NSW GOVERNMENT | Planning & Environment

Contact: Pamela Morales
Phone: 02 9228 6386
Fax: 02 9228 6455
Email: pamela.morales@planning.nsw.gov.au

Mr David Pincott
TQ Holdings Australia Pty Ltd
PO Box 32
Coniston NSW 2500

Our ref: SSD 7264

Dear Mr Pincott

SEARs for Port Kembla Bulk Liquids Terminal (SSD 7264)

Thank you for your letter dated 8 September 2015 requesting the Secretary's environmental assessment requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the Port Kembla Bulk Liquids Terminal. I have attached a copy of these requirements.

The attached SEARs have been prepared in consultation with the relevant government authorities and Wollongong City Council (see **Attachment 2**) and are based on the information you have provided to date. Please note that the Secretary may alter these SEARs at any time and that you must consult further with the Secretary if you do not lodge a development application and EIS for the development within two years of the date of issue of these SEARs. The Department of Planning and Environment (the Department) will review the EIS for the development carefully before publically exhibiting it, and will require you to submit an amended EIS if it does not adequately address the SEARs.

I wish to emphasise the importance of effective and genuine community consultation and the need for proposal to proactively respond to the community's concerns. Accordingly a comprehensive, detailed and genuine community consultation engagement process must be undertaken during the preparation of the EIS. This process must ensure that the community is provided with a good understanding of what is proposed, description of any potential impacts and they are actively engaged in issues of concern to them. Sufficient information must be provided to the community so that it has a good understanding of what is being proposed and of the potential impacts.

The Department also understands that the development of the terminal is likely to be staged and a component may be constructed under an existing project approval. Notwithstanding, the Department would prefer the operation of the facility to operate under a single, modern development consent. Consequently, the Department encourages you to develop the proposal with this preference in mind, and to consider surrendering all existing planning consents for the site if the development application is approved.

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

I would appreciate it if you would contact the Department at least two weeks before you propose to submit the development application and EIS for your development. This will enable the Department to:

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

If you have any questions, please contact Pamela Morales, who can be contacted on (02) 9228 6386 or via email at pamela.morales@planning.nsw.gov.au

Yours sincerely

C. Ritchie 8/10/15.

Chris Ritchie
Director
Industry Assessments
as delegate for the Secretary

Secretary's Environmental Assessment Requirements

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

State Significant Development

Application Number	SSD 7264
Development	The construction and operation of a bulk liquids terminal at Port Kembla to provide for: • the storage of up to 288 mega litres (ML) of combustible and flammable liquids; • 12 x flammable liquid storage tanks; • 11 x combustible liquid storage tanks; • 13 x combustible liquid slops, flammable liquid slops and oily water slops tanks; • berth infrastructure and ship unloading equipment on Berth 104; and • associated utilities, services and infrastructure.
Location	The site is located in the Inner Harbour of Port Kembla within the City of Wollongong Local Government Area. The site is comprised of four separate allotments being Part Lot 2 DP 1125445, Part Lot 301 DP 1148391, Part Lot 11 DP 1182111 and Part Lot 70 1182824.
Applicant	TQ Holdings Australia Pty Ltd
Date of Issue	October 2015
General Requirements	The Environmental Impact Statement (EIS) must meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*. Notwithstanding the key issues specified below, the EIS must include: • a detailed description of the development including: – need for the proposed development; – justification for the proposed development; – likely staging of the development during construction and operation; – likely interactions between the development and other existing, approved and proposed port and industrial 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; • a risk assessment of the potential environmental impacts of the development; • identification of key issues for further assessment; • a detailed assessment, where relevant, of the key issues below, and any other potential significant issues identified in the risk assessment. This must include: – a description of the existing environment, using sufficient baseline data; – an assessment of the potential impacts of all stages of the

	proposed 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 and if necessary, offset the potential impacts of the proposed development, including proposals for adaptive management and/or contingency plans to manage any significant risks to the environment; and • a 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 (as defined in clause 3 of the *Environmental Planning and Assessment Regulation 2000*) of the proposal, including details of all assumptions and components from which the CIV calculation is derived; • an estimate of the jobs that will be created during the construction and operational phases of the proposed development; and • certification that the information provided is accurate at the date of preparation. The Department understands that the development of the terminal is likely to be staged and a component may be constructed under an existing project approval. Notwithstanding, the Department would prefer the operation of the facility to operate under a single, modern development consent. Consequently, the Department encourages you to develop the proposal with this preference in mind, and to consider surrendering all existing planning consents for the site if the development application is approved.
Key Issues	The EIS must address the following specific matters: • **Hazards and Risk** – including: – a summary of the results of a Preliminary Hazard Analysis (PHA) undertaken for the proposed development with consideration of the existing site. The PHA should be prepared in accordance with *Hazardous Industry Planning Advisory Paper No. 6 - Guidelines for Hazard Analysis*. The PHA should: o identify the hazards associated with the existing site and proposed development, as well as any external hazards (i.e. natural hazards) to determine the potential for off-site impacts; o address all relevant recommendations arising from the Buncefield accident; o 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 o 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; and

