STATEMENT OF ENVIRONMENTAL EFFECTS



VOLUME 2 Appendices

November 2014

Kurnell Refinery Demolition





Appendix A*

SEARs and Application Documentation
A1 SEARs*

A2 SEARs Response Table

A3 Application Documentation

Appendix A1*

* SEARs*



Contact: Pascal van de Walle Phone: 02 9228 6412

Fax: 02 9228 6466
Email: Pascal.vandewalle@planning.nsw.gov.au

Mr Jos Kusters
Caltex Refineries (NSW) Pty Ltd
2 Solander Street
KURNELL NSW 2231

Dear Mr Kusters

Secretary's Environmental Assessment Requirements (SEARs)
Modification – Caltex Kurnell Refinery Conversion (SSD-5544 MOD 1)

Please find attached a copy of the Secretary's Environmental Assessment Requirements (SEARs) at **Appendix A** for the preparation of supporting documentation for the proposed modification to State Significant Development (SSD) Consent SSD-5544, which was approved by the Planning Assessment Commission (PAC) on 7 January 2014.

These requirements are based on the information you have provided to date as well as the responses received from Council and other relevant government agencies. These written responses are provided at **Appendix B** and should be addressed in consultation with these agencies when preparing the supporting documentation. Please note that these requirements may change at any time.

Given the proximity of the proposed modification to the township of Kurnell, genuine community consultation and engagement should be undertaken during preparation of the supporting documentation for the proposed modification. In addition, details must be provided to demonstrate how the local community, Council and relevant agencies will be kept informed about the progress of all modification works at the site.

The consultation process must ensure that the community is informed and is actively engaged in issues of concern to them. Sufficient information must be provided to the community so that it has a clear understanding of the nature, duration and potential impacts of the proposed modification works.

Before exhibiting the proposed modification, the Department will review the supporting documentation in consultation with relevant agencies to determine if it addresses the SEAR's and the relevant requirements of the *Environmental Planning and Assessment Act 1979* and *Environmental Planning and Assessment Regulation 2000*.

I would appreciate it if you would contact the Department at least two weeks before you propose to submit your supporting documentation. This will enable the Department to confirm the applicable fee and determine the number of copies of the supporting documents required for reviewing purposes.

The Department will make all relevant documents associated with the proposed modification publicly available on its website. Consequently, I would appreciate it if you would ensure that all documents you subsequently submit to the Department are in a suitable format for the web, and arrange for an electronic version of all supporting documentation to be hosted on a suitable website during the assessment process.

If you have any enquiries, please contact Mr Pascal van de Walle on the above details.

Yours sincerely

Chris Ritchie 23/7/14.

Manager – Industry, Coastal & Regional Projects
As the Secretary's nominee

Department of Planning & Environment 23-33 Bridge Street, Sydney NSW 2000 GPO Box 39, Sydney NSW 2001 Phone 02 9228 6111 Website planning.nsw.gov.au

APPENDIX A – SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS

Secretary's Environmental Assessment Requirements

Section 96(2) of the Environmental Planning and Assessment Act 1979

State Significant Development

Application Number	SSD-5544 MOD 1			
Modification	Demolition, dismantling and/or removal of redundant refinery and rela infrastructure, process units, buildings, tanks, foundations and undergrouservices.			
Location	2 Solander Street, Kurnell NSW 2231			
Applicant	Caltex Refineries (NSW) Pty Ltd			
Date of Issue	23 July 2014			
General Requirements	The supporting documentation submitted with the Section 96(2) application must meet the minimum form and content requirements in clause 115 of the Environmental Planning and Assessment Regulation 2000. In addition, the supporting documentation must: provide a detailed description of the proposed modification, including: justification and need for the proposed modification; a statement of the objectives of the proposed modification; various components and stages of the proposed modification; likely interactions between the proposed modification and the existing and/or approved operations on the site and in the vicinity of the site; plans of all proposed works associated with the modification, including all demolition and excavation works; an analysis of any feasible alternatives to the proposed modifications, demonstrate the status of compliance with existing conditions of consent for SSD 5544; include consideration of any relevant statutory provisions; provide environmental scoping of the potential environmental impacts of the proposed modification, identifying the key issues for further assessment and taking into consideration the issues raised during consultation; a review of existing management plans and programs in place at the existing facility and a description of any proposed amendments to these plans and programs; include a detailed assessment of the key issues specified below, and any other significant issues identified through the environmental scoping (see above), which includes: a description of the existing environment, using sufficient baseline data; an assessment of the potential impacts of all components and stages of the proposed modification, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes; a description of the measures that would be implemented to avoid, minimise, manage and monitor and, if necessary, offset the potential impacts of the proposed modification, including proposals for adaptive management and/or conting			

area of the site once terminal operations commence;

- a conclusion, justifying the proposed modification on economic, social and environmental grounds, taking into consideration whether the development is consistent with the objects of the EP&A Act;
- a signed statement from the author of any written statement certifying that
 the statement contains all available information that is relevant to the
 environmental assessment of the proposed modification, and that the
 information contained in the statement is neither false nor misleading.

Key Issues

The supporting documentation must address the following specific matters:

- Hazards and Risks including a Hazards in Demolition (HAZDEM) study that identifies all significant demolition related hazards, and the assessment of the risks associated with these hazards. The analysis shall cover all phases of the proposed modification (i.e. demolition/removal of redundant assets and infrastructure), and include all components and stages (e.g. demolition of refinery process units, tanks, pipelines etc). The demolition hazards identification and risk assessment shall particularly examine the following:
 - the potential risk impacts from the proposed demolition works onto the existing simultaneous terminal operations;
 - the potential for any of the identified demolition related risks to alter during the proposed works associated with the modification, individually or through interaction with existing operations, the offsite risk profile of the facility as assessed in the PHA report for SSD-5544.

• Contamination - including:

- how ecological and human health risks posed by contaminants on the site would be mitigated and managed; and
- a description of the measures that would be used to identify, capture, treat, remediate and/or dispose of contaminated soil (including acid sulfate soil) and water that is encountered.

Soil and Water – including:

- an assessment of the potential impacts to soil, groundwater and surface water resources;
- a surface water, waste water and flooding assessment which includes details on how stormwater would be managed during and post works;
- identification of any water licensing or other approvals required under the *Water Act 1912* and/or the *Water Management Act 2000*.

Waste – including:

- accurate estimates of the quantity, characterisation and classification of the potential waste streams generated;
- identification of beneficial reuse and/or alternative treatment opportunities for all wastes generated by the proposed modification;
- a description of the measures that would be implemented to ensure that any waste produced is appropriately handled, processed and disposed of.
- Noise and Vibration including an assessment of all potential noise and vibration impacts on surrounding receivers.

Air Quality and Odour – including:

- an assessment of all potential air quality and odour impacts on surrounding receivers; and
- a greenhouse gas assessment and consideration of ways to minimise energy consumption and greenhouse gas emissions.
- Transport and Access an assessment of additional traffic movements associated with the proposed modification, and updated site access plans.
- **Heritage** including an assessment of the potential impacts on Aboriginal and non-Aboriginal heritage (including movable cultural heritage) values.

	Ecology – including an assessment of the potential impacts on terrestrial, aquatic and riparian ecology, including impacts to the surrounding Botany Bay National Park, Towra Point Nature Reserve, Towra Point Aquatic Reserve, watercourses, riparian land, wetlands and groundwater dependent ecosystems.
Consultation	During the preparation of the supporting documentation, you must consult with all relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners.
	In particular, you must consult with the:
	 Environment Protection Authority (EPA); NSW Department of Primary Industries (Office of Water and NSW Fisheries); Sutherland Shire Council; WorkCover NSW; Office of Environment and Heritage (OEH); NSW Heritage Council; and NSW Health.
	The supporting documentation must describe the consultation process and the issues raised, and identify where the design of the proposed modification 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 the Section 96 application to modify the approved development (SSD 5544) within 2 years of the issue date of these SEARs, you must consult with the Secretary in relation to the 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 proposed modification.

ATTACHMENT 1 Technical and Policy Guidelines

The following guidelines <u>may</u> assist in the preparation of the Supporting Documents for the modification application. 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

Aspect	Policy /Methodology		
Licensing			
Licensing	Protection of the Environment Operations Act 1997		
	EPA Guide to Licensing		
Risk Assessment	El 77 data to Electronig		
	AS/NZS 4360:2004 Risk Management (Standards Australia)		
	HB 203:2006 Environmental Risk Management – Principles & Process		
	(Standards Australia)		
Hazards and Risk	TEST COLUMN TO THE TEST COLUMN T		
	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. 4 (DUAP, 1992): Criteria		
	for Land Use Planning, (DUAP)		
	Hazardous Industry Planning Advisory Paper No. 6 (HIPAP No 6):		
	Guidelines for Hazardous Analysis, (DUAP)		
	Multi-Level Risk Assessment (DUAP)		
Contamination			
	National Environment Protection (Assessment of Site Contamination)		
	Measure (NEPM) 1999 and Draft NEPM Variation (2010, 2012)		
	Australian and New Zealand Guidelines for Fresh and Marine Water Quality		
	(2000)		
Soil and Water			
	NSW Coastal Policy (NSW Government 1997)		
	State Environmental Planning Policy No 71 - Coastal Protection		
	Floodplain Risk Management Guideline - Practical Consideration of Climate		
	Change (DECC)		
	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		
Coastal	(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) Liging the ANZECC Cuideline and Water Quality Chicetives in NSW (DEC)		
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)		
	NSW Guidelines for Controlled Activities on Waterfront Land (NOW 2012)		
	The NSW Wetlands Management Policy (1996)		

