maximum operating temperature.
- > Proposed roadway locations shall also take into consideration any street lighting requirements to ensure that statutory clearance requirements are followed. The design clearances should include future maintenance safety issues. TL outages will not be provided for street light maintenance. Access to the TL and its structures shall be available at all times for TransGrid plant and personnel. In this regard a continuous and unobstructed access way shall be retained along the easement.
- > Where fences are required for security purposes access gates will be installed in an agreed location and a TransGrid lock will be fitted.
- > Application of “prudent avoidance” in relation to electric and magnetic fields should always be observed.
- > No increase in earth potential rise risks.
- > All underground services installed more than 20 metres but within 30 metres of a TL structure shall be non-metallic. Utility services (including street lighting), whether above or below ground, shall not be installed without prior written approval of TransGrid.
- > Excavation work or other alterations to existing ground levels shall not be carried out within the easement area without the prior approval of TransGrid. Approval will not normally be granted for such work within 20 metres of any supporting structure.
- > Boundaries for new subdivided properties should not be located within the easement.
- > Fenced boundaries for all new properties in the subdivision shall not be within 30 metres of any TL structure.
- > A “Restriction-as-User” (88B Instrument) shall be placed on the titles of any created lots that may become affected by a TL easement. Any proposed activity within an easement area will require the prior written approval of TransGrid (appropriate wording will be advised when required).
- > Any proposed development must not impact on TransGrid’s costs of inspecting, maintaining or reconstruction of the transmission lines.
- > In order to comply with its statutory responsibilities to maintain adequate clearance between the conductors and any forms of vegetation, TransGrid maintains its easements as follows:
 - Tall growing species likely to infringe safe clearances are to be removed regardless of existing height at time of construction.
 - Trees likely to fall onto conductors or towers are also to be removed whether on the easement or off the easement (ref. Sec 48 of the Electricity Supply Act 1995).

- Shrubs and other vegetation of lower mature height within the easement will be reduced and managed, generally by slashing with ground level retained.
- Vegetation management will aim to reduce available fuel and subsequent bushfire risks in accordance with NSW Rural Fire Service Bush Fire Environmental Assessment Code that sets out the requirements for hazard reduction strategies such as Asset Protection Zones and Strategic Fire Advantage Zones.
- Removed vegetation will be mulched or chipped and removed from site or retained on site in accordance with owner/stakeholder requirements.
- Other works considered necessary in order to provide a safe working environment for maintenance staff, contractors and for the property owner/manager will be undertaken.

Proposed vegetation plantings, such as Riparian corridors, within the transmission line easements shall be compatible with the above maintenance requirements and must consider on-going vegetation control.

2. Construction

During construction, the development plans shall also provide for the following considerations:

- > Vehicles, plant or equipment having a height exceeding 4.3 metres when fully extended shall not be brought onto or used within the easement area without prior TransGrid approval.
- > Where temporary vehicular access or parking (during the construction period) is within 16 metres of a transmission line structure, adequate precautions shall be taken to protect the structure from accidental damage. Plans need to be submitted to TransGrid for prior approval.
- > The easement area shall not be used for temporary storage of construction spoil, topsoil, gravel or any other construction materials.

3. Costs

The Developer shall bear all costs of any specialist design studies, TransGrid supervision, reconstruction or modification of the transmission line and its components, including consultation and design required to maintain clearances due to proposed ground level changes; road crossings within the easement; or due to any damage to the TL arising from the development.

Example of the Required Working Platform for Transmission Tower Maintenance





**Transport
for NSW**



PCU064251

Ms Kate MacDonald
Team Leader
Industry Assessments
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Attention: Lawrence Huang

**Request for SEARs for the Proposed Dangerous Goods Facility Warehouse 3B,
Oakdale Central, Horsley Park (SSD 7491)**

Dear Ms MacDonald

Thank you for your letter requesting Transport for NSW (TfNSW) to provide input to the draft SEARs for the subject development.

Please note that Roads and Maritime Services will provide its comments separately.

The suggested additions and changes to the SEARs are provided in track changes in the attached draft SEARs for the above development application.