	– an evaluation of the impacts of the transport of Dangerous Goods to and from the site in the immediate vicinity. • **Air Quality** – including: – a description of all potential air emissions and odours and their sources, including construction, operational and transport sources; – a quantitative assessment of all potential air quality impacts and odour impacts for the development, including cumulative, on surrounding land and sensitive receptors under the relevant Environment Protection Authority (EPA) guidelines; – details of any pollution control equipment and other impact mitigation measures for fugitive and point source emissions; and – details of the proposed management and monitoring measures. • **Noise and Vibration** – including: – a description of all potential noise sources, including construction, operational and transport sources; – a quantitative assessment of construction, operational and transport noise and vibration impacts to surrounding receivers from on site and off site activities in accordance with the relevant EPA guidelines; and – details of the proposed management, mitigation and monitoring measures. • **Traffic and Transport** – including: – details of traffic types and volumes likely to be generated during construction and operation of the development; – details of the proposed transport routes, site access, internal roadways, parking and upgrades to road and shipping infrastructure; – detailed plans of the proposed layout of the internal road network and parking on site in accordance with the relevant Australian standards; – a detailed traffic impact study of the proposed development, with consideration of the predicted traffic impacts on the safety and capacity of the surrounding road network and the shipping capacity of Port Kembla and cumulative traffic impacts from other developments, using SIDRA or a similar traffic model; and – a description of the measures that would be implemented to upgrade and/or maintain the surrounding road network and shipping infrastructure over time. • **Soil & Water** – including: – details of water supply including annual volumes of surface water and groundwater required by the proposal and options for reuse of process water; – a detailed consolidated site water balance; – proposed erosion and sediment controls (during construction) and the proposed stormwater management system (during operation); – an assessment of the potential soil, groundwater and surface water impacts and the measures proposed to mitigate these impacts; – an assessment of pollutant loads and concentrations, contaminated groundwater and soils, acid sulfate soils and proposed mitigation and management measures, particularly in

	the event of a product spill; and – potential impacts of flooding, with consideration of climate change and projected sea level rises. • **Waste Management** – including: – details of all the quantities and classification of all waste streams to be generated on site; – details of waste storage, handling and disposal and how slops will be managed; – wastewater predictions, and the measures that would be implemented to treat, reuse and/or dispose of this water; and – the measures that would be implemented to ensure that the proposed development considers the aims, objectives and guidelines in the NSW Waste Avoidance and Resource Recovery Strategy 2007 and Draft NSW Waste Avoidance and Resource Recovery Strategy 2013-2021. • **Greenhouse Gas** – including an assessment of the potential greenhouse gas emissions of the proposed development. • **Visual Amenity** – including an assessment of the potential visual impacts of the proposed development on the amenity of the surrounding area. • **Biodiversity** – including an assessment of the potential impacts on critical habitats, threatened species (including *Litorea aurea*), populations or ecological communities and their habitats in accordance with the *Framework for Biodiversity Assessment* or relevant Office of Environment Guidelines. • **Heritage** – including Aboriginal and non-Aboriginal heritage items and values of the site and surrounding area, taking into account the *NSW Heritage Manual* and *Assessment Heritage Significance Guidelines.* • **Cumulative** – including all industrial facilities in the area and other nearby approved and proposed development, particularly in relation to hazards and risk, air quality, noise and vibration, traffic and soil and water.
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.* These documents should be included 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: • Wollongong City Council; • Environment Protection Authority; • Roads and Maritime Services; • Office of Environment and Heritage; • NSW Department of Primary Industries; • NSW Ports; • SafeWork NSW (formerly WorkCover NSW); • NSW Health; and • the local community 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 the preparation of the EIS.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, Attachment 1 contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this development.

ATTACHMENT 1
Technical and Policy Guidelines

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

Many of these documents can be found on the following websites:
http://www.planning.nsw.gov.au
http://www.bookshop.nsw.gov.au
http://www.publications.gov.au

Policies, Guidelines & Plans	
Plans and Documents	
	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include the following: 1. An existing site survey plan drawn at an appropriate scale illustrating: • the location of the land, boundary measurements, area (sq.m) and north point; • the existing levels of the land in relation to buildings and roads; • location and height of existing structures on the site; • location and height of adjacent buildings and private open space; and • all levels to be to Australian Height Datum (AHD). 2. A locality/context plan drawn at an appropriate scale should be submitted indicating: • 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

Hazards and Risk	
	State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
	Applying SEPP 33 – Hazardous and Offensive Development Application Guidelines (DUAP)
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis
	AS/NZS 4360:2004 Risk Management (Standards Australia)
	HB 203: 203:2006 Environmental Risk Management – Principles & Process (Standards Australia)
	Hazardous Industry Planning Advisory Paper No 3 – Risk Assessment
	Hazardous Industry Planning Advisory Paper No 4 – Risk Criteria for Land Use Safety Planning
	Hazardous Industry Planning Advisory Paper No 6 – Hazard Analysis
	Hazardous Industry Planning Advisory Paper No 10 – Land Use Safety Planning
	Multi-level Risk Assessment Guideline
Traffic	
	Guide to Traffic Generating Development (RTA)
	Road Design Guide (RTA)
Soil and Water	
Soil	Managing Urban Stormwater: Soils & Construction (Landcom)
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC & NHMRC)
	National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPC)
	State Environmental Planning Policy No. 55 – Remediation of Land
	Managing Land Contamination - Planning Guidelines SEPP 55 – Remediation of Land (DUAP and EPA)
Surface Water	National Water Quality Management Strategy: Water quality management - an outline of the policies (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Policies and principles - a reference document (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Implementation guidelines (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ, 2000)
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ, 2000)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (EPA, 2006)
	State Water Management Outcomes Plan
	NSW Government Water Quality and River Flow Environmental Objectives (DECC)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)
	Sorting and Handling Liquids: Environmental Protection – Participants Manual (DECC)
	Managing Urban Stormwater: Council Handbook. Draft (EPA)
	Managing Urban Stormwater: Treatment Techniques (EPA, 1997)
	Managing Urban Stormwater: Source Control. Draft (EPA)
	Managing Urban Stormwater: Soils & Construction (Landcom, 2004)