	TI NOMO LEDITORIO
	The NSW State Rivers and Estuaries Policy (NSW Water Resources Council)
	Water Sharing Plan for the Metropolitan Region Unregulated River Water Sources (NOW) 2011
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	NSW State Groundwater Policy Framework Document (DLWC)
	Australian Groundwater Modelling Guidelines (NWC 2012)
Croundwater	NSW Aquifer Interference Policy (NOW 2012)
Groundwater	NSW Water Extraction Monitoring Policy (DWE 2007)
	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
	Acid Sulfate Soils Planning Maps
Acid Sulfate Soils	Acid Sulfate Soil Manual (ASSMAC) (Stone et al. 1998)
	Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)
	Managing Urban Stormwater: Soils & Construction (Landcom)
	Design Manual for Soil Conservation Works - Technical Handbook No. 5
Erosion and Sediment	(Soil Conservation Service of NSW)
	Soil and Landscape Issues in Environmental Impact Assessment (DLWC)
<u> </u>	Wind Erosion – 2nd Edition
	Managing Urban Stormwater: Strategic Framework. Draft (EPA)
	Managing Urban Stormwater: Council Handbook. Draft (EPA)
Stormwater	Managing Urban Stormwater: Treatment Techniques (EPA)
	Managing Urban Stormwater: Source Control. Draft (EPA)
	Managing Urban Stormwater: Harvesting and Reuse (DEC)
	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)
Wastewater	National Water Quality Management Strategy - Guidelines For Water
radionalo,	Recycling: Managing Health And Environmental Risks (Phase1) (EPHC,
	NRMMC & AHMC)
	National Water Quality Management Strategy - Guidelines For Water
	Recycling: Managing Health And Environmental Risks (Phase1) (EPHC,
	NRMMC & AHMC)
	State Environmental Planning Policy No 55 - Remediation of Land
	Managing Land Contamination - Planning Guidelines SEPP 55 -
	Remediation of Land (DUAP and EPA)
	Contaminated Land Management Act 1997 and Amendment Act 2008
	Guidelines under the CLM Act
	Australian and New Zealand Guidelines for the Assessment and
	Management of Contaminated Sites (ANZECC & NHMRC)
	National Environment Protection (Assessment of Site Contamination)
Contomination	Management 4000 (NIEDO)
Contamination	Measure 1999 (NEPC)
Contamination	Contaminated Sites: Sampling Design Guidelines (NSW EPA)
Contamination	Contaminated Sites: Sampling Design Guidelines (NSW EPA) Contaminated Sites: Guidelines for Consultants Reporting on Contaminated
Contamination	Contaminated Sites: Sampling Design Guidelines (NSW EPA) Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites (NSW EPA)
Contamination	Contaminated Sites: Sampling Design Guidelines (NSW EPA) Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites (NSW EPA) Guidelines for the NSW Site Auditor Scheme – 2 nd edition (2006)
Contamination	Contaminated Sites: Sampling Design Guidelines (NSW EPA) Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites (NSW EPA) Guidelines for the NSW Site Auditor Scheme – 2 nd edition (2006) Sampling Design Guidelines
Contamination	Contaminated Sites: Sampling Design Guidelines (NSW EPA) Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites (NSW EPA) Guidelines for the NSW Site Auditor Scheme – 2 nd edition (2006) Sampling Design Guidelines Guidelines for the Assessment and Management of Groundwater
	Contaminated Sites: Sampling Design Guidelines (NSW EPA) Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites (NSW EPA) Guidelines for the NSW Site Auditor Scheme – 2 nd edition (2006) Sampling Design Guidelines
	Contaminated Sites: Sampling Design Guidelines (NSW EPA) Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites (NSW EPA) Guidelines for the NSW Site Auditor Scheme – 2 nd edition (2006) Sampling Design Guidelines Guidelines for the Assessment and Management of Groundwater Contamination (DECC) Draft
Contamination Noise & Vibration Noise	Contaminated Sites: Sampling Design Guidelines (NSW EPA) Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites (NSW EPA) Guidelines for the NSW Site Auditor Scheme – 2 nd edition (2006) Sampling Design Guidelines Guidelines for the Assessment and Management of Groundwater

	Industrial Noise Policy (EPA, 2000) and Industrial Noise Policy Application Notes
	Environmental Noise Management – Assessing Vibration: a technical guide (DEC)
Vibration	DIN 4150 Part 3 – Structural Vibration: effects of vibration on structures (ISC 1999)
	Assessing Vibration – A Technical Guide 2006 (DEC)
	Technical Basis for Guidelines to Minimise Annoyance Due to Blasting
	Overpressure and Ground Vibration (ANZECC, 1990)
Waste	
	Waste Classification Guidelines (2008)
	Resource Recovery Exemption
	Waste Avoidance and Resource Recovery Strategy 2007 - Overview (DECC
	Waste Avoidance and Resource Recovery Performance Report 2006 (DECC)
Air Quality & Odour	
	Protection of the Environment Operations (Clean Air) Regulation 2010
Air Ouglitu	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC)
Air Quality	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)
	National Environment Protection (Air Toxics) Measure (NEPC, 2004)
	Technical Framework: Assessment and Management of Odour from
Odour	Stationary Sources in NSW (DEC)
Odour	Technical Notes: Assessment and Management of Odour from Stationary
	Sources in NSW (DEC)
	Clean Energy Legislation Amendment Act (CELA) 2012
	National Greenhouse and Energy Reporting (NGER) Act 2007
Greenhouse Gas	NSW Greenhouse and Climate Change Action Plan
Greenmoude Gue	National Greenhouse Accounts (NGA) Factors
	AGO Factors and Methods Workbook (AGO)
	Guidelines for Energy Savings Action Plans (DEUS)
Transport and Access	
	State Environmental Planning Policy (Infrastructure) 2007
	Guide to Traffic Generating Development (RTA)
Na trail a facility of the fac	Road Design Guide (RTA)
Heritage	
	Draft Guidelines for Aboriginal Cultural Heritage Assessment and Community
Aboriginal	Consultation (DEC 2005)
	The Burra Charter (The Australia ICOMOS charter for places of cultural
	significance)
Non- Aboriginal	NSW Heritage Manual (NSW Heritage Office & DUAP)
Non-Aboriginal	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
Ecology	
	Environment Protection and Biodiversity Conservation Act 1999
	Australian and New Zealand Guidelines for Fresh and Marine Water Quality
	(2000)
	Risk Assessment Guidelines for Groundwater Dependent Ecosystems (NOW 2012)

APPENDIX B – COUNCIL AND AGENCY SUBMISSIONS



Our reference: Contact: EF13/2741:DOC14/92632-01:CP Craig Patterson (02) 4224 4100

Department of Planning and Environment Major Projects Assessment (Attention: Pascal van de Walle) GPO Box 39 SYDNEY NSW 2001

Dear Mr van de Walle

REQUEST FOR KEY ISSUES AND ASSESSMENT REQUIREMENTS APPLICATION TO MODIFY STATE SIGNIFICANT DEVELOPMENT APPLICATION (SSD-5544) CALTEX KURNELL REFINERY CONVERSION

I refer to your request dated 4 June 2014 for the Environment Protection Authority (EPA) to provide its key issues and environmental assessment requirements for the modification of the above State Significant Development and preparation of a Statement of Environmental Effects (SEE). The proposed modification involves the demolition and removal of redundant infrastructure.

On the basis of a review of the information provided to date by Department of Planning and Environment (DPE) and supporting information provided by Caltex Refineries (NSW) Pty Ltd (Caltex), the EPA has identified a number of key environmental issues that should be addressed as part of the modification. These issues are outlined in more detail in the attachment to this letter (Attachment A) and relate to the following:

- Proiect details
- Licensing requirements
- Air Quality
- Noise and vibration
- Water Quality
- Waste
- Contaminated Land Management

Guidance and supporting documents which may be useful in addressing the above issues are included in the attachment to this letter (Attachment B). If you have questions regarding the above, please phone Craig Patterson on (02) 4224 4100.

Yours sincerely

PETER BLOEM Manager Illawarra

Environment Protection Authority

17/6/14

Att.

Attachment A Attachment B Key Issues and Environmental Assessment Requirements

PO Box 513 Wollongong NSW 2520 Level 3, 84 Crown Street, Wollongong NSW Tel: (02) 4224 4100 Fax: (02) 4224 4110 ABN 43 692 285 758

ATTACHMENT A

Key Issues and Environmental Assessment Requirements

Project Details

The proponent should ensure the SEE is sufficiently comprehensive to enable the EPA to determine the extent of the impact(s) of the proposal and that satisfactory measures are implemented to protect the environment and community amenity. Details are required on the location of the proposed development including the affected environment to place the proposal in its local and regional environmental context including surrounding landuses, planning zonings and potential sensitive receptors.

The SEE should provide a detailed description of the proposed methods of demolition that will be used to demolish and remove the redundant infrastructure. Information relating to the staging, hours of operation and duration of the works should also be provided. The proponent should also provide information regarding the likely future uses (if any) for the refinery site during terminal operations.

Given the refinery's proximity to the Kurnell community, the SEE should also detail the proposed communication strategy that will be implemented for the duration of the works to regularly inform all relevant stakeholders of the progress of the works and future activities. Particular attention should be given to sensitive receivers that may be present in the vicinity of the refinery, including residential homes, schools, aged care facilities, hospitals and users of the nearby National Park.

The SEE should describe mitigation and management options that will be used to prevent, control, abate or mitigate identified environmental impacts including any cumulative impacts associated with the project and to reduce risks to human health and prevent the degradation of 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.

Licensing requirements

Caltex Refineries (NSW) Pty Ltd currently holds an Environment Protection Licence (EPL) Number 837 issued under the *Protection of the Environment Operations (POEO) Act 1997* for the operation of the Kurnell Refinery. A copy of this licence can be obtained at http://www.environment.nsw.gov.au/prpoeoapp/.

The SEE should demonstrate how this licence, the POEO Act and associated regulations will be complied with. The need for any variation to the licence, prior to works commencing, should be identified. This could include the removal of conditions relating to the refinery operations and adding new scheduled activities that might arise from the demolition works, for example: crushing, grinding or separating works, resource recovery or waste management.

Air Quality

The environmental outcomes of the project should be to ensure:

- Unacceptable impacts do not occur on human health or the environment
- No offensive odours are caused or permitted from the premises
- Emissions of dust from the premises are prevented or minimised; and
- All relevant guidelines in regards to ambient air quality are satisfied.

The SEE should include a detailed description of the proposal and identify and describe all processes and sources (including odour and dust) that could result in air emissions. Sufficient detail to accurately communicate the characteristics and quantity of all emissions must be provided. A description of any proposed mitigation, monitoring and management measures the proponent intends to apply to ensure the above environmental outcomes are satisfied should also be included.

The SEE should also include a risk assessment associated for any identified air emissions for all stages of the project. Assessment of risk relates to environmental harm, risk to human health and amenity. Where appropriate, the SEE should include air dispersion modelling where there is a risk of adverse air quality impacts, or where there is sufficient uncertainty to warrant a rigorous numerical impact assessment. The SEE 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 need for ambient air quality monitoring and reporting should be carefully evaluated based on actual or perceived risks to the environment and human health.

Particular attention should be given to air pollutants that are generated or may be believed by the community to be generated from demolition activities and which can result in environmental/health concerns. This includes, but is not necessarily limited to, fine particles (including PM2.5), asbestos, crystalline silica and heavy metals.

Noise and vibration

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

The existing licence contains noise limits but these apply to an operational refinery and should not be used for the demolition project.

The SEE must include an assessment of the predicted noise impacts associated with the project in accordance with the EPA's *Interim Construction Noise Guidelines* and *Industrial Noise Policy*. The assessment should include, but need not be limited to:

- identification and assessment of all potential noise sources associated with the demolition and removal
 of the redundant infrastructure. This may include the use of heavy machinery (bulldozers and
 excavators), crushing, grinding or separating activities and any proposed blasting activities
- if there is likely to be any vibration impacts associated with the demolition works, the SEE should also include an assessment of the predicted vibration impacts associated with the project
- identify the locations of all sensitive receptors
- · the proposed hours of demolition activities
- an assessment of compliance with the existing licence conditions and appropriate construction noise criteria as determined using the above guidelines; and
- any proposed noise mitigation, monitoring (continuous and/or attended) and management measures which are necessary to achieve the above outcome.

Water Quality

The environmental outcomes for the project should be to ensure:

- There is no pollution of waters (including surface and groundwater) except in accordance with licence requirements; and
- Wastewater is collected, treated and beneficially reused, where this is safe and practicable to do so and provides the best environmental outcome.

The SEE should describe the nature and degrees of any likely impacts to both surface water and groundwater from the demolition works and clearly outline the proposed mitigation, monitoring and management measures the proponent intends to apply to ensure the above outcomes are satisfied. Particular attention should be given to the protection of sensitive receivers present in the local catchment including Towra Point Nature Reserve, Silver Beach, Botany Bay and Yena Gap (Botany Bay National Park).

The proposed project will involve the demolition and removal of a number of structures at the site. This will include the removal of:

- · foundations and redundant slabs for the process units
- · pipelines from the process units
- redundant cabling and certain underground services including the Oily Water Sewer from beneath the process units; and
- several underground pipelines including the cooling water intake and outlet lines, product lines and the Continental Carbon pipeline.

The SEE should address how process/wastewaters collected on the site currently will be managed post demolition activities particularly from the areas where services to the Oily Water Sewer system are proposed to be removed.