Thank you again for the opportunity to comment on the draft SEARs. If you require further clarification regarding this matter, please don't hesitate to contact Para Sangar, Senior Transport Planner on 8202 2672.

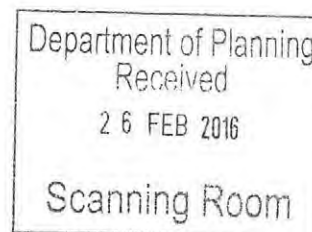
Yours sincerely



18/2/16

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

CD16/01468



Secretary's Environmental Assessment Requirements

Section 78A(8A) of the *Environmental Planning and Assessment Act 1979*

State Significant Development

Application Number	SSD 7491
Development	Construction of a Dangerous Goods Facility to warehouse and distribute Dangerous Goods with a gross floor area of approximately 36,880 m ² .
Location	Lot 3 Oakdale Central, Horsley Park (Lot 21 DP 1173181)
Applicant	Goodman Property Services (Aust) Pty Ltd
Date of Issue	February 2016
General Requirements	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 detailed description of the development, including: - the need for the proposed development; - justification for the proposed development; - likely staging of the development; - likely interactions between the development and existing, approved and proposed operations in the vicinity of the site; and - plans of any proposed building works. - consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments; - risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment; - detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes: - a description of the existing environment, using sufficient baseline data; - an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes; and - 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 - consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS. The EIS must also be accompanied by a report from a qualified quantity surveyor providing: - 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; - an estimate of the jobs that will be created by the development during the construction and operational phases of the development; and - certification that the information provided is accurate at the date of preparation.
Key issues	The EIS must address the following specific matters: Strategic and Statutory Context – including: - detailed justification for the proposal and the suitability of the site; and - demonstration that the proposal is generally consistent with all relevant planning strategies, environmental planning instruments including <i>State Environmental Planning Policy (Western Sydney Parklands) 2009</i>,

	development control plans (DCPs) and justification for any inconsistencies. The EIS shall address the relevant planning provisions, goals and strategic planning objectives in the following: • A Plan for Growing Sydney; • NSW Long Term Transport Master Plan; • NSW State Priorities; • Sustainable Sydney 2030; and • NSW Bicycle Guidelines; • Contributions – including consideration of the following: – <i>Fairfield City Council – Direct (Section 94) Development Contributions Plan 2011; and</i> – <i>Development contributions in accordance with Department of Planning - Oakdale Central and Oakdale South, Horsley Park Planning Agreement dated 12 March 2015.</i> • Traffic and Transport Assessment (Construction and Operation) that includes, but is not limited to, the following: - accurate 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; - assessment of the operation of existing and future transport networks including bus networks and their ability to accommodate the forecast number of trips to and from the development; - details of 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, including a description - details of heavy vehicle access routes and types of heavy vehicles, and the impacts of heavy vehicles on nearby intersections; - details of access to the site from the road network including intersection location, design and sight distance; - assessment of the existing and future performance of key intersections providing access to the site, and any upgrades (road/intersections) required as a result of the development. The assessment needs to be supported by appropriate modelling and analysis to the satisfaction of Roads and Maritime Services; - assessment of the cumulative impacts of traffic volumes from the proposal together with existing and approved developments in the area and potential conflict with traffic movements generated by existing uses; - an assessment of predicted impacts on road safety and the capacity of the road network to accommodate the development; - plans of any road upgrades or new roads required for the development if necessary; - the measures to be implemented to encourage users of the development to make sustainable travel choices, including walking, cycling, public transport and car sharing; - details of sustainable travel initiatives for workers and visitors, particularly for the provision of end-of-trip facilities, pedestrian and cyclist facilities in secure, convenient, accessible areas close to main entrances, incorporating lighting and passive surveillance; - demonstrate appropriate provision, design and location of on-site bicycle parking, and how bicycle provision will be integrated with the existing bicycle network; - 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;
--	---