	Technical Guidelines: Bunding & Spill Management (DECC)
Groundwater	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC, 1995)
	NSW State Groundwater Policy Framework Document (DLWC, 1997)
	NSW State Groundwater Quality Protection Policy (DLWC, 1998)
	NSW State Groundwater Dependent Ecosystems Policy (DLWC, 2002)
Waste	
	NSW Waste Avoidance and Resource Recovery Strategy 2014-21 (EPA, 2014)
	Waste Classification Guidelines (EPA)
	Environmental Guidelines: Assessment Classification and Management of Non-Liquid and Liquid Waste (NSE EPA)
Air Quality	
	Protection of the Environment Operations (Clean Air) Regulation 2010
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA, 2005)
	Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (EPA, 2005)
	Action for Air (DECC)
	Assessment and Management of Odour from Stationary Sources in NSW (EPA, 2006)
Odour	
	Technical Framework: Assessment and Management of Odour from Stationary Sources in NSW (DEC)
	Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC)
Noise and Vibration	
	NSW Industrial Noise Policy (EPA, 2000) and Industrial Noise Policy Application Notes
	NSW Road Noise Policy (EPA, 2011)
	Environmental Noise Control Manual (DECC)
	Assessing Vibration: a Technical Guide (EPA, 2006)
	Interim Construction Noise Guidelines (EPA, 2009)
Greenhouse Gas	
	AGO Factors and Methods Workbook (AGO)
	Guidelines for Energy Savings Action Plans (DEUS, 2005)
Biodiversity	
	NSW Biodiversity Offsets Policy for Major Projects (2014) and the Framework for Biodiversity Assessment http://www.environment.nsw.gov.au/resources/biodiversity/140675fba.pdf
	The NSW State Groundwater Dependent Ecosystem Policy (DLWC)
Visual	
	Control of Obtrusive Effects of Outdoor Lighting (Standards Australia, AS 4282)
	State Environmental Planning Policy No 64 - Advertising and Signage

ATTACHMENT 2
Agency Input into Key Assessment Issues

NSW EPA

Our reference: EF15/15401:DOC15/372014-01:WD
Contact: William Dove (02) 4224 4100

Department of Planning and Environment
(Attention: Joanna Bakopanos)
GPO Box 39
SYDNEY NSW 2001

Dear Madam

REQUEST FOR SEARS
FOR BULK LIQUIDS FUEL TERMINAL AT PORT KEMBLA (SSD 15_7264)

I refer to the *'Environmental Scoping Assessment, Proposed Port Kembla Bulk Liquids Terminal – 8 September 2015'* provided to the Environment Protection Authority (EPA) on 18 September 2015. The Department of Planning and Environment (DPE) has advised the EPA you have received a request for the Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for a Bulk Liquids Fuel Terminal at Port Kembla (SSD 15_7264).

The EPA attended a Planning Focus Meeting in relation to this proposal in January 2015. Based on the information provided to EPA, there are a number of matters that should be addressed when preparing the EIS.

These issues are identified in Attachment A and include:

- General
- Licensing Requirements
- Air Quality and Odour Management
- Water Quality
- Noise and Vibration
- Traffic and Transport
- Land Pollution and Waste
- Contaminated Land.

Guidance and supporting documents which should be used in addressing these matters are included in Attachment B.

A key environmental issue is preventing discharges of offensive odours/air emissions during loading/unloading activities. It is EPA's experience that similar activities have resulted in complaints unless appropriate control equipment or management measures are implemented. Other key issues include preventing spills/leaks and discharges to waters. The EIS must provide detailed information on how these risks will be managed to ensure that the proposed development is designed, constructed and operated to meet the stated environment outcomes.

PO Box 513 Wollongong NSW 2520
Level 3, 84 Crown Street, Wollongong NSW 2500
Tel: (02) 4224 4100 Fax: (02) 4224 4110
ABN 43 692 285 758
www.epa.nsw.gov.au

In 2009, National Biodiesel Pty Ltd obtained Approval MP08_0083 for a Soybean Processing Plant and Biodiesel Production Facility. National Biodiesel determined the approved project would not be viable, in particular, the processing plant, however the storage component of the approved project remains viable. TQ acquired the Approved Project rights and propose to establish the Port Kembla Bulk Liquids Terminal at the same location. The proposed works include:

- Ship unloaders on Berth 104
- Bulk liquids storage tanks on Site 1 and 2
- Truck loading and unloading equipment on site 2
- Office and control rooms.

The EPA requests that DPE confirm the status of the Biodiesel Approval MP08_0083, Mod 2 and Mod 3 and any relationship with SSD 15_7264.

The EPA may have additional requirements or comments upon receipt and review of the EIS.

If you have questions regarding the above, please phone the contact officer on (02) 4224 4100.

Yours sincerely

30/09/15

PETER BLOEM
Manager Illawarra
Environment Protection Authority

Att: A and B

ATTACHMENT A

The following key environmental matters should be addressed in the preparation of an Environmental Assessment (EIS) for the project. These relate to:

- General
- Licensing requirements
- Air Quality and Odour Management
- Water Quality
- Noise and Vibration
- Traffic and Transport
- Land Pollution and Waste
- Contaminated Land.