Stormwater management should also be carefully considered in relation to the proposed development. Demolition activities may result in exposed soils from excavations and removal of foundations. It is important that prior to, during and following demolition, appropriate stormwater management systems are implemented by Caltex to comply with the EPL and prevent any contaminated discharges from the site. The site can experience periods of intense rainfall and this should be carefully considered in the design, operation and maintenance of measures to prevent water pollution.

The SEE should also describe how the proposed demolition activities may affect the works currently being completed by Caltex as part of its Stormwater Catchment and Management Program which was developed as a requirement of a Pollution Reduction Program (PRP).

Waste

The goal of the project should be to ensure 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 and it provides the best environmental outcome; and
- · No waste disposal occurs on site except in accordance with an EPL.

The SEE should include a Waste Management Plan which includes the following matters:

- 1. Identify, characterise and classify all waste that will be generated, recycled, reused and disposed of as a result of the demolition activities.
- 2. Provide an estimate of the quantities of materials generated.
- 3. 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 SEE must provide details of how the waste will be treated or immobilised to render it suitable for transport and disposal.
- 4. Describe the proposed methods of treatment, processing, reuse, recycling and disposal for each of these waste types (for example, crushing on site, treatment on site, removal to another premises for treatment or disposal).
- 5. Identify any opportunities to regenerate hydrocarbon impacted soils generated from the refinery site through the Bio Pile Pilot trial currently being conducted by Caltex at the Kurnell Refinery.

All waste must be assessed, classified and managed in accordance with EPA's Waste Classification Guidelines.

Contaminated Land Management

There are a range of contamination issues at the Kurnell Refinery site that are the legacy of historical practices. The assessment and management of these issues has been the subject of previous directions by the EPA, including Pollution Reduction Programs (PRPs) attached to the EPL.

In 2013, the EPA issued Caltex with a Preliminary Investigation Order (PIO) under Section 10 of the Contaminated Land Management Act 1997 to address identified contamination legacies across the refinery site. The EPA has met regularly with Caltex to discuss progress in meeting the requirements of the POI.

While the PIO does not address the remediation of identified contamination, the EPA has advised Caltex that it will require a plan, including milestones, to clean up site contamination. The EPA has advised Caltex that the remediation of contamination should be completed by the end of 2017. Remediation that is not associated with demolition activities will be regulated by the EPA under Caltex's EPL and/or under the Contaminated Land Management Act. Once the proposed use of any surplus land has been determined, further remediation under a separate development consent may be required.

The proposed demolition activities include the excavation of soils at various areas of the site to remove a number of redundant pipelines, services and infrastructure. The SEE should determine the likelihood of any impacts (including any potential offsite migration of contamination) occurring as a result of the project and detail any proposed mitigation and monitoring measures that will be implemented in the event that soil contamination is encountered. Also, the SEE should provide details on how soil and/or groundwater contamination will be identified, how the identified site contamination will be remediated (including details on the remediation goals and objectives) and provide details, including timing, on what reports (for example, validation reports) will be prepared. Clarification on any potential future uses should also be detailed in the SEE as should be the process of making the site suitable for its potential uses

ATTACHMENT B - GUIDANCE MATERIAL

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	www.epa.nsw.gov.au/licensing/licenceguide.htm		
	<u>Air Quality</u>		
Approved methods for modelling and assessment of air pollutants in NSW	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 Framework - Assessment and Management of Odour from Stationary Sources in NSW	http://www.epa.nsw.gov.au/resources/air/20060440framework.pdf		
Technical Notes - Assessment and Management of Odour from Stationary Sources in NSW	http://www.epa.nsw.gov.au/resources/air/20060441notes.pdf		
POEO (Clean Air) Regulation 2010	http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+428+20 10+cd+0+N		
	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		
Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration (ANZECC 1990)	http://www.epa.nsw.gov.au/noise/blasting.htm		
Waste, Chemic	als and Hazardous Materials and Radiation		
Waste Classification Guidelines (2008)	http://www.epa.nsw.gov.au/waste/envguidIns/index.htm		
Resource recovery exemption	http://www.epa.nsw.gov.au/waste/RRecoveryExemptions.htm		
	Water and Soils		
Acid sulphate soils			
Acid Sulfate Soils Planning Maps	http://canri.nsw.gov.au/download/		
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 DoP'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		

Title	Web address 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.derm.qld.gov.au/land/ass/pdfs/lmg.pdf This replaces Chapter 4 of the Acid Sulfate Soils Manual above.		
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.nsw.gov.au/water/usinganzeccandwqos.htm		
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		
Contaminated Sites Assessment and Remediation			
Contaminated Land Management Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+140+1997+cd+0+N		
Guidelines under the CLM Act	http://www.epa.nsw.gov.au/clm/guidelines.htm		
Guidelines for Consultants Reporting on Contaminated Sites (2011)	http://www.epa.nsw.gov.au/resources/clm/20110650consultantsglines.pdf		
Guidelines for the NSW Site Auditor Scheme - 2nd edition (2006)	http://www.epa.nsw.gov.au/resources/clm/auditorglines06121.pdf		
Sampling Design Guidelines (1995)	http://www.epa.nsw.gov.au/resources/clm/95059sampgdlne.pdf		
National Environment Protection (Assessment of Site Contamination) Measure 1999 (or update)	http://www.ephc.gov.au/taxonomy/term/44		
Managing land contamination: Planning Guidelines – SEPP 55 Remediation of Land	http://www.planning.nsw.gov.au/DevelopmentAssessments/RegisterofDevelopmentAssessmentGuidelines/tabid/207/language/en-US/Default.aspx		



WorkCover Authority of NSW | Hazardous Chemical Services – Major Hazard Facilities Level 10, Centennial Plaza, Building C, 300 Elizabeth Street

Surry Hills, NSW 2010 PO Box 1476 Strawberry Hills NSW 2012 mhf@workcover.nsw.gov.au

WorkCover Assistance Service 13 10 50 workcover.nsw.gov.au

Date: 16 June 2014

Our Ref: 10131 / 2009/002752-03 Your Ref: SSD-5544 MOD 1

Mr Nick Hall A/Team Leader - Industry NSW Planning & Infrastructure GPO Box 39 SYDNEY NSW 2001

UNCLASSIFIED

Dear Mr Hall

Response to Request for Key Issues and Environmental Assessment Requirements

Application to Modify State Significant Development Application – Caltex Kurnell Refinery

Conversion (SSD-5544)

Thank you for the opportunity to make comment on the draft SEARs for the above project.

We note that the requirement that Caltex carry out a Preliminary Hazard Screening (PHS) followed, if necessary, by an amended Preliminary Hazard Analysis (PHA) is in line with the environmental scoping proposed by Caltex. We agree that risks from the facility after demolition would not be expected to change significantly compared with the approved development. However, Caltex appears not to have addressed the possible risk impacts of demolition activities on the existing terminal operations. It appears unlikely that the SEPP 33 screening process would capture such impacts. Additionally, given that this is a major hazard facility (MHF) there is a need for Caltex to consider the risks to people on site from the demolition and terminal operations.

Accordingly, we suggest that the Hazards and Risks requirement be amended to:

- A Preliminary Hazard Analysis (PHA) to specifically address:
 - o Risks to terminal operations arising out of the proposed demolition works
 - o Risks to people on site from demolition works and terminal operations
 - Any changes to the overall facility risk profile during demolition and following completion of the proposed works

We are happy with the requirement that Caltex continue to consult with WorkCover.

On a minor point, we note that the draft covering letter is addressed to Mr Jos Kusters, while the Memorandum from Caltex gives his title as Dr Jos Kusters.

Please contact Nicholas Hon on (02) 8281 6221 or email <u>nicholas.hon@workcover.nsw.gov.au</u> should you wish further clarification.

Yours sincerely,

Derek Mullins

Hazardous Chemical Services - Major Hazard Facilities

WorkCover Authority of NSW

Pascal Van De Walle

From:

Wayne Jones <wayne.jones@dpi.nsw.gov.au>

Sent:

Thursday, 19 June 2014 3:30 PM

To:

Pascal Van De Walle

Subject:

Caltex Kurnell Refinery (SSD_5544) Mod 1

Hi Pascal

Please see below draft DPI comments on the above project. Formal response should follow soon.

Regards Wayne

Wayne Jones | Land Use Planning Coordinating Officer Department of Primary Industries Level 48, MLC Centre, 19 Martin Place Sydney NSW 2000 T:02 9338 6708 | E: wayne.jones@dpi.nsw.gov.au

UT14/17413

Mr Pascal van de Walle Industry, Coastal and Regional Projects NȘW Department of Planning and Environment GPO Box 39 SYDNEY NSW 2001

Pascal.VanDeWalle@planning.nsw.gov.au

Dear Mr van de Walle,

Caltex Kurnell Refinery (SSD_5544) Proposed Modification

I refer to your email dated 4 June 2014 requesting advice from the Department of Primary Industries (DPI) in respect to the above matter.

Comment by Fisheries NSW

Fisheries NSW advise that the main area of concern is the potential for sedimentation and contamination impacts to adjacent waters. The use of appropriate measures to mitigate these potential impacts is recommended.

For further information please contact Carla Ganassin, Fisheries Conservation Manager, (Wollongong Office) on 4254 5527 or at carla.ganassin@dpi.nsw.gov.au.

Comment by NSW Office of Water

The NSW Office of Water (Office of 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**. Suggested amendments are included as tracked changes in the draft SEARs.

It is recommended that the EIS be required to include:

- Details of water proposed to be taken (including through inflow and seepage) from each surface and groundwater source as defined by the relevant water sharing plan.
- Assessment of any 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.

- 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, wetlands and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts.
- Proposed surface and groundwater monitoring activities and methodologies.
- Full technical details and data of all surface and groundwater modelling.
- A detailed and consolidated site water balance.
- 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 Janne Grose, Planning and Assessment Coordinator (Penrith office) on 4729 8262 or at janne.grose@water.nsw.gov.au.

Attachment A

Caltex Kurnell Refinery (SSD_5544) Proposed Modification Additional comments by NSW Office of Water

For further information visit the NSW Office of 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.

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 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

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 Sharing Plans

The proposal is located within the area covered by the Water Sharing Plan for the Greater Metropolitan Region Unregulated River Water Sources and the Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources. 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.
 - 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 Aguifer 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).
- The NSW Wetlands Management Policy (1996).
- 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).

Office of Water policies can be accessed at the following links: 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 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.

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 including:

- The 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 (Office of Water "GW" registration numbers and licence/approval numbers should be supplied).
- A description of the 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 the quality of the groundwater for the local groundwater catchment.
- 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 ongoing 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.

Watercourse 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:
 - watercourses and top of bank;
 - 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.
 - A detailed description of all potential impacts on the watercourses/riparian land.
 - 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.

Project specific notes

It is noted the proposed Modification involves demolition works (removal of redundant infrastructure) and these works will require excavation. The EIS for the Caltex Kurnell Refinery project noted stormwater from the site is discharged to three receiving environments, including the freshwater Marton Park wetland.

The EIS for the Caltex Kurnell Refinery project indicated that should groundwater be encountered during the proposed works that a Groundwater Management Plan (GWMP) would be developed and included in the CEMP to outline measures that would be used to manage the testing, dewatering, storage, movement and treatment of any groundwater during the construction phase. The Office of Water previously recommended in the event that groundwater is intersected during works, the proponent should:

- 1. Make application to the NSW Office of Water for a determination of any required water approvals.
- 2. Develop a Groundwater Management Plan for the testing dewatering, storage, movement and treatment of any groundwater in consultation with the NSW Office of Water.