- provide details of service vehicle movements and site access arrangements (including vehicle type and likely arrival and departure times of service vehicles);
- assessment of proposed loading dock and servicing provisions and access arrangements to loading docks;
- details of access and parking arrangements for emergency vehicles;
- detailed plans of the proposed layout of the internal road network and parking provision on-site in accordance with the relevant Australian Standards; and
- 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.
- In relation to construction traffic:
 - o assessment of cumulative impacts associated with other construction activities;
 - o assessment of road safety at key intersections and locations subject to heavy vehicle movements;
 - o details of anticipated peak hour and daily truck movements to and from the site;
 - o details of access arrangements for workers to/from the site, emergency vehicles and service vehicle movements;
 - o details of temporary cycling and pedestrian access during construction;
 - o details of proposed construction vehicle access arrangements at all stages of construction; and
 - o 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, including the preparation of a draft Construction Traffic Management Plan to demonstrate the proposed management of impact. This Plan needs to include vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures for all demolition/construction activities.

Relevant Policies and Guidelines:

- *Guide to Traffic Generating Developments (Roads and Maritime Services)*
- *EIS Guidelines – Road and Related Facilities (DoPI)*
- *NSW Planning Guidelines for Walking and Cycling*
- *Guide to Traffic Management – Part 12: Traffic Impacts of Development (AUSTROADS)*
- **Urban Design and Visual** – including:
 - layout of the development including staging, site coverage, setbacks, proposed open space and landscaped areas;
 - suitable landscaping incorporating endemic species;
 - the layout and design of the development having regard to the surrounding vehicular, pedestrian and cycling networks, if applicable;
 - a detailed assessment (including photomontages and perspectives) of the facility (buildings and storage areas) including height, colour, scale, bulk, building materials and architectural treatments and finishes, signage, lighting and any retaining walls particularly from nearby public receivers and significant vantage points within the broader public domain;
 - proposed cut and fill works associated with the development; and
 - measures to minimise the extent of cut and fill.
- **Hazards and Risks** including:
 - 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). The PHA must:

	- provide details of all hazardous materials stored or handled on the premises; - identify the hazards associated with materials that will be stored or handled at the proposed development. Any safety measures to be implemented should also be clearly identified; - estimate the risks from the proposed development; - demonstrate that the potential offsite risk from the proposed development comply with the criteria set out in <i>Hazardous Industry Planning Advisory Paper No 4 - Risk Criteria for Land Use Safety Planning</i>; and - an evaluation of the impacts of the transport of dangerous goods to and from the site in the surrounding area. • Noise and Vibration– including: - a description of all potential noise and vibration sources such as construction, operational, on and off-site traffic noise; - a noise impact assessment including a cumulative noise impact assessment in accordance with relevant Environment Protection Authority guidelines; and - details of noise mitigation, management and monitoring measures. • Soils and Water – including: - a description of the water demands and a breakdown of water supplies; - a description of the measures to minimise water use; - a detailed water balance; - a description of all wastewater generated on-site; - a description of the proposed erosion and sediment controls during construction and operation; - a description of the surface and stormwater management system, including on site detention, and measures to treat or reuse water; - an assessment of potential surface and groundwater impacts associated with the development; and - details of impact mitigation, management and monitoring measures. • Infrastructure Requirements – including - a detailed written and/or geographical description of the infrastructure required on the site; - identification of any infrastructure upgrades required off-site to facilitate the development, and describe any arrangements to ensure that the upgrades will be implemented in a timely manner and maintained; and - a detailed description of cooling/heating systems to be installed on-site. • Air Quality and Odour – including: - a description of all potential odour sources and predicted odour emissions from the construction and operation of the facility; - details of air quality and odour impacts on private properties, in accordance with relevant Environment Protection Authority guidelines; and - details of mitigation, management and monitoring measures for preventing and/or minimising emissions. • Waste – including: - details of the quantities and classification of all waste streams to be generated on site; - details of waste storage, handling and disposal; and - details of 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>. • Heritage – including: - an Archaeological Assessment of Aboriginal and non-Aboriginal archaeological items, including an assessment of the significance and potential impacts on these items; and - the identification of appropriate mitigation/conservation/management measures to address the construction and/or operational impacts of the proposed development.
--	---

	• Socio-Economic – including an analysis of the economic and social impacts of the development, particularly of any benefits to the community.
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. You should provide these as part of the EIS rather than as separate documents.
Consultation	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. In particular you must consult with: • Fairfield City Council; • Blacktown City Council; • Penrith City Council; • Office of Environment and Heritage; • Department of Primary Industries; • Transport for NSW; • Roads and Maritime Services; and • local residents and stakeholders. 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.
Further consultation after 2 years	If you do not lodge an EIS for the development within 2 years of the issue date of these SEARs, you must consult with the Secretary in relation to any further requirements for lodgement.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this development.