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

General

The EIS should fully describe the proposed project including details on the location of the proposal, including tanks, bunds, pipelines, truck load out facilities, ship unloading stations, and pig launching stations. Information on ship numbers, unloading and loading rates, and number of truck movements should also be provided. This should include details on the affected environment to place it in its local and regional environmental context including surrounding land uses, planning zonings, and potential sensitive receptors.

At the Planning Focus Meeting, the operation of the proposed Terminal was described as a multi-product facility, where products handled in different tanks could change depending on markets. The EIS should describe this operational model, particularly in terms of managing any *'slops'* generated during tank change-overs.

The EPA understands that the development will be undertaken in stages. The EIS should include a description of staging works and any associations.

The EIS should also provide a detailed assessment of the key issues specified below, and any other significant issues, including but not limited to the following:

- A description of the existing environment.
- An assessment of the potential impacts of the development, including any cumulative impacts associated with the operation of the development and any other approved or proposed port or industrial operations in the area.
- A description of the measures that would be implemented to avoid, minimise, mitigate, rehabilitate/remediate, monitor and/or offset the potential impacts of the development, including detailed contingency plans for managing any significant risks to human health and the environment. Appropriate Best Management Techniques should also be outlined. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.
- Information to demonstrate any Australian Standards relevant to the proposal and describe how the requirements of the Standards will be achieved.

The EPA also suggests community consultation be undertaken by the proponent during the preparation of the EIS. Details of this consultation should be documented in the EIS.

Licensing Requirements

The proposed development, including construction and operation, will require licensing under the *Protection of the Environment Operations Act* (POEO Act) 1997. In exercising its licensing functions, the EPA will take into account the requirements of Section 45 of the POEO Act. The proponent should be aware of these requirements when preparing the EIS.

Sections of the proposed site, namely Berth 104 (Lot 70 DP1182824) and Lot 301 DP1148391, are subject to Environment Protection Licences (EPL) issued under the POEO Act and held by other licensees. Graincorp Operations Limited, Port Kembla Operations Pty Limited and Boskalis Australia Pty Limited currently hold an EPL for scheduled activities at Berth 104. Waterway Constructions Pty Limited and Boskalis Australia Pty Limited currently hold an EPL for scheduled activities at Lot 301 DP1148391. A copy of these EPLs can be obtained at: http://www.epa.nsw.gov.au/prpoeoapp/.

The EIS should describe how the proposed development will relate to common premises to which these EPLs apply. The EIS should also describe any arrangements with these licence holders to ensure the occupier of the common premises is clearly defined and understood by all parties.

Any application for an EPL will need to satisfy the requirements of the EPA's *Guide to Licensing*, be accompanied by the EIS and all development approvals.

Air Quality and Odour Management

The environmental outcomes of the project should be to ensure:

- Unacceptable impacts do not occur on human health or the environment
- No potentially offensive odours occur beyond the boundary of the premises
- Emissions of dust from the premises are prevented or minimised
- All relevant guidelines in regards to ambient air quality are satisfied
- Any regulatory requirements relating to air discharges and their control are satisfied.

The EIS should include a detailed description of the proposed development and identify and describe all processes and sources of potential air emissions (including odour, dust and air toxics). It should include sufficient detail to accurately characterise and quantify all potential air emissions (both point and fugitive sources). Information should also be provided that describes all proposed mitigation, monitoring and management measures that will be installed, operated and maintained to ensure the above outcomes are satisfied. In particular, the EIS must describe how any air vented from tanks, trucks, and ships during unloading/loading operations, will be managed. In some instances, controls including thermal oxidisers and carbon beds are used to treat vented air to ensure potentially offensive odours do not occur beyond the boundary of the premises. Such measures need to be carefully considered as part of this proposal to ensure this outcome is achieved.

The EIS should include an air quality impact assessment undertaken in accordance with the attached guidelines. The EIS should justify the level of assessment undertaken on the basis of risk factors including proposal location, characteristics of the receiving environment and type and quantity of pollutants emitted.

The EIS should demonstrate all regulatory requirements relating to air discharges and their control are satisfied. This includes the POEO Act and the POEO (Clean Air) Regulation 2010, in particular, the requirements in Part 6 - Control of Volatile Organic Liquids.

Water Quality

The environmental outcomes of the project should be to ensure:

- There is no pollution of waters (including surface and groundwater)
- Wastewater is collected, treated and beneficially reused, where this is safe and practicable to do so.

The EIS should identify the relevant Water Quality Objectives and values for the waters of Port Kembla and demonstrate how the project will be designed and operated to restore or maintain these requirements.

The EIS should also describe the nature and degree of any likely impacts that the proposed project may have on the receiving environment and clearly outline the proposed mitigation, monitoring and management measures the proponent intends to apply to the project to ensure the above goals are satisfied.

The EIS should address the potential for any product spills from the site and any necessary bunding and/or spill management contingency measures that may need to be implemented.

Noise and Vibration

The environmental outcome of the project should be to minimise adverse impacts due to noise from the project.

The EIS must include a noise impact assessment prepared in accordance with the attached guidelines. This should include, but need not be limited to: identification and assessment of all potential noise sources associated with the project, the location of all sensitive receptors, proposed hours of operation and proposed noise mitigation measures. This should address construction, operational and road traffic noise generated by the proposal.