As the Modification (MOD 1) proposal involves excavation, the Office of Water repeats the previous advice. The Office of Water also requests it is provided with a copy of the GWMP to review.

End Attachment A

Regards Wayne

Wayne Jones | Land Use Planning Coordinating Officer Department of Primary Industries Level 48, MLC Centre, 19 Martin Place Sydney NSW 2000 T:02 9338 6708 | E: wayne.jones@dpi.nsw.gov.au

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Pascal Van De Walle

From:

PBiswell@ssc.nsw.gov.au

Sent:

Thursday, 10 July 2014 3:49 PM

To:

Pascal Van De Walle

Subject:

Re: SEARs - Caltex Kurnell Refinery Conversion - SSD 5544 MOD 1

Attachments:

SEARs - SSD 5544 MOD 1 - FINAL.docm

Hi Pascal,

I confirm that council is satisfied with the amended SEARs - Caltex Kurnell Refinery Conversion - SSD 5544 MOD 1.

Just one error that I'd like to point out on page 7 (contamination guidelines) - update NEPM reference to the Amended 2013 version.

Regards

Phillippa Biswell

Environmental Scientist / Educator Environmental Science & Policy Unit

Sutherland Shire Council

Locked Bag 17 Sutherland 1499 Australia

Tel: 02 9710 0210 Fax: 61 2 9710 0180

Email: pbiswell@ssc.nsw.gov.au

http://www.sutherlandshire.nsw.gov.au

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From:

Pascal Van De Walle < Pascal. Van De Walle @planning.nsw.gov.au >

To:

"PBiswell@ssc.nsw.gov.au" <PBiswell@ssc.nsw.gov.au>,

Date: 10/07/2014 10:21 AM

SEARs - Caltex Kurnell Refinery Conversion - SSD 5544 MOD 1 Subject:

Dear Phillippa,

As discussed, the draft SEAR's have been amended following consideration of the issues raised by Council and other agencies.

A list of the specific issues raised by Council in response to the draft SEARs is provided below. These issues have been addressed in the amended SEARs. Would you be able to review these amended SEARs and advise if any issues.

Issues Raised by Council to draft SEAR's

Soil and Water

- An assessment of the potential Acid Sulfate Soils impacts; and
 - Details of any water treatment processes or water disposal processes for surface water or captured groundwater or any other water that would be used.

Transport and Access

Updated site access plans required to be provided.

Appendix A2*

SEARs Response Table





Appendix A2 Secretary's Environmental Assessment Requirements: SEE Cross-Reference Table

Government Authority	Requirement	Relevant SEE Chapter
NSW Department of Planning and Environment (DPE)	General Requirements	
	The supporting documentation submitted with the Section 96(2) application must meet the minimum form and content requirements in clause 115 of the <i>Environmental Planning and Assessment Regulation 2000</i> .	SEE Volume 1 and Volume 2
	In addition, the supporting documentation must:	
	 Provide a detailed description of the proposed modification, including: Justification and need for the proposed modification; A statement of the objectives of the proposed modification; Various components and stages of the proposed modification; Likely interactions between the proposed modification and the existing and/or approved operations on the site and in the vicinity of the site; 	Chapter 4 Chapters 1 & 21 Chapter 1 Chapter 4 Chapter 4
	 Plans of all proposed works associated with the modification, including all demolition and excavation works; An analysis of any feasible alternatives to the proposed modifications; 	Chapters 4 & 9
		Chapter 1
	Demonstrate the status of compliance with existing conditions of consent for SSD 5544;	Chapter 5
	Include consideration of any relevant statutory provisions;	Chapter 5
	 Provide environmental scoping of the potential environmental impacts of the proposed modification, identifying the key issues for further assessment and taking into consideration the issues raised during consultation; 	Chapter 7
	A review of existing management plans and programs in place at the existing facility and a description of any proposed amendments to these plans and programs;	Chapter 20
	 Include a detailed assessment of the key issues specified below, and any other significant issues identified through the environmental scoping (see above), which includes: 	Chapters 8 - 19
	 A description of the existing environment, using sufficient baseline data; 	Chapter 2, Chapters 8 - 19
	 An assessment of the potential impacts of all components and stages of the proposed modification, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes; 	Chapters 8 - 19
	 A description of the measures that would be implemented to avoid, minimise, manage and monitor, and if necessary, offset the potential impacts of the proposed modification, including proposals for adaptive management and/or contingency plans, to manage any significant risks to the environment; and 	Chapter 20
	 Include an updated, consolidated schedule of mitigation and management measures, which differentiate between the measures established by the original EIS for SSD-5544, and those proposed as part of the modification application. 	Chapter 20
	A list of all approvals that must be obtained under any other Act or law before the proposed modifications may lawfully be carried out;	Chapter 5

Kurnell Refinery Demolition A-1





Government Authority	Requirement	Relevant SEE Chapter
	Provide an update on the likely future uses (if any) of the refinery area of the site once terminal operations commence;	Chapter 4
	 A conclusion, justifying the proposed modification on economic, social and environmental grounds, taking into consideration whether the development is consistent with the objects of the EP&A Act; 	Chapter 21
	 A signed statement from the author of any written statement certifying that the statement contains all available information that is relevant to the environmental assessment of the proposed modification, and that the information contained in the statement is neither false nor misleading. 	Statement of Validity
	Key Issues	
	Hazards and Risks – including a Hazards in Demolition (HAZDEM) study that identifies all significant demolition related hazards, and the assessment of the risks associated with these hazards. The analysis shall cover all phases of the proposed modification (i.e. demolition/removal of redundant assets and infrastructure) and include all components and stages (e.g. demolition of refinery process units, tanks, pipelines etc). The demolition hazards identification and risk assessment shall particularly examine the following: The potential risk impacts from the proposed demolition works onto the existing simultaneous terminal operations; The potential for any of the identified demolition related risks to alter during the proposed works associated with the modification, individually or through interaction with existing operations, the offsite risk profile of the facility as assessed in the PHA report for SSD-5544.	Chapter 8 and Appendix B
	 Contamination – including: How ecological and human health risks posed by contaminants on the site should be mitigated and managed; and A description of the measures that would be used to identify, capture, treat, remediate and/or dispose of contaminated soil (including acid sulphate soil) and water that is encountered. 	Chapter 10 and Appendix C Chapter 9
	Soil and Water – including: An assessment of the potential impacts to soil, groundwater and surface water resources; A surface water, waste water and flooding assessment which includes details on how stormwater would be managed during and post works and Identification of any water licensing or other approvals required under the Water Act 1912 and/or the Water management Act 2000.	Chapter 9, Chapter 12 and Appendix D
	Waste – including:	Chapter 11
	Noise and Vibration – including an assessment of all potential noise and vibration impacts on surrounding receivers.	Chapter 13 and Appendix E



Government Authority	Requirement	Relevant SEE Chapter
	Air Quality and Odour – including:	Chapter 14
	Transport and Access – an assessment of additional traffic movements associated with the proposed modification, and updated site access plans.	Chapter 15
	Heritage – including an assessment of the potential impacts on Aboriginal and non-Aboriginal heritage (including movable cultural heritage) values.	Chapter 16 and Appendix F
	Ecology – including an assessment of the potential impacts on terrestrial, aquatic and riparian ecology, including impacts to the surrounding Botany Bay National Park, Towra Point Nature Reserve, Towra Point Aquatic Reserve, watercourses, riparian land, wetlands and groundwater dependent ecosystems.	Chapter 17, Appendix G1 and Appendix G2
	Consultation	
	 During the preparation of the supporting documentation, you must consult with all relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular, you must consult with the: Environment Protection Authority (EPA); NSW Department of Primary Industries (Office of Water and NSw Fisheries); Sutherland Shire Council; WorkCover NSW; Office of Environment and Heritage (OEH); NSW Heritage Council; and NSW Health. The supporting documentation must describe the consultation process and the issues raised and identify where the design of the proposed modification has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided. 	Chapter 6





Government Authority	Requirement	Relevant SEE Chapter
NSW	Project Details	
Environment Protection Authority (EPA)	The proponent should ensure the SEE is sufficiently comprehensive to enable the EPA to determine the extent of the impact(s) of the proposal and the satisfactory measures are implemented to protect the environment and community amenity. Details are required on the location of the proposed development including surrounding land uses, planning zonings and potential sensitive receptors.	SEE Volume 1
	The SEE should provide a detailed description of the proposed methods of demolition that will be used to demolish and remove the redundant infrastructure. Information relating to the staging, hours of operation and during of the works should also be prepared. The proponent should also provide information regarding the likely future uses (if any) for the refinery site during terminal operations.	Chapter 4
	The SEE should also detail the proposed communication strategy that will be implemented for the duration of the works to regularly inform all relevant stakeholders of the progress of the works and future activities.	Chapter 6
	The SEE should describe the mitigation and management options that will be used to prevent, control, abate or mitigate identified environmental impacts including any cumulative impacts associated with the project and to reduce risks to human health and prevent the degradation of 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.	Chapter 20
	Licencing requirements	
	The SEE should demonstrate how the current Environment Protection Licence (EPL) Number 837, the POEO Act and associated regulations will be complied with.	Chapter 5 & Chapters 8 - 19
	Air Quality	
	The SEE should include a detailed description of the proposal and identify and describe all processes and sources (including odour and dust) that could result in air emissions. Sufficient detail to accurately communicate the characteristics and quantity of all air emissions must be provided. A description of any proposed mitigation, monitoring and management measures the proponent intends to apply to ensure the above environmental outcomes are satisfied should also be included.	Chapter 14
	 The SEE should also include a risk assessment associated for any identified air emissions for all stages of the project. Where appropriate, the SEE should include air dispersion modelling where there is a risk of adverse air quality or where there is sufficient uncertainty to warrant a rigorous numerical impact assessment. The SEE should justify the level of assessment undertaken on the basis of risk factors including proposal location, characteristics of the receiving environment and type and qunaitity of pollutants emitted. 	Chapter 14
	Noise and Vibration	
	The SEE must include an assessment of the predicted noise impacts associated with the project in accordance with the EPA's Interim Construction Noise Guidelines and Industrial Noise Policy. The assessment should include, but need not be limited to:	Chapter 13 and Appendix E





Government Authority	Requirement	Relevant SEE Chapter
	 Identification and assessment of all potential noise sources associated with the demolition and removal of the redundant infrastructure. If there is likely to be any vibration impacts associated with the demolition works, the SEE should also include an assessment of the predicted vibration impacts associated with the project Identify the locations of all sensitive receptors The proposed hours of demolition activities An assessment of compliance with the existing licence conditions and appropriate noise criteria as determined using the above guidelines; and Any proposed noise mitigation, monitoring (continuous and/or attended) and management measures which are necessary to achieve the above outcome. 	
	Water Quality	
	The SEE should describe the nature and degrees of any likely impacts to both surface water and groundwater from the demolition works and clearly outline the proposed mitigation, monitoring and management measures the proponent intends to apply to ensure the above outcomes are satisfied.	Chapter 12
	The SEE should address how process/wastewaters collected on the site currently will be managed post demolition activities particularly from areas where services to the Oily Water Sewer system are proposed to be removed.	Chapter 12
	 The SEE should also describe how the proposed demolition activities may affect the works currently being completed by Caltex as part of its Stormwater Catchment and Management Program which was developed as a requirement of a Pollution Reduction Program (PRP). 	Chapter 12 and Appendix D
	Waste	
	 The SEE should include a Waste Management Plan which includes the following matters: Identify, characterise and classify all waste that will be generated, recycled, reused and disposed of as a result of the demolition activities. Provide an estimate of the quantities of materials generated. Provide details of how waste will be handled and managed both onsite and offsite to minimise pollution. Describe the proposed methods of treatment, processing, reuse, recycling and disposal for each of these waste types. Identify any opportunities to regenerate hydrocarbon impacted soils generated from the refinery site through the Bio Pile Pilot trial currently being conducted by Caltex at the Kurnell Refinery. 	Chapter 11 and Chapter 9
	Contaminated Land Management	