ATTACHMENT 1

Technical and Policy Guidelines

The following guidelines may assist in the preparation of the Environmental Impact Statement. This list is not exhaustive and not all of these guidelines may be relevant to your proposal.

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

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

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

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

Policies, Guidelines & Plans	
Plans and Documents	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include the following: 1. An existing site survey plan drawn at an appropriate scale illustrating: • the location of the land, boundary measurements, area (sqm) 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. Locality/context plan drawn at an appropriate scale should be submitted indicating: • significant local features such as heritage items; • the location and uses of existing buildings, shopping and employment areas; and • traffic and road patterns, pedestrian routes and public transport nodes. 3. 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 hard copy and 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.
Aspect	Policy / Methodology
Transport and Access	State Environmental Planning Policy (Infrastructure) Guide to Traffic Generating Development (Road and Maritime Services TA) Road Design Guide (Road and Maritime Services TA) Austrorads Guide to Traffic Management – Pt 12: Traffic Impacts of Development
Noise and Vibration	Assessing Vibration: A Technical Guide (DEC, 2006).

	Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC, 1990).
	NSW Industrial Noise Policy (EPA, 2000).
	Environmental Criteria for Road Traffic Noise (EPA, 1999).
	Environmental Noise Control Manual (DECC).
	Interim Construction Noise Guideline (DECC, 2009).
	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)
	Bunding and Spill Management (EPA)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)
	The NSW State Rivers and Estuaries Policy (NSW Water Resources Council)
	Water Sharing Plan for the Metropolitan Region Unregulated River Water Sources (NOW) 2011
Soils and Water	
<i>Groundwater</i>	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	NSW State Groundwater Policy Framework Document (DLWC)
	NSW State Groundwater Quality Protection Policy (DLWC)
	The NSW State Groundwater Dependent Ecosystem Policy (DLWC)
	Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources (NOW) 2011
<i>Acid Sulfate Soils</i>	Acid Sulfate Soil Manual (ASSMAC)
<i>Erosion and Sediment</i>	Managing Urban Stormwater: Soils & Construction (Landcom)
	Design Manual for Soil Conservation Works - Technical Handbook No. 5 (Soil Conservation Service of NSW)
	Soil and Landscape Issues in Environmental Impact Assessment (DLWC)
	Wind Erosion – 2nd Edition
<i>Stormwater</i>	Managing Urban Stormwater: Strategic Framework. Draft (EPA)
	Managing Urban Stormwater: Council Handbook. Draft (EPA)
	Managing Urban Stormwater: Treatment Techniques (EPA)
	Managing Urban Stormwater: Source Control. Draft (EPA)
	Managing Urban Stormwater: Harvesting and Reuse (DEC)
<i>Wastewater</i>	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)
	National Water Quality Management Strategy - Guidelines For Water Recycling: Managing Health And Environmental Risks (Phase1) (EPHC, NRMCC & AHMC)
	National Water Quality Management Strategy - Guidelines For Water Recycling: Managing Health And Environmental Risks (Phase1) (EPHC, NRMCC & AHMC)
	National Water Quality Management Strategy - Guidelines For Water Recycling: Managing Health And Environmental Risks (Phase1) (EPHC, NRMCC & AHMC)
Air Quality	
	Protection of the Environment Operations (Clean Air) Regulation 2002
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)
Waste	
	Waste Avoidance and Resource Recovery Strategy 2014-21 (EPA)
	Waste Avoidance and Resource Recovery Performance Report 2006 (DECC)

ATTACHMENT 2

Government Authority and Council Responses to Request for Key Issues