If there is likely to be any vibration impacts associated with the proposed project, the EIS should also include an assessment of the predicted vibration impacts associated with the project.

Traffic and Transport

The environmental outcome of the project should be to minimise air and noise emissions due to heavy vehicle movements from the project.

The EIS should include accurate predictions of the traffic volumes likely to be generated during the construction and operation of the project, including proposed transport routes and details of any upgrades to road or shipping infrastructure.

The EIS should include a feasibility assessment of Best Management Practices for all on-road diesel trucks associated with the project. Best Management Practices could include, but not necessarily be limited to:

- The development and implementation of a truck noise auditing program to confirm trucks achieve noise standards for engine brake noise; and

All on-road diesel trucks associated with the project should:
- Conform with relevant and current emission standards as prescribed in Australian Design Rules for heavy-duty engines and vehicles (EURO IV); or
- Where the vehicle is older than the 2006 model year (that is, EURO I, EURO II or EURO III standards), the vehicle should be fitted with a diesel exhaust treatment device.
- Consider emission reduction options in the diesel NEPM.

Land Pollution and Waste

The environmental outcomes of the project should be to ensure the following are achieved:
- Waste is managed In accordance with the principles of the waste hierarchy and cleaner production.
- The handling, processing and storage of all materials used at the premises does not have negative environmental or amenity impacts.
- The beneficial reuse of all wastes generated at the premises are maximised where it is safe and practical to do so.
- Pollution of land does not occur.

The EIS should identify, characterise and classify all waste that will be generated and disposed of as a result of the project. Proposed quantities of waste and disposal locations must be detailed in the assessment and should include waste that is intended for reuse and/or recycling. All waste must be classified in accordance with EPA's *Waste Classification Guidelines*.

The EIS should also provide details of how waste will be handled and managed both onsite and offsite to minimise pollution. This should include information on the procedures and protocols to be implemented to ensure that any waste leaving the site is transported and disposed of lawfully and does not pose a risk to human health or the environment. If the waste possesses hazardous characteristics, the EIS must provide details of how the waste will be treated or immobilised to render it suitable for transport and disposal.

The proposal has tanks being used for different products from time to time depending on demand and supply. Product change overs may generate *'slops'* from *'pigging'* of pipelines, and tank clean outs. The EIS needs to fully describe how any *'slops'* will be managed.

Contaminated Land

The environmental outcomes of the project should be to ensure the following environmental outcomes will be achieved in relation contaminated sites.

- To ensure any contaminated land is identified and appropriately managed for the purpose of reducing the risk of harm to human health or any other aspect of the environment.

A range of activities can result in land contamination and significant environmental and health risks if the land is not appropriately classified, assessed and rehabilitated. In cases where land has potential for land contamination, the EIS should also consider the requirements and procedures in the attached guidelines.

ATTACHMENT B

Title	Web address
Licensing	
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
EPA Guide to Licensing	http://www.epa.nsw.gov.au/licensing/licenceguide.htm
Air	
Approved Methods for Modelling and Assessment of Air Pollutants in NSW (2005)	http://www.epa.nsw.gov.au/resources/air/ammodelling05361.pdf
Approved Methods for the Sampling and Analysis of Air Pollutants in NSW	http://www.epa.nsw.gov.au/resources/air/07001amsaap.pdf
Technical Notes - Assessment and Management of Odour from Stationary Sources in NSW	http://www.epa.nsw.gov.au/air/odour.htm
POEO (Clean Air) Regulation 2010	http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+428+2010+cd+0+N
National Environment Protection (Diesel Vehicle Emissions) Measure	http://www.scew.gov.au/nepms/diesel-vehicle-emissions
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/index.html
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.epa.nsw.gov.au/resources/legislation/approvedmethods-water.pdf
Noise and Vibration	
Interim Construction Noise Guideline (2009)	http://www.epa.nsw.gov.au/noise/constructnoise.htm
Assessing Vibration: a technical guideline (2006)	http://www.epa.nsw.gov.au/noise/vibrationguide.htm
Industrial Noise Policy (EPA, 2000) and Industrial Noise Policy Application Notes	http://www.epa.nsw.gov.au/noise/industrial.htm
NSW Road Noise Policy (2011)	http://www.epa.nsw.gov.au/noise/traffic.htm
Waste	
Waste Classification Guidelines (DECC, 2008)	http://www.epa.nsw.gov.au/waste/envguidlns/index.htm
Contaminated Land	
State Environmental Planning Policy 55 – Remediation of Land.	http://www.planning.nsw.gov.au/assessingdev/pdf/gu_contam.pdf

Department of Primary Industries

OUT15/27343

Ms Joanna Bakopanos
Industry Assessments
NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Joanna.Bakopanos@planning.nsw.gov.au

Dear Ms Bakopanos,

Port Kembla Bulk Liquids Terminal (SSD_7264)
Request for input into Secretary's Environmental Assessment Requirements

I refer to your email dated 18 September 2015 to the Department of Primary Industries (DPI) in respect to the above matter.

The key issues that DPI requests are addressed in the EIS are:

- Assessment of local groundwater conditions (level, flow, quality), potential for interception with and take of groundwater, and management of any impacts to groundwater; and
- Any potential impacts to fisheries during construction or operation, including through:
  - Pollution to the marine environment, including the risk of any spills, and any mitigation measures proposed
  - Impacts to fish habitat.