Government Authority	Requirement	Relevant SEE Chapter
	The SEE should determine the likelihood of any impacts (including any potential offsite migration of contamination) occurring as a result of the project and detail any proposed mitigation and monitoring measures that will be implemented in the event that soil contamination is encountered.	Chapter 9, Chapter 10 and Appendix C
	The SEE should provide details on how soil and/or groundwater contamination will be identified, how the contamination will be remediated and provide details, including timing, on what reports (for example, validation reports) will be prepared. Clarification on any potential future uses should also be detailed in the SEE as should be the process of making the site suitable for its potential uses.	Chapter 9
NSW WorkCover	Hazards and Risk	





Government Authority	Requirement	Relevant SEE Chapter
	 The SEE should include a Preliminary Hazard Analysis (PHA) to specifically address: Risks to terminal operations arising out of the proposed demolition works. Risks to people on site from demolition works and terminal operations. Any changes to the overall facility risk profile during demolition and following completion of the proposed works. 	Chapter 8 and Appendix B
Fisheries NSW	Fisheries NSW advise that the main area of concern is the potential for sedimentation and contamination impacts to adjacent waters. The use of appropriate measures to mitigate these potential impacts is recommended.	Chapter 12 and Chapter 18
NSW Office of	The SEE should include:	Chapters 5, 9
Water	 Details of water proposed to be taken (including through inflow and seepage) from each surface and groundwater source as defined by the relevant water sharing plan. Assessment of any 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. 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, wetlands and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts. Proposed surface and groundwater monitoring activities and methodologies. Full technical details and data of all surface and groundwater modelling. A detailed and consolidated site water balance. 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 where each element of the SEARs is addressed in the SEE (in the form of a table). 	&12 and Appendices A & D
	Key Relevant Legislative Instruments	Chapter 5
	 The SEE should take into account the objects and regulatory requirements of the Water Act 1912 and Water Management Act 2000, and associated regulations and instruments, as possible. 	





Government Authority	Requirement	Relevant SEE Chapter
	 Water Sharing Plans The SEE is required to: Demonstrate how the proposal is consistent with the relevant rules of the Water Sharing Plan including rules for access licenses, 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 licenses 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. 	Appendix D
	Relevant Policies and Guidelines The SEE should take into account the following policies (as applicable): NSW Guidelines for Controlled Activities on Waterfront Land (NOW, 2012). Risk Assessment Guidelines for Groundwater Dependent Ecosystems (NOW, 2012) Australian Groundwater Modelling Guidelines (NWC, 2012). NSW State Rivers and Estuary Policy (1993) The NSW Wetlands Management Policy (1996) 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)	Chapter 5, Chapter 9 Chapter 12 and Appendix D





Government Authority	Requirement	Relevant SEE Chapter
	 Licensing Considerations The SEE 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 a 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 requirement 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. 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. 	Appendix D, where relevant
	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.	N/A





Government Authority	Requirement	Relevant SEE Chapter
	Groundwater Assessment To ensure the sustainable and integrated management of groundwater sources, the SEE needs to include adequate details to assess the impact of the project on all groundwater sources including: The 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 (Office of Water "GW" registration numbers and licence/approval numbers should be supplied). A description of the 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 the quality of the groundwater for the local groundwater catchment. 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).	Chapter 9
	 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. 	Chapter 9





Government Authority	Requirement	Relevant SEE Chapter
	Groundwater Dependent Ecosystems	Chapter 9,
	The SEE must consider the potential impacts on any Groundwater Dependent Ecosystems (GDEs) at the site and in the vicinity of the site and:	Chapter 17 and Appendix G1
	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.	
	Watercourse and Riparian Land	Chapter 12 and
	The SEE 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 SEE provides details on all watercourses potentially affected by the proposal, including:	Appendix D
	Scaled plans showing the location of:	
	 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. A detailed description of all potential impacts on the watercourses/riparian land. 	
	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.	

Appendix A3°

* Application Documentation



12 September 2014

General Manager

Sutherland Shire Council 4 Eton Street, Sutherland, 2232 NSW

Dear Sir or Madam

Sutherland Shire Council - Landowners Consent

Caltex Refineries (NSW) Pty Ltd (Caltex) is seeking development consent under Section 96 (2) of the *Environmental Planning and Assessment Act 1979* to demolish and remove redundant infrastructure following the cessation of refining at their Kurnell facility (the Site).

This work will include the removal of seven pipelines that pass through Caltex's two rights of way in Kurnell.

Six of these redundant pipelines pass through the eastern right of way in Kurnell and one pipeline passes through the western right of way. Caltex is proposing to excavate these pipelines within each of the rights of way, remove the pipes and return the surface to grade. Where the pipelines cross Captain Cook Drive, Bridges Street, Torres Street, Cook Street, and Prince Charles Parade, Caltex are proposing to excavate the roads and remove the pipelines before returning the land to grade and repairing the road in kind.

In addition to removing the pipelines from beneath the roads, Caltex are also proposing to remove the cooling water outlet pipeline that runs through the western right of way from beneath Silver Beach. To complete this work the pipeline will need to be excavated, removed and the beach rehabilitated. Part of this pipeline will also be removed and/or collapsed from land under the ownership of NSW Roads and Maritime. A separate 'Permission to Lodge' process is being completed with NSW Roads and Maritime.

Further details of the works described above are provided in Attachment 1.

Following discussions with Sutherland Shire Council (the Council) we understand that Council is responsible for the roads listed above and part of Silver Beach. Therefore Caltex is requesting landowners consent from the Council to complete the works described in this letter.

Should the Council have any questions regarding this work, please do not hesitate to contact William Miles on 0289285782 or william.miles@urs.com.

Yours sincerely

William Miles

Principal Environmental Planner

URS Australia Pty Ltd

cc Dr Jos Kusters - Caltex



Attachment 1 - Proposed works within SSC Land

The following provides an overview of the works proposed to remove seven redundant pipelines in the eastern and western rights of way (refer to Figure 1), which pass across Sutherland Shire Council (SSC) owned land. A full description of the demolition works will be included in the Statement of Environmental Effect (SEE) being completed for the works.

The work within SSC owned land is proposed to occur between August 2015 and December 2017 in a staged manner. More detail on the duration of the works is provided below. Specific timing details would also be provided to SSC during ongoing consultation following detailed design.

1.1 Description

1.1.1 Western ROW

The cooling water outlet is proposed to be removed from the Western ROW (refer to Figure 1). This pipeline has a 1.8m diameter.

The removal of this pipeline would require works within Captain Cook Drive, Bridges St, Torres St and Prince Charles Parade. Caltex are also proposing to remove the cooling water outlet pipeline from beneath Silver Beach. This is discussed in detail below.

The works within the road would require the pipeline to be excavated, cut into lengths and craned onto trucks and returned to the refinery for disposal. The trench remaining will be filled and compacted to the required finish.

The works within each roadway would take approximately 2 weeks to complete.

1.1.2 Eastern ROW

There are six redundant pipelines to be removed from the Eastern ROW (refer to Figure 1). These pipelines run from Kurnell Wharf to the Gate 5 at the refinery boundary and are of varying diameters.

The removal of these pipelines would require works within Cook St, Captain Cook Drive and Prince Charles Parade.

The works within the road would require the pipe line to be excavated, cut into lengths and craned onto trucks and returned to the refinery for disposal. The remaining trench would be filled and compacted to the required finish.

The works within each roadway would take approximately 2 weeks to complete.

1.1.3 Road crossings

As the works require the disturbance of the road (as outlined above) a road opening approval would be obtained from SSC and a traffic management plan would be provided to SCC and implemented.

The traffic management plan (TMP) would be developed alongside the Demolition Environmental Management Plan (DEMP). This plan would be developed following modification approval and sent to SSC.



Each road crossing will be completed in two halves with appropriate fencing and access controls in place (as detailed in the TMP). As outlined above, the road will be returned to the appropriate standard (which will be determined in consultation with SSC) for the road type with engineering drawing and control in place to ensure the road is made good for its purpose.

1.1.4 Works on Silver Beach

The cooling water outlet extends from the Western ROW, under Silver Beach and into Botany Bay. Caltex propose to remove the pipe from the dunes, beach and intertidal area north of Prince Charles Parade (SSC owned land), and collapse the pipe for up to 20 m seaward from the low tide mark into the bay (Roads and Maritime owned land). The remaining section of the outfall pipe would be left in situ.

It is expected that both the removal and collapsing of the pipe would require the pipe to be excavated, and that suitable material would be required to return the dunes, beach, intertidal and sub tidal areas to grade and rehabilitation would be required.

The works would take approximately 4 weeks to complete.

1.2 Equipment

The works in the ROW and beach would be completed using mechanical equipment as first preference, with other methods considered if the first preference is not practicable. The equipment proposed to be used includes:

- Excavators with buckets/shears/hammers;
- Cranes:
- Trucks;
- Oxy cutters or similar;
- Bitumen laying equipment (road repairs); and
- Power tools (demolition saws, etc.).

Potential traffic and noise impacts associated with the use of this equipment are being considered within the SEE being completed for the works.

1.3 Recycling

Materials from the demolition will be processed and graded for recycling where possible. Typical materials that would be recycled include:

- Steel:
- Concrete; and
- Building materials.

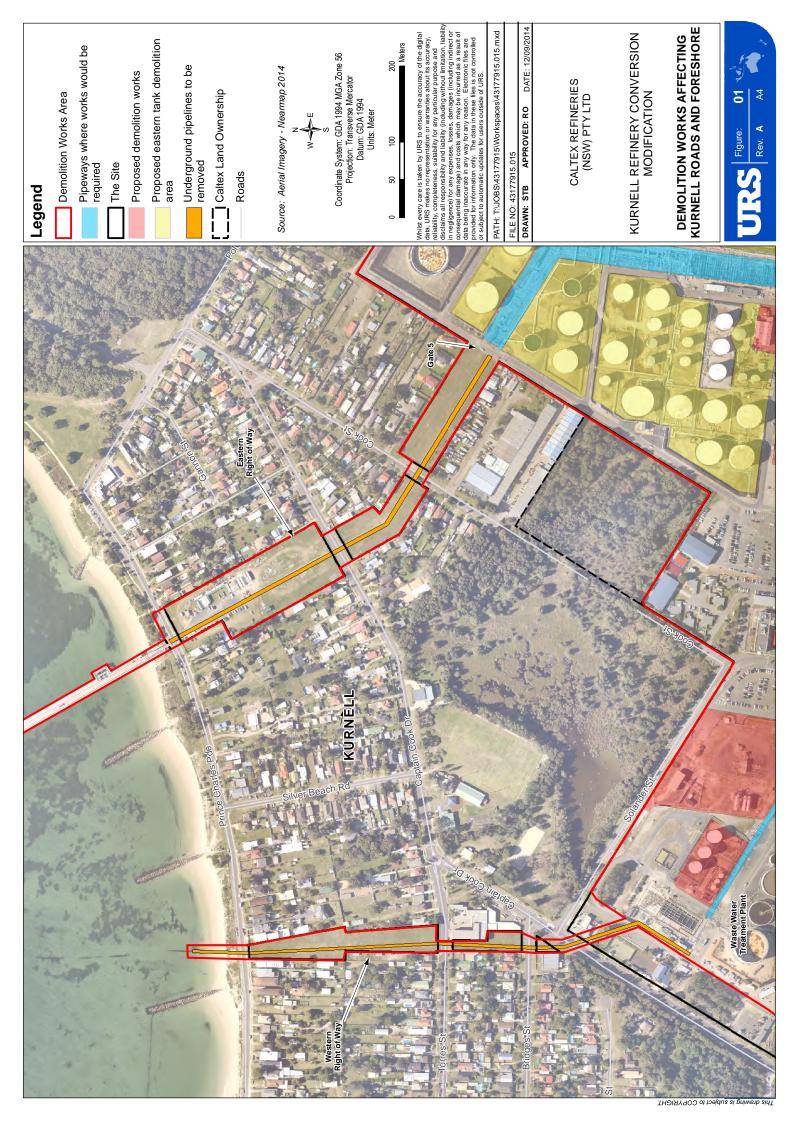
The target is to recycle as much of the generated material streams as possible and where possible reuse it on Site.