Further 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, 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 Nicole Hely, Water Regulation Officer (Parramatta Office) on 8838 7816 or at nicole.hely@dpi.nsw.gov.au.

Yours sincerely

Mitchell Isaacs
Director, Planning Policy & Assessment Advice
2/10/2015

Attachment A

Port Kembla Bulk Liquids Terminal (SSD_7264)
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:
    - Sufficient market depth to acquire the necessary entitlements for each water source.
    - Ability to carry out a "dealing" to transfer the water to relevant location under the rules of the WSP.
    - Daily and long-term access rules.
    - 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,
    - water quality,
    - flood regime,
    - dependent ecosystems,
    - existing surface water users, and
    - 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:
  - the effect of the proposal on the recharge to groundwater systems;
  - the potential to adversely affect the water quality of the underlying groundwater system and adjoining groundwater systems in hydraulic connections; and
  - 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:
  - wetlands/swamps, watercourses and top of bank;
  - riparian corridor widths to be established along the creeks;
  - existing riparian vegetation surrounding the watercourses (identify any areas to be protected and any riparian vegetation proposed to be removed);

  - the site boundary, the footprint of the proposal in relation to the watercourses and riparian areas; and
  - 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

NSW GOVERNMENT | Office of Environment & Heritage

Date: 30 September 2015
Your reference: SSD15_7264
Our reference: DOC15/386331
Contact: Calvin Houlison
4224 4179

Joanna Bakopanos
Team Leader, Industry Assessments
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001
E-mail: joanna.bakopanos@planning.nsw.gov.au

Dear Ms Barnet

RE: OEH INPUT INTO SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS FOR PROPOSED BULK LIQUIDS FUEL TERMINAL, PORT KEMBLA (SSD15_7264)

Thank you for your request dated 18 September 2015 inviting input from the Office of Environment & Heritage (OEH) for the Secretary's Environmental Impact Assessment Requirements (SEARs) for the abovementioned proposal.

We note that the project will be assessed as State Significant Development (SSD) under Part 4 Division 4.1 of the *Environmental Planning & Assessment Act 1979*.

We recommend that the Environmental Impact Statement (EIS) appropriately addresses the following:

1. Biodiversity and offsetting
2. Aboriginal Cultural Heritage
3. Historic heritage
4. Flooding
5. Water and soils

The EIS should include an appropriate assessment of the potential impact on biodiversity, including threatened species, populations, ecological communities, or their habitats likely to occur within or near the subject site. Please note that the NSW Biodiversity Offsets Policy for Major Projects is now being implemented. We note that the site and surrounds are habitat for the Green and Golden Bell Frog (*Litoria aurea*).

Impacts to biodiversity should be assessed in accordance with the Framework for Biodiversity Assessment (FBA) by a person accredited in accordance with s142B(1)(c) of the Threatened Species Conservation Act 1995. The biodiversity assessment report and offset strategy, should one be required, must meet the minimum requirements outlined in the FBA. Given this is a new assessment procedure, the project team is welcome to contact OEH with any questions regarding the methodology.

The full list of standard and project specific OEH requirements to be addressed in the EIS is provided at **Attachments A and B**. In preparing the EIS, the proponent should refer to the relevant guidance material listed in **Attachment C**.

If you have any further queries in relation to this matter, please contact Calvin Houlison, Conservation Planning Officer, on 4224 4179 or calvin.houlison@environment.nsw.gov.au.

Yours sincerely

CHRIS PAGE
Senior Team Leader, Planning (Illawarra)
South Branch

Enclosures:

Attachment A – Standard Environmental Assessment Requirements
Attachment B – Project Specific Requirements
Attachment C – Guidance Material

Attachment A – Standard Environmental Assessment Requirements

Biodiversity
1. Biodiversity impacts related to the proposed development are to be assessed and documented in accordance with the Framework for Biodiversity Assessment, unless otherwise agreed by OEH, by a person accredited in accordance with s142B(1)(c) of the *Threatened Species Conservation Act 1995.*
Aboriginal cultural heritage
2. The EIS must identify and describe the tangible and intangible Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in the EIS. This may include the need for surface survey and test excavation. The identification of cultural heritage values should be guided by the *Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW* (DECCW, 2011) and consultation with OEH regional officers.
3. Where Aboriginal cultural heritage values are identified, consultation with Aboriginal people must be undertaken and documented in accordance with the *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the EIS.
4. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the EIS. The EIS must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.
Historic heritage
5. The EIS must provide a heritage assessment including but not limited to an assessment of impacts to *State and local heritage* including conservation areas, natural heritage areas, places of Aboriginal heritage value, buildings, works, relics, gardens, landscapes, views, trees should be assessed. Where impacts to State or locally significant heritage items are identified, the assessment shall: a. outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the NSW Heritage Manual (1996), b. be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria), c. include a statement of heritage impact for all heritage items (including significance assessment), d. consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant), and e. where potential archaeological impacts have been identified develop an appropriate archaeological assessment methodology, including research design, to guide physical archaeological test excavations (terrestrial and maritime as relevant) and include the results of these test excavations.
Water and soils
6. The EIS must map the following features relevant to water and soils including:

a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).
b. Rivers, streams, wetlands, estuaries (as described in Appendix 2 of the Framework for Biodiversity Assessment).
c. Groundwater.
d. Groundwater dependent ecosystems.
e. Proposed intake and discharge locations.

7. The EIS must describe background conditions for any water resource likely to be affected by the development, including:
   a. Existing surface and groundwater.
   b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.
   c. Water Quality Objectives (as endorsed by the NSW Government http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters.
   d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government.

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

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

Flooding and Coastal Erosion

10. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:
    a. Flood prone land
    b. Flood planning area, the area below the flood planning level.
    c. Hydraulic categorisation (floodways and flood storage areas).

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

12. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:
    a. Current flood behaviour for a range of design events as identified in 8) above. The 1 in 200 and 1 in 500 year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.

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

14. The EIS must assess the impacts on the proposed [development/project] on flood behaviour, including:
    a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
    b. Consistency with Council floodplain risk management plans.
    c. Compatibility with the flood hazard of the land.
    d. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
    e. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.
    f. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.
    g. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council.
    h. Whether the proposal incorporates specific measures to manage risk to life from flood.

Attachment B – Project Specific Requirements

A. Impacts on the following species will require further consideration and provision of the information specified in s9.2 of the Framework for Biodiversity Assessment:

- *Litoria aurea*

B. Surveys for all species must include targeted searches in all habitat (including marginal habitat) on the subject site.

Attachment C – Guidance material

Title	Web address
Relevant Legislation	
Coastal Protection Act 1979	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+13+1979+cd+0+N
Commonwealth Environment Protection and Biodiversity Conservation Act 1999	http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
Fisheries Management Act 1994	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N
Marine Parks Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N
National Parks and Wildlife Act 1974	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
Threatened Species Conservation Act 1995	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+101+1995+cd+0+N
Water Management Act 2000	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
Wilderness Act 1987	http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N
Biodiversity	
NSW Biodiversity Offsets Policy for Major Projects (OEH, 2013)	http://www.environment.nsw.gov.au/resources/biodiversity/140672biopolicy.pdf
Framework for Biodiversity Assessment (OEH, 2013)	http://www.environment.nsw.gov.au/resources/biodiversity/140675fba.pdf
Fisheries NSW policies and guidelines	http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation
List of national parks	http://www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx
Revocation, recategorisation and road adjustment policy (OEH, 2012)	http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm
Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/parks/policyRevocations.pdf
Heritage	
The Burra Charter (The Australia ICOMOS charter for places of cultural significance)	http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf
Statements of Heritage Impact 2002 (HO & DUAP)	http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf

Title	Web address
NSW Heritage Manual (DUAP) (scroll through alphabetical list to 'N')	http://www.environment.nsw.gov.au/Heritage/publications/index.htm#M-O
Aboriginal Cultural Heritage	
Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreq.pdf
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf
Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011)	http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf
Aboriginal Site Recording Form	http://www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf
Aboriginal Site Impact Recording Form	http://www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf
Aboriginal Heritage Information Management System (AHIMS) Registrar	http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm
Care Agreement Application form	http://www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf
Water and Soils	
Acid sulphate soils	
Acid Sulfate Soils Planning Maps via 'The NSW Natural Resource Atlas'	www.nratlas.nsw.gov.au/
Acid Sulfate Soils Manual (Stone et al. 1998)	Manual available for purchase from: http://www.landcom.com.au/whats-new/the-blue-book.aspx Chapters 1 and 2 are on DPI's Guidelines Register at: Chapter 1 Acid Sulfate Soils Planning Guidelines: http://www.planning.nsw.gov.au/rdaguidelines/documents/NSW%20Acid%20Sulfate%20Soils%20Planning%20Guidelines.pdf Chapter 2 Acid Sulfate Soils Assessment Guidelines: http://www.planning.nsw.gov.au/rdaguidelines/documents/NSW%20Acid%20Sulfate%20Soils%20Assessment%20Guidelines.pdf
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	http://www.advancedenvironmentalmanagement.com/Reports/Savannah/Appendix%2015.pdf This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
Flooding and Coastal Erosion	
Reforms to coastal erosion management	http://www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm
Floodplain development manual	http://www.environment.nsw.gov.au/floodplains/manual.htm
Guidelines for Preparing Coastal Zone Management Plans	Guidelines for Preparing Coastal Zone Management Plans http://www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf
NSW Climate Impact Profile	NSW Climate Impact Profile
Climate Change Impacts and Risk	Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change

Title	Web address
Management	Adaptation
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGuidance7.pdf
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf

Our Ref: STH08/02096/03
Contact: Hala Sattouf 4221 2769
Your Ref: MP 08_0083

6 March 2015

Ashley Cheong
Department of Planning & Environment
GPO Box 39
Sydney NSW 2001

MP 08_0083 – LOT 2 DP 1125445, LOT 301 DP 1148391, LOT 10 DP 118211, LOT 11 DP 1182111, TOM THUMB ROAD, NATIONAL PORTS BULK LIQUIDS TERMINAL

Dear Madam

Roads and Maritime Services (RMS) refers to your email dated 22 January 2015 and the Planning Focus Meeting held 29 January 2015 regarding the subject development application.