Waste management is being considered within the SEE being completed for the works. A Waste Management Plan would also form part of the DEMP.

1.3.1 Rehabilitation

Where there is disturbance to natural levels due to the removal off an asset or part thereof, the ground/buildings area will be made good and rehabilitated to minimise potential safety or environmental risks post demolition. The measures required to rehabilitate Silver Beach will be outlined within the SEE.



Miles, William

From: TDimovski@ssc.nsw.gov.au

Sent: Friday, 26 September 2014 1:44 PM

To: Miles, William

Cc: PBiswell@ssc.nsw.gov.au

Subject: Caltex Refineries - Land Owner's Consent

Hi Will

I refer to your letter dated 12 September 2014 in relation to Caltex Refineries (NSW) Pty Ltd (Caltex) seeking land owner's consent for works over Council land.

Having reviewed the letter and the proposed works, it appears your proposed works are to occur over a number of Council controlled roads and road reserves. It does not appear that any of the proposed works is to occur through or over Council owned land (being a lot and DP). Therefore land owner's consent is not required.

However, I refer to your recent meeting and discussions with Phillippa Biswell in relation to the proposed works and understand that it was advised to you that a road opening application is required to be completed and submitted for assessment for the proposed works over and through the roads and road reserves that are affected. All affected roads and road reserves are to form part your application/s.

Please do not hesitate to contact me if you have any guestions.

Thank you.

Kind Regards

Tony Dimovski
Property Officer
Sutherland Shire Council
Locked Bag 17, SUTHERLAND NSW 1499

P: (02) 9710 0574

TDimovski@ssc.nsw.gov.au

Important: This email / fax and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email / fax in error please notify the sender via return mail. You must not disclose the contents of this email / fax to any third party without the consent of the Sender.



APPLICATION FORM - PERMISSION TO LODGE

Under Clauses 8F, 49(1)(b) and 126 of the Environmental Planning and Assessment Regulations 2000.

You can use this form to obtain landowners consent to lodge:

- · a Development Application;
- an application to modify a development consent (Section 96 Application);
- · an application for a Complying Development Certificate; or
- a Project Application under Part 3A of the Environmental Planning and Assessment Act 1979.

HOW TO COMPLETE THIS FORM

- 1: Ensure that all fields have been filled out correctly.
- 2: Please note that fields on this form marked with an * are mandatory and must be completed before submitting the application.
- 3: Once completed you will need to print out and sign this form.
- 4: You can submit this form by mail or in person:

BY MAIL: NSW Maritime Property Planning Branch

Locked Bag 5100

Camperdown

NSW 1450

OR IN PERSON:

NSW Maritime Rozelle Office

(during business hours) James Craig Road

(just off the City West Link)

Rozelle Bay

This form must be read in conjunction with the Obtaining Permission to Lodge Policy. This policy and other relevant information can be found on our website at: www.maritime.nsw.gov.au/mpd/permission_to_lodge.

For further information regarding your application please contact the Development Applications Coordinator on 9563 8511. This form is a public record and may be made available on NSW Maritime's website.

Name of Bay or Waterway (if wholly	or partially located in/over water)	Suburb*	
Botany Bay		Kurnell	
Property benefiting from the propose Street Number*	ed development Street Name*		
Kurnell Refinery	Solander Street		
Lot Number*	DP/SP*	Title Reference (eg. Vol/Fol)	
Please refer to Attachment 1	-	-	
of the proposed developmer details or clarification, pleas	n the proposed development is generally nt, or on which any associated facilities (e contact a NSW Maritime property offi e please attach details of other sites.	eg, car parking) are located. For further	

PART 2: DETAILS OF THE DEVELOPMENT APPLICATION / PROJECT APPLICATION			
Type of application: (Please tick appropriate box below)			
Development Application			
Application to modify a development consent (Section 96 Application)			
Complying Development Certificate			
Project Application			
Note that Permission to Lodge is not required for Section 96(1) applications. Please contact the Development Approvals Coordinator for further information on 9563 8511.			
Consent authority for the proposed application*			
Minister for Planning, Department of Planning and Environment			
Usually the consent authority for development applications and Section 96 applications are the local Council (please state which Council), NSW Maritime or a Joint Regional Planning Panel. If you are unsure who the consent authority is please contact the Property Planning Branch on 9563 8511.			
Description of proposed development*			
Please refer to attached statement of intent (Attachment 1). In summary Caltex are proposing to demolish and remove redundant infrastructure from their site at Kurnell. This involves removing a cooling water outline from beneath Silver Beach and for 20m into Botany Bay from the low tide mark.			
Note: A statement is also required to provide a detailed description of the proposed development, including access arrangements (see Note 1). Sufficient information must be provided on the precise location of the land to which this application relates and the nature and extent of the development for which consent is ultimately sought.			
Is the proposed development considered to be minor development?* (See Note 2) Yes No			
Existing use of site*			
Beach, Foreshore and Pipeline Route			
Location of proposed development (if part of an existing structure or facility)			
Silver Beach, Kurnell			

PART 3: APPLICANT	DETAILS		
	e individual or party who intends to lodge will be forwarded to the nominated ap	ge the subsequent development application. plicant	
Title Given Name/s	s* Family	Name*	
Mr Craig	Coll	ard	
Organisation / company na	ame (if applicable)		
Caltex Refineries	(NSW) Pty Ltd		
Address*			
Kurnell Refinery, 2	Solander St, Kurnell, NSW	2231	
	tion can be lodged at least one of the mo		
Home Number*	Business Number	Mobile Number#	
	02 9668 1356	0478 304 948	
ax Number#	Email Address*		
	ccollar@caltex.co	ar@caltex.com.au ,	
Applicant Name (please pri	nt)		
Caltex Refineries (NSW) Pty NSW		
lote: If you are signing on	behalf of a company please state capacit	Capacity within company Project Manager	
Applicant Signature*		Date*	
an Co	ille	9/10/4	
lote: It is important that w	e are able to contact you if we need more	information. Please give as much detail as necess	

PART 4	: LESSEE DETA	ILS (SEE NOTE 3)			
	The Lessee is the perso Maritime in relation to		have a formal tenure agree	ment over the site with NSW	
Title	Given Name/s*	s the proposal.	Family Name*		
Mr	Jeff	1417	Andrews	a there are many	
Organisa	tion / company name	e* (if applicable)	ACN,	/ABN* (if applicable)	
Caltex	Refineries (N	SW) Pty Ltd	000	000108725	
Address*				Ab Mi, d	
Kurne	II Refinery, 2 S	olander Street, Kur	nell, NSW 2231		
Home Nu	ımber	Business Number	Mobi	ile Number	
•		(02) 9668 1	491 042	23894021	
Fax Numb	per	Email Address			
(02) 9	668 1353	1	@caltex.com.au		
	enure arrangements				
developm res		llowing information:			
Lease/agr	eement number		Date rent paid until		
23790					
proposed Yes 🔽 🕨	development?*	ure arrangement with NSW I	Maritime which applies to a	ny part of the site of the	
	e number 275	589			
essee Sig	nature(s)				
/We agree prior to th /We cons	e to enter into an app e commencement of ent to this applicatio	any works on land owned by	NSW Maritime (See Note	Maritime for this development 4). Lessee is also the Applicant).	
	me* (please print)		Position		
Jeff An	drews		D&D Project L	ead	
ignature*			Date*	ComponyiStanta	
Je	4 Anexens		9/10/19	Company/Strata Stamp/Seal to be affixed if	
essee Nar	ne* (please print)		Position	applicable.	
N/A		•	7		
ignature*			Date*		

F	PART 5: OWNER OF ABI	UTTING LAND (SEE NOTE 5)		
ls	the proposal located either who	olly or partially on/over submerge	d land (ie. below the Mean High	Tide line)?*
Ye	s 🔽	No If no , go to Part 6		
D	oes the lessee or lessees noted in	n Part 4 own all abutting land loc	ated landward of the subject site	?*
Ye	s (go to Part 6)	No If no, please provi	de details of this land:	
St	treet Number Street Name			
N	N/A Prince Charles Parade Road Reserve			
Lot Number* DP/SP*		Title Refere	nce (eg. Vol/Fol)	
N	I/A	N/A	N/A	
Ple	ease also attach a written stat	ement from the owner/s of this	land consenting to the making	of this Application.
P	ART 6: CHECKLIST*			
Th	e following information is req	uired for every application in di	gital (pdf) and hard copy/print	ed format. All digital
inf	formation should be contained	d on one CD.		
Ple	ease tick all applicable boxes b	pelow which relate to documents	s you intend to lodge with this a	application.
			Provid	led Not Applicable
1:	Completed application form 3 additional copies of this fo			
2:	Lessee details and consent		[V]	
	specified in Note 3 must be a	completed (and any other applicattached)	able information	
3:	Consent from owner/s of al		7	
	A written statement is requir (where this is not the lessee)	ed from the owner/s of abutting	gland	
4:	Plans (4 copies)			
	See Note 6 for further inform	nation		
5:	Statement (4 copies) See Note 1 for further inform	nation		
5:	A CD must be provided cont this application. This should	osal and all documents in pdf of aining a pdf copy of all docume include a scanned copy of this a ar media will not be accepted. Stile requirements.	nts attached to	
7:	Fee This is currently \$400. Payme website: www.maritime.nsw.	ent details can be found on the I gov.au/mpd/development	NSW Maritime	

APPLICANT DECLARATION* PART 7:

Important Notice

NSW Maritime will not process applications that are incomplete or do not comply with lodgement requirements. These will be returned to applicants if NSW Maritime is unable to assess the application. NSW Maritime can request additional information from applicants to allow proper assessment if all requirements have not been met.

Check fee calculation with NSW Maritime officers prior to lodgement.

- · I apply for permission to lodge an application described above. I declare that all the information in the application and checklist is to the best of my knowledge, true and correct.
- · I also understand that if the information is incomplete, the application may be delayed or rejected or more information may be requested. I acknowledge that if the information provided is misleading, any approval granted may be void
- · I declare that the digital data provided is a true copy of all plans and associated documents submitted with this development application.
- I declare that the digital data is not corrupted and does not contain any viruses.
- · I understand that the information and materials provided will be made available to the public in accordance with the requirements of the Government Information (Public Access) Act 2009
- · Details of this application and its determination, including parts of this application form, any attachments and/or plans, and any navigation assessment, may be published on NSW Maritime's internet site.
- I understand that, should NSW Maritime decide to grant Permission to Lodge, that permission will be granted only to a development of that nature, extent and specific location. Permission to Lodge cannot be transferred to another lessee or applicant. Furthermore, subsequent modifications to the nature, extent or precise location of the development may result in NSW Maritime requiring that the applicant reapply for land owner's consent in relation to any land or development not covered by the original consent.
- I understand that, further to any requirements under the Environmental Planning and Assessment Act 1979, I will also be required to have an appropriate tenure arrangement with NSW Maritime before any construction can take place.
- · I understand that, if the subsequent planning application is substantially different from what is set out in this application, NSW Maritime may refuse to ent

Applicant Name* (please print)	nure agreement to facilitate the dev
Craig Collard	
Applicant Signature*	Date*
Co Cally	9/10/14.

Attachment 1 - Statement of Intent

Introduction

Caltex received development consent (SSD 5544) to convert the Kurnell Refinery into a Finished Product Import Terminal (the 'Project'). This consent was just for the conversions works and did not involve demolition. The 'demolition works', are the next phase of the Project, and are critical for establishing a viable, safe, reliable and sustainable finished product import terminal at Kurnell. Caltex intends to seek approval for the demolition works as a modification to development consent SSD 5544 under S.96 (2) of the *Environmental Planning and Assessment Act 1979* (EP&A Act) as the works are a continuation of the conversion process, but may result in certain impacts that were not considered under the initial consent.

The purpose of this memo is to provide information on the proposed demolition works to the NSW Roads and Maritime (R&M) in accordance with **Part 2** of the **Application Form – Permission to Lodge**.

The Site

The Caltex Kurnell Refinery (the 'Site') is located on Kurnell Peninsula within Sutherland Shire Local Government Area (LGA). The Site location is shown in **Figure 1** and is legally described under the following lot and deposited plan (DP) numbers:

- Lot 56/ DP 908
- Lot 62/ DP 908
- Part Lot 12/ DP 7632
- Lot 190/ DP 7632
- Lot 44/ DP 8135
- Lot 46/ DP 8135
- Lot 78/ DP 8135
- Part Lot 122/ DP 8135
- Part Lot 124/ DP 8135
- Lot 48/ DP 9564
- Lot 78/ DP 9564
- Part Lot 1/ DP 215818
- Lot 1/ DP 215819
- Lot D/ DP 361103
- Lot G/ DP 361103
- Lot K/ DP 362655
- Lot 570/ DP 752064
- Lot 1/ DP 1044690
- Lot 283 / DP 752064

- Lot 57/ DP 908
- Part Lot 11/ DP 7632
- Lot 189/ DP 7632
- Lot 43/ DP 8135
- Lot 45/ DP 8135
- Part Lot 77/ DP 8135
- Lot 79/ DP 8135
- Part Lot 123/ DP 8135
- Part Lot 125/ DP 8135
- Lot 77/ DP 9564
- Lot 81/ DP 9564
- Part Lot 2/ DP 215818
- Lot B/ DP 338897
- Part Lot F/ DP 361103
- Lot J/ DP 362655
- Lot H/ DP 362655
- Lot 24/DP 776328

Lot 25 / DP 776328

• Lot 1 / DP 132055

The majority of the demolition works would be completed within the boundary of the Site. The exceptions to this include:

- the removal of the Continental Carbon Pipeline which is located on land owned by Caltex to the south of the Site (Lot 2/DP 215818);
- sections of the redundant pipelines that run through the Western and Eastern Right of Ways (ROWs) that are located outside of the Site (i.e. under the roads that cross the ROWs (no Lot and DP available) and under Silver Beach (Lot 3/DP 1165618 from the low tide mark into Botany Bay); and
- the removal of the cooling water intake pipelines and associated infrastructure from the Kurnell Wharf (Lot 456/DP 1413279).

The part of the demolition works that is relevant to R&M and the Permission to Lodge Application relates to the removal of the Cooling Water Outlet pipeline from under Silver Beach and Botany Bay (Lot 3/DP 1165618).

Overview of Demolition Project

The demolition works at the Site would broadly involve the following works:

- demolition, dismantling or removal of:
 - refinery process units
 - redundant tanks
 - redundant pipelines
 - redundant services
 - redundant buildings
- associated minor civil works with the removal of foundations and underground services;
- waste management activities; and
- returning the works areas to grade.

As previously mentioned, the demolition works would involve the removal of pipelines, including seven redundant pipelines from within the Eastern and Western ROWs. Originally it was proposed that these pipelines would be removed from within the boundaries of Caltex ownership only, however, further investigations have indicated that this approach would not be practical and could create a long term risk to the community and the environment. Therefore, Caltex has concluded that the redundant pipelines within the Eastern and Western ROWs should be removed in their entirety from under the roads and, in the case of the Cooling Water Outlet, from under Silver Beach and part of Botany Bay.

As such, the demolition works are now proposed to take place in land owned by Sutherland Shire Council (the affected road reserves in Kurnell) and land owned by NSW Roads and Maritime (the affected area below the mean high tide mark on Silver Beach going 20 m below the low tide mark into Botany Bay).

The demolition works required to remove the Cooling Water Outlet from Silver Beach and Botany Bay are described below.

Removal of Cooling Water Outlet - Proposal

The cooling water outlet is proposed to be removed from the main Site and through the Western ROW (refer to **Figure 2**). This pipeline would be removed from the both ROW and the road reserves that it crosses. This pipeline has a 1.8 m diameter and is made out of reinforced concrete.

In addition to removing the pipeline from beneath the ROW and roads, the cooling water outlet pipeline would also be removed from beneath Silver Beach north of Prince Charles Parade up to 20 m seaward from the low tide mark into Botany Bay. As noted, not all of the Cooling Water Pipeline would be removed. Beyond 20 m from the low tide mark the rest of the pipeline would be left in situ. The remaining pipeline is approximately 400 m in length.

The following works are proposed to remove the cooling water outlet pipeline from Silver Beach.

- The pipeline would be excavated where it is covered with sediment/sand. The pipeline would be cut or dismantled at the original construction joints prior to lifting and removal. Where the pipeline needs to be cut into sections, excavations may be deeper (i.e. as deep as the pipe) than elsewhere (possibly only half the pipe height). Two divers may be required to complete the cutting.
- Once dismantled or cut, sections of the pipe would be lifted out of the sea bed. The
 preferred technique for lifting sections of pipe would be using a terrestrial backhoe with a
 lifting attachment given the shallow waters.
- Sections of pipe would be moved to the Western ROW for storage prior to being loaded onto a truck and transported to the main refinery site.
- Following removal of the pipeline, the backhoe would backfill the excavated area with suitable material to restore the sea bed profile. A gabion and geotextile material would be placed inside the landward end of the redundant pipe that would remain in Botany Bay to prevent sediments moving down into the pipe over time.

It is anticipated that the proposed works at Silver Beach would be completed before the rest of the cooling water pipeline is removed. This would allow the demolition contractor access to Silver Beach at the point where the Cooling Water Pipeline is currently located, prior to it being removed.

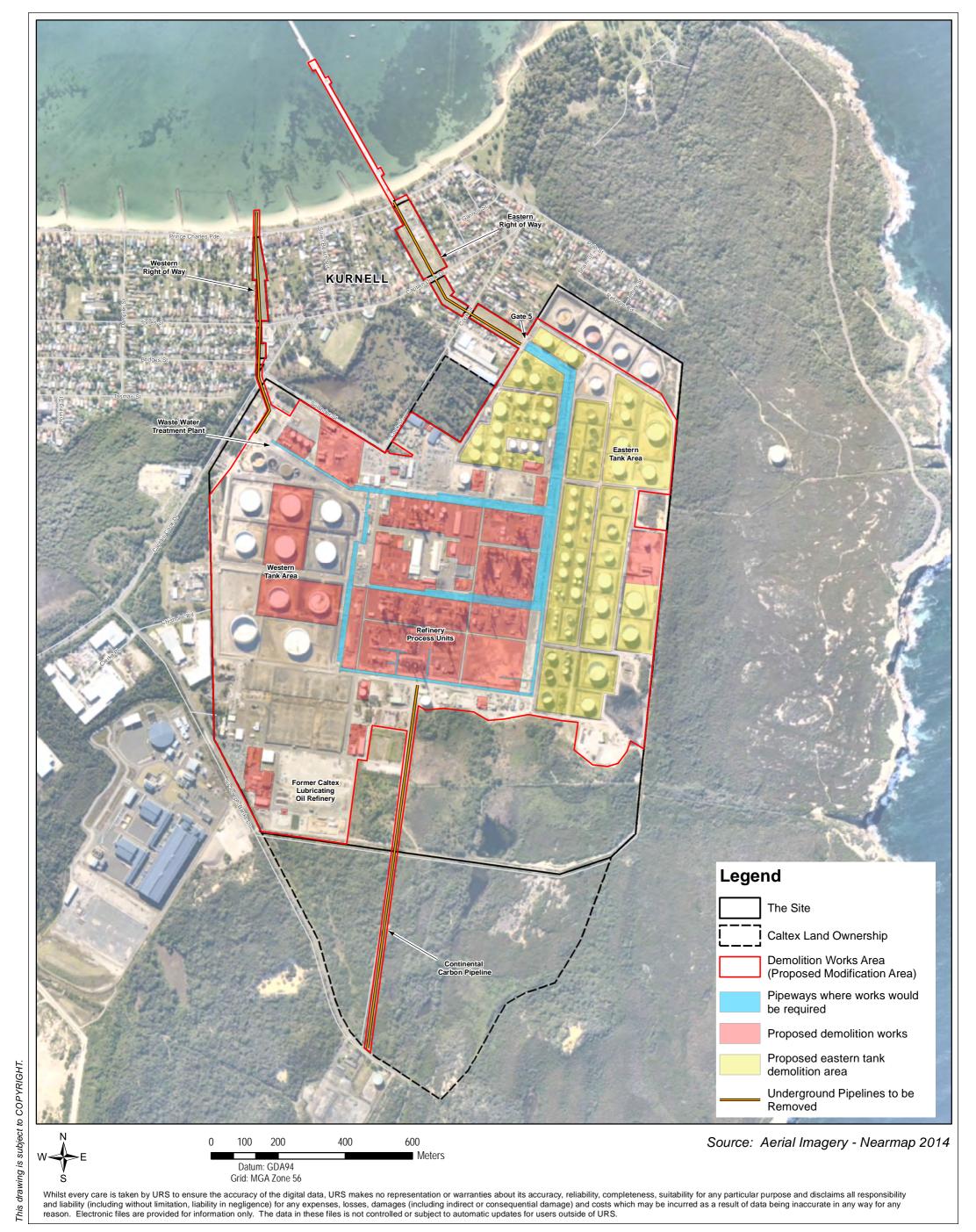
Following removal of the pipeline, measures will be taken to rehabilitate Silver Beach and the affected area in Botany Bay. These measures will be discussed within the Statement of Environmental Effects for the modification application.

Other Relevant Landowners

The Prince Charles Parade road reserve is located to the south of Silver Beach between the Caltex owned land of the Western ROW and the R&M owned land on Silver Beach. This land is managed by Sutherland Shire Council.

Caltex will be removing the cooling water outlet pipeline from this road reserve and have contacted Sutherland Shire Council. The council have responded, stating that landowners consent (i.e. permission to lodge) is not required for works in the road reserve. This statement is provided as **Attachment 2** to this application.

Council do require a Road Opening Application prior to the works commencing, but further correspondence with council has indicated that this application is to be submitted after development consent for the demolition works has been received.

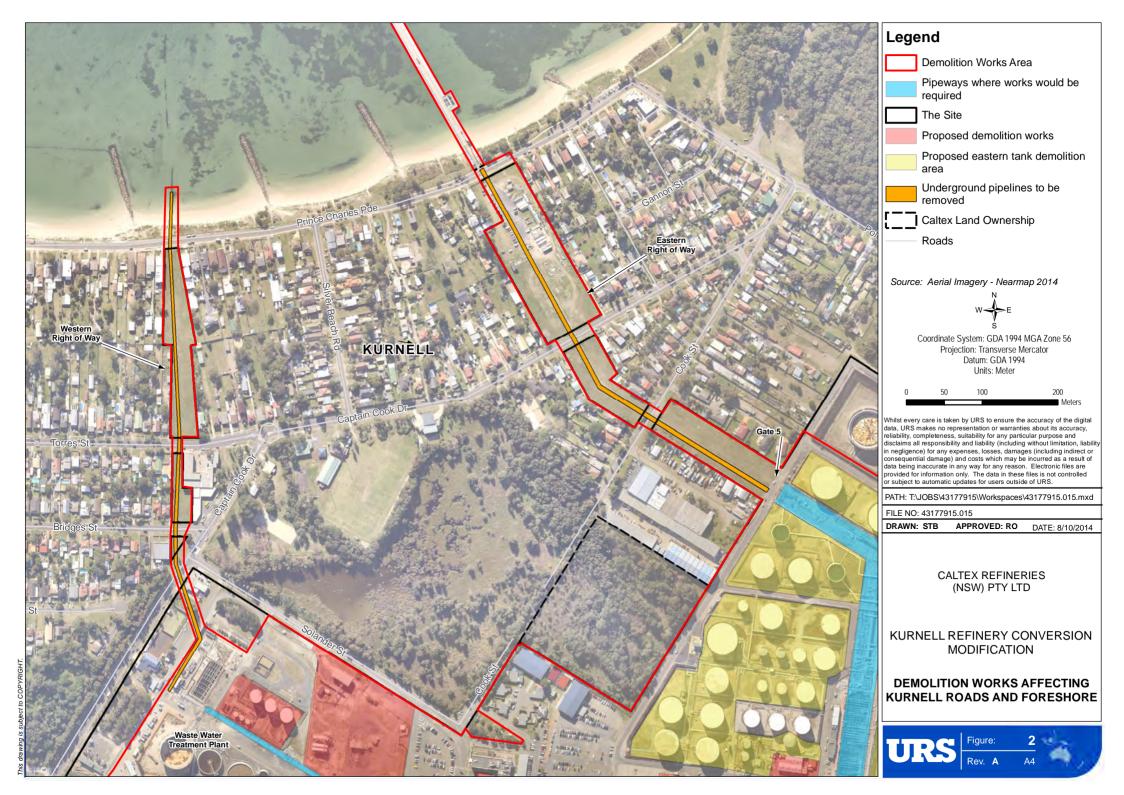


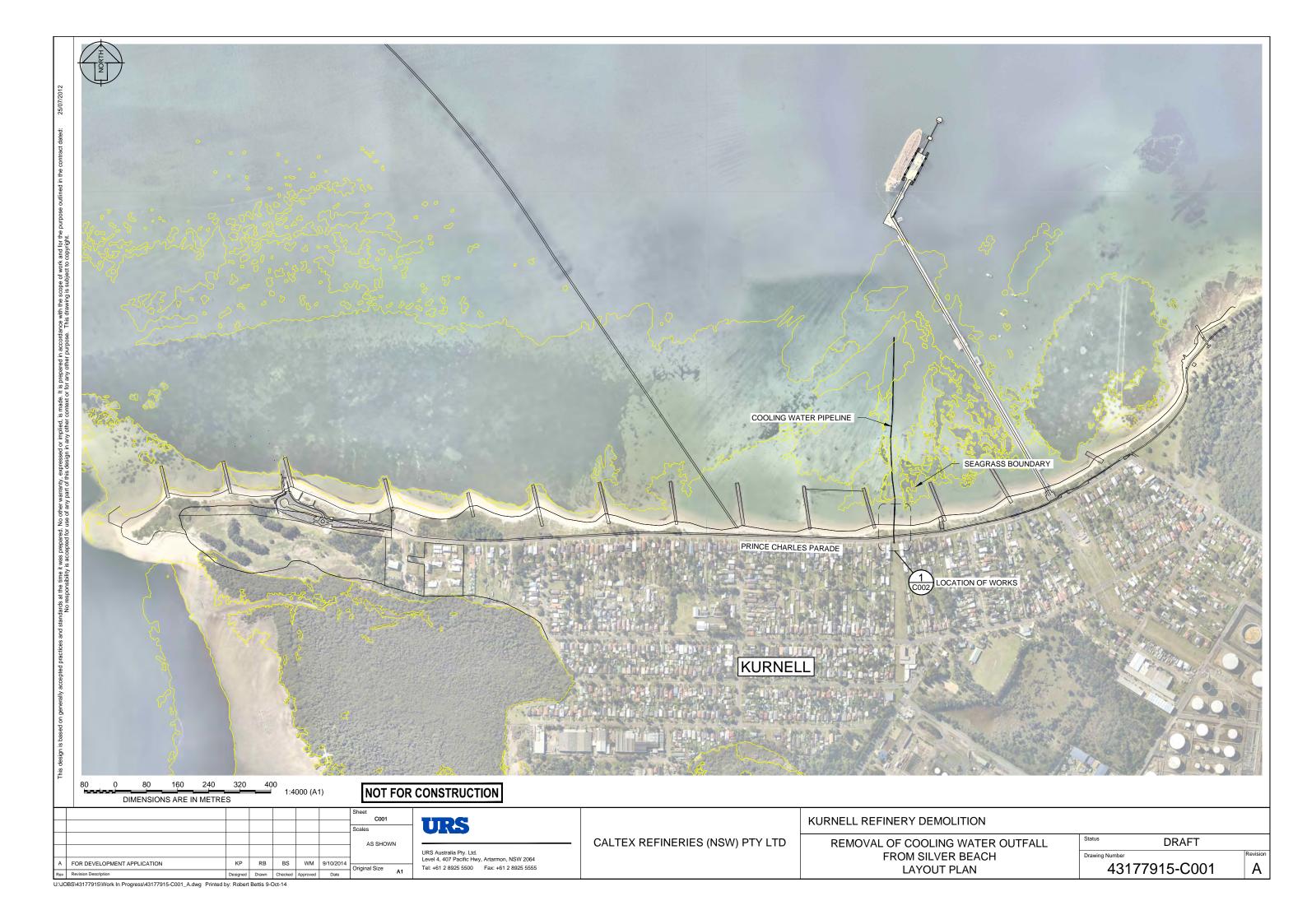
CALTEX **REFINERIES** (NSW) PTY LTD

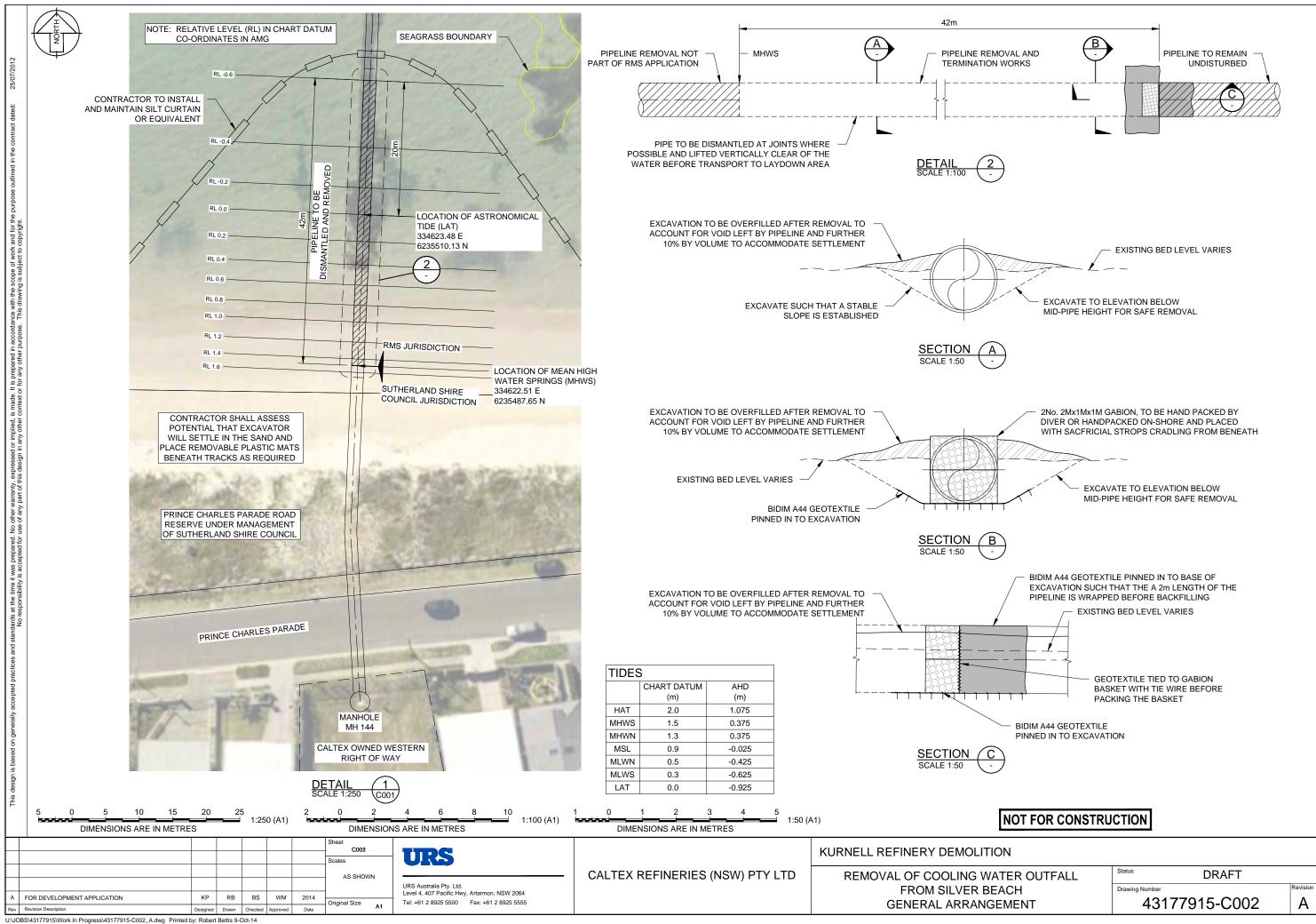
KURNELL REFINERY CONVERSION MODIFICATION

PROPOSED MODIFICATION

Figure:









22/10/2014

Mr Craig Collard Project Manager Caltex Refineries (NSW) Pty Ltd Kurnell Refinery 2 Solander Street KURNELL NSW 2231

> W12/301/2 PTL1856

Dear Mr Collard

Applicant(s) :

Caltex Refineries (NSW) Pty Ltd

Site Address:

Solander Street KURNELL

Proposal

Demolition and removal of redundant infrastructure beneath Silver Beach

& 20m into Botany Bay.

I refer to your application for Permission to Lodge a Development Application received by Roads and Maritime Services on 10 October 2014 for the abovementioned property.

Your Application will be assessed with regard to Roads and Maritime Services' (RMS) *Obtaining Permission to Lodge* Policy.

If you require any further information please do not hesitate to contact me directly on 9563-8662.

Yours sincerely

Myriam Mendez

Development Approvals Officer Property, Strategy & Planning