RMS has reviewed the information provided and considers that the following information should be addressed in the Environmental Impact Assessment (EIA):

- RMS notes a traffic impact assessment (TIA) will be undertaken as part of the EIA. It is noted impacts on the local road network will be considered as part of the TIA. RMS considers the impacts on the classified road network should also be considered in the TIA. In particular:
    - The intersection of Tom Thumb Road and Springhill Road
    - Any other key classified road intersections likely to be impacted. This may be determined based on traffic distributions and/or key delivery routes.
- As a guide Table 2.1 of the RTA's Guide to Traffic Generating Developments outlines the key issues that may be considered in preparing a TIA.
- As part of the TIA the developer should identify likely peak traffic generation rates, likely distributions and identify what modelling will be undertaken to assess the impact. This should then be submitted to RMS for acceptance prior to the modelling being completed.
- Intersection modelling using SIDRA should be undertaken for the junction of Tom Thumb Road with Springhill Road considering the following:
    - AM and PM peaks volumes
    - Existing traffic volumes with and without development and 10 year projected volumes with and without the development
- SIDRA intersection modelling may also be required for key classified road intersections likely to be impacted by the proposed development, identified based on traffic distribution and/or key delivery routes.

- The applicant should identify suitable infrastructure required to ameliorate any traffic impacts and safety impacts associated with the development. This should include identification of pedestrian, cyclists and public transport infrastructure. Concept plans should be provided for any works proposed within the road reserve.
- The EIA needs to consider the environmental impacts of any roadworks within the road reserve that are required to manage the impacts of the development. These impacts include traffic and road safety impacts as well as other impacts such noise, flora and fauna, heritage and impact to community.

RMS will commence its detailed assessment once the aforementioned information is provided to its satisfaction. Should you require any clarification on this matter please call Hala Sattouf on 4221 2769.

Yours faithfully

Chris Millet
Manager Land Use
Southern Region

Pamela Morales

From: Fernando, Sohan <Sohan.Fernando@safework.nsw.gov.au>
Sent: Thursday, 8 October 2015 4:00 PM
To: Pamela Morales
Cc: Joanna Bakopanos
Subject: Bulk liquids Fuel terminal - port kembla - SSD 15_7264

Security Classification:UNCLASSIFIED

Hi Pamela,

Regarding your e mail requesting SEARS for the above proposal, SafeWork NSW (formerly WorkCover NSW) has reviewed the Environmental Scoping Assessment document ref 82015103-01/Report 006 Ver 5 dated 8 September 2015 and make the following comments.

1. A facility is determined as a major hazard facility (MHF) under the Work Health and Safety (WHS) act and WHS regulation based on the maximum quantities of materials listed in schedule 15 of the WHS regulation 2011. The scoping document does not state the maximum quantities of liquids that would be held on site. However, the URS document dated 1/12/2014 indicates that the quantities will be above the MHF threshold. Therefore SafeWork NSW will assume that the facility will be a Major Hazard Facility (MHF)under the WHS regulation 2011.

Based on the above assumption, SafeWork NSW (formerly WorkCover NSW) has set out below the matters that need to be considered when preparing the EIS/PHA and addressed in the EIS/PHA as appropriate.

1. Details of how compliance with the requirements of the Work Health and Safety (WHS) Act 2011 and Regulation 2011 will be achieved.
   Note: If the proposal is approved, a safety case as required under clause 560 of the WHS Regulation will need to be prepared that demonstrates to SafeWork NSW how the risks related to hazards and safety will be minimised to "So Far As Is Reasonably Practicable" (SFARP) (see section 17 of the WHS Act 2011.
2. A clear statement on the risk criteria that will be adopted for demonstrating SFARP and the basis/justification for adopting such criteria. – Reference to relevant publications by the UK health and safety executive (HSE) and the Australian National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) is recommended.
   Note: While the risk criteria in the Hazardous Industry Planning Advisory Paper (HIPAP) No.4 sets out criteria for land use safety planning, the WHS Regulation requires major hazard facilities to demonstrate that the risks have been reduced to SFARP.
3. An outline of how the requirement to prepare and submit a Safety Case to SafeWork NSW with the MHF licence application will be achieved.
4. When preparing the PHA, the proponent is advised to identify the possible major incidents and the risk reduction measures to be included in the design.
5. The PHA (QRA) should evaluate both on site and off site risks on a cumulative (whole of site) basis.
   Note: While the risk criteria in HIPAP 4 refers only to offsite risk, the WHS Regulation requires both onsite and offsite risks to be evaluated for major hazard facilities. Doing so at the PHA stage will eliminate the need to repeat this work when preparing the Safety Case under the WHS regulation in the post approval period.
6. Details of the risk reduction measures that will be included to achieve SFARP.
7. An outline of how the recommendations made by the UK HSE and other industry bodies in relation to the Buncefield fuel storage depot fire and explosion in 2005 will be addressed by this proposal.
8. Details of the standards and codes used in the construction of the tanks, the protection systems for the tanks and spill control systems for the tanks. E.g. API standard 2350.

9. The PHA should include an assumptions register with source/justification for the assumptions made in the risk analysis. In particular, with respect to event and failure frequencies.
10. The risk matrix at table 4-1 in the scoping document indicates the risk of fatality of one in a million years as "medium". This would be inappropriate in the major hazard context. SafeWork NSW should be consulted if a risk matrix is to be used for major hazard risks.
11. Tank bunding should be concrete or similar impervious material to minimise soil contamination in the event of a spill. Any cost benefit analysis when deciding on bunding options should take the cost of remediation of contaminated soil into consideration if it is decided not to line the base of the bunded area.
12. As proposed in clause 5.18.2 of the 8 September 2015 scoping document, the proponent should consult with SafeWork NSW during the development of the EIS and PHA.

Should you have any queries, please contact me.

regards

Sohan Fernando
Senior Safety Analyst
Major Hazard Facilities Team
SafeWork NSW
2 Burbank Place
Baulkham Hills NSW 2153
Tel: 8867 2747 Fax:9271 